Impact Report

2022

HomeBiogas

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About

The world has reached a critical point in the transition to a circular economy, which offers a solution to many environmental and social challenges.

We are proud to be at the forefront of this movement.

HomeBiogas

Dear Stakeholders,

We are delighted to present our 2022 Impact Report, in which we share with you our valued partners, shareholders, customers, and of course our invaluable team, our progress and achievements towards a more sustainable future.

The world is facing unprecedented challenges. Environmental and social issues continue to become ever-more pressing, and global supply chain disruptions are causing chaos for manufacturers, suppliers and consumers. The world has reached a critical point in the transition to a circular economy, which offers a solution to many of these environmental and social challenges, and we are proud to be at the forefront of this movement.

Now is the time to take action to address global environmental challenges, and meet the goals outlined in the Paris Agreement and we are committed to being a part of that action.

As a world leader in the development of modular biogas systems, HomeBiogas promotes sustainable solutions and helps businesses reach their Environmental, Social and Governance (ESG) goals. Our innovative waste-to-energy solutions are crucial in mitigating greenhouse gas (GHG) emissions, specifically methane, which is 84 times more potent than CO2 in a 20 year timescale.

This is how we are helping households, farmers, communities, and businesses worldwide achieve 13 of the United Nations' Sustainable Development Goals, which serve as a blueprint for a better & more sustainable future for all.
It is equally important for us to have a positive social impact, and our solutions do this by providing access to clean energy, promoting self-sufficiency, and fostering sustainable communities.

We appreciate your support as we work towards a sustainable future, and look forward to continuing our work together.

Boaz Schweiger
Executive Chairman

Oshik Efrati
Co-founder & CEO

Yair Teller
Co-founder & Deputy CEO

Erez Lanzer
Co-founder & Deputy CEO

2022 Highlights

HomeBiogas making an impact for a better world **in 2022**

196,547
Trees saved[1]

124,591 tons
CO2-eq mitigated[2]

26,265,765
Hours of clean cooking[3]

134,422 m3
of water conserved[4]

6,812 tons
Food waste upcycled[5]

454,278 m3
Bio-fertilizer produced[6]

7,591,216 m³
Biogas produced[7]

600
Systems installed in schools[8]

Projects awarded in 2022

UN projects in Rwanda.

Governmental projects for sanitation and clean cooking in schools and households in Central America.

UN SDGs

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

Global Recognition in 2022

World Sustainability Awards - Circular Economy Award

HomeBiogas impressed the judges with its digester systems which provide a cost–effective way for people to turn organic waste into biogas for cooking and natural fertilizer – tackling climate change by reducing methane emissions and providing clean energy for people in need.

Each system offsets 6 tonnes of CO2 per year, the equivalent of one vehicle's annual emissions.

"HomeBiogas offers an astonishing innovation, which opens up a new era of possibilities for the underdeveloped world, but also the developed one, through autonomy in energy for households and families."

Judges' feedback

FT/IFC Transformational Business Awards

Transformational Climate Change Solutions Award

AD and Biogas Industry Awards

AD Pacesetter: Micro AD

About HomeBiogas

Advancing circular economy solutions in the waste management and clean energy sectors around the world.

The fastest way to disrupt a status quo is to develop innovative technology.

HomeBiogas is taking action on climate change and sustainability by helping people, companies, organizations, cities and countries achieve zero waste and net-zero CO2 emissions targets and reduce their environmental footprints.

The driving force behind HomeBiogas is therefore to develop a portfolio of products that harness an environmentally friendly biological process to convert organic waste into biogas, clean energy, and biofertilizer.

Our solutions

By adopting our innovative solutions, our customers can promote sustainable living, reduce waste, and contribute to a cleaner environment for generations to come. Here's how:

- **On-site waste treatment**
  In most countries, organic waste is sent to landfill, creating one of the major sources of methane emissions – a greenhouse gas that is 84 times more potent than carbon dioxide on a 20-year timescale[9]. By enabling on-site treatment, our solutions reduce the environmental and economic costs of transporting waste.
- **Creating a valuable resource**
  Generating added value for our customers in the form of biogas as renewable energy, and rich organic fertilizer.
- **Providing a cleaner environment**
  Enabling farmers to better manage animal manure, and reduce their exposure to harmful indoor air pollution, thereby reducing the occurrence of respiratory diseases.
- **Off-grid sanitation**
  Connecting to bio-toilets to provide a sanitation solution, even in rural communities that have no access to sanitation systems.

Our Vision

> To transform waste into a resource that can better our lives today, and our planet tomorrow.

Using our systems to convert organic waste into a resource, HomeBiogas is an active partner in enabling a zero waste and net-zero GHG-emission world.

We have worked hard for more than ten years to promote our vision, investing long hours and resources in research and development.

Today, we operate in more than 100 countries on six continents to make our systems available worldwide, and achieving our goal of changing our customers' lives.

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.

Our Journey to Date

2012

The HomeBiogas story begins with three long-time friends and a mission to make free, renewable energy available to everyone, all over the world. After analyzing and testing current biodigester designs, their limitations and excellent opportunities for improvement became clear. Our founders were determined to modernize the technology, to make it easy to install and accessible to all.

2013

Project with USAID MERC, Ben Gurion University and AIES. Trilateral project in Israel, Jordan and Palestinian Authority for transforming animal waste into energy in rural communities.

2014

- The first HomeBiogas prototype is piloted.
- First global sales.

2015

- Our CEO is appointed chairman of the ISO biogas committee.
- Project with the European Union and the Peres Center for Peace & Innovation. Installation of HomeBiogas systems for 100 families in Palestinian Authority – "Sustainable Energy Sustainable Peace"..

2016

First generation HomeBiogas system becomes commercially available.

2017

Awarded European Commission Horizon 2020 Project 'HomeBiogas'.

2018

- Awarded European Commission Horizon 2020 Project 'Houseful'.
- Launch of latest and most advanced HBG system – following further research and fine-tuning.

2019

Launch of the HomeBiogas Bio-Toilet.

2020

- **Publication of ISO 23590** Household Biogas System Requirements.
- **CSR projects in India** in collaboration with Adani Foundation – providing HomeBiogas systems to improve the lives of small farmers in rural India.

2021

- **TASE IPO** – HomeBiogas listed for trading on the Tel Aviv Stock Exchange under the symbol HMGS.
- **First installation of the HomeBiogas Pro system** in a kibbutz dining room.
- **UN projects** with UNHCR to supply biogas systems in refugee camps in Zimbabwe and Malawi.
- **First HomeBiogas subsidiary established in Kenya** for direct sales of HomeBiogas systems.

2022

- **Cross 30,000 customers**
- **HomeBiogas Farmers' system launched.**
- **UNDP Project** in Rwanda.
- **Governmental Projects–** sanitation and clean cooking project for schools and households in Central America.
- Approved for **Indian Ministry of New and Renewable Energy (MNRE) subsidy program** – customers in India now receive a subsidy on purchases of our systems, making them affordable.

SUSTAINABLE DEVELOPMENT GOALS

SDGs

Our business activities align with 13 of the United Nations Sustainable Development Goals reflecting our commitment to being catalysts of change.

HomeBiogas

Contributing to the UN Sustainable Development Goals

As a company focused on sustainability and the circular economy, our business activities align with most of the United Nations' 17 Sustainable Development Goals (SDGs) and accompanying 169 targets.

As part of the worldwide community that has undertaken these goals, we attach great importance to our role as catalysts for change.

Throughout this report, we indicate how our environmental, social, and governance activities support the UN SDGs.
The overview in the table below provides a brief summary of how our systems help provide solutions to global problems, and the UN SDGs to which they relate.

Access to clean cooking

Global Problem

According to the WHO 2.4 billion people worldwide lack access to clean cooking[10].

These people use open fires and rely on wood-based fuel, including wood & charcoal for cooking.
These fuel types have numerous negative impacts:

Environmental

- Inefficient fuel consumption.
- Increased greenhouse gas emissions.
- Provoke deforestation.

HomeBiogas Solution

HomeBiogas systems generate clean energy by converting organic waste into biogas, thus eliminating the negative impacts associated with wood-based fuel. Instead, these systems offer several benefits, including:

- Creates energy-efficient, carbon-neutral fuel.
- Eliminates any negative impact of waste debris.
- Reduces deforestation.
- Reduces use of chemical fertilizer.
- Revitalizes soil's organic matter.

Access to clean cooking

Health

According to WHO, every year, nearly 3.2 million people die prematurely from illnesses attributable to household air pollution from inefficient cooking practices[11].

- indoor air pollution.
- Injuries associated with use of traditional fuels cooking appliances.
- Chronic and acute physical ailments caused by the work involved in firewood collection.

- zero indoor air pollution.
- ISO 23590:2020 compliant.
- on-site energy generation – no need to collect firewood.

Economic

- lost opportunities for income generation because of the time spent collecting fuel and cooking.
- cost of fuel.

- No resources required for maintenance.
- Free energy source, available on-demand.
- Time is freed up for women and children to pursue education and leisure activities, instead of having to go out to collect firewood.
- HomeBiogas system's liquid bio-fertilizer has demonstrated excellent economic and operational efficiency. Farmers report healthier and more fertile soil, less need for pesticides, higher crop yields, and a stronger natural flavor.

Access to sanitation

Global Problem

Untreated waste causes land and water pollution, and is a harmful health hazard.

According to WHO, 3.6 billion people – nearly half the world's population – do not have access to safely managed sanitation systems in their homes[12].

Of those, 1.9 billion people live with basic sanitation services, and 494 million people practice open defecation.[12]

Water stress

Untreated waste causes land and water pollution, and is a harmful health hazard.
According to UNESCO **2 billion people** in the world live in countries experience high water stress. On average, a person uses **19 to 24 gallons** a day flushing the toilet (compared to **15 gallons** per washing machine load, and **1 gallon** of drinking water)[13].

HomeBiogas Solution

HomeBiogas systems transform waste from a potential hazard to a valuable resource.

When connected to the HomeBiogas Bio-Toilet solution, the system provides access to safe sanitation services, completely independent of the grid.

The HomeBiogas Bio-Toilet saves over **80% of the water** used by a regular toilet with every flush.

Turning waste into a resource

Global Problem

According to the UN Environment Program humans generate over 2 billion tons of solid waste annually around the world, and this is expected to increase to 3.4 billion tons by 2050. 44% of this global waste is made up of foods and organics.[14]

In an era of rapid urbanization and population growth, waste management is critical for sustainable, healthy, and inclusive cities.

Methane (CH4) emissions

In most countries, organic waste is sent to landfill, where it decomposes naturally. This creates methane, a potent greenhouse gas that has **84 times** more warming power than carbon dioxide on a 20-year scale time.[9]

This makes landfills one of the main sources of methane emissions into the atmosphere.

HomeBiogas Solution

Treating organic waste on site with HomeBiogas systems can help cities and communities become sustainable, self-sufficient entities, with a clean and renewable source of energy, while improving waste management, reducing greenhouse gas emissions and dependence on fossil fuels, fostering local economic development, and improving their environmental footprint.

HomeBiogas systems help mitigate methane pollution by enabling on-site organic waste treatment.

The treatment mimics what happens to organic waste in landfill, but in a controlled environment that prevents methane emissions. The methane created during the treatment is the biogas later used as clean energy. In this way, HomeBiogas systems help mitigate climate change, reduce GHG (greenhouse gases), and offer a comprehensive solution for organic waste treatment.

HomeBiogas

Circular economy

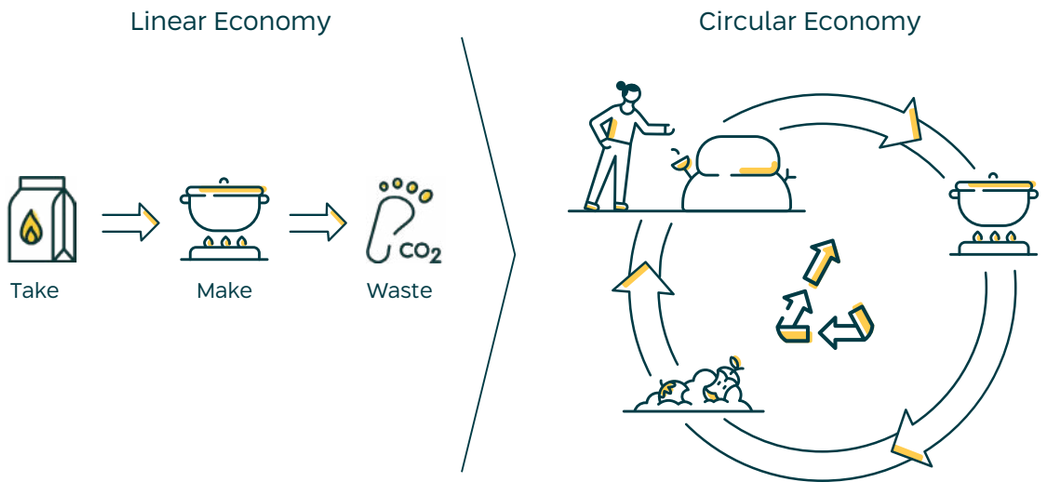
Reduce.
Reuse.
Upcycle.

The concept of a Circular Economy strives to prevent the waste of resources, and promote a waste-free world.

Promoting Circular Economy

> Based on the principles of Reduce, Reuse & Recycle, the concept of a circular economy (CE) strives to prevent the waste of resources & promote a waste-free world.

A circular economy is regenerative by design, and the HomeBiogas research & development team works to ensure that the company's products, and the component and materials of which they are made, are of the highest quality to support their reuse and recyclability.



The main sectors in which HomeBiogas operates to promote a circular economy:

Waste treatment

industries engaged in the collection, treatment, and disposal of waste materials. HomeBiogas systems treat organic waste on site, reducing the need for alternative waste treatment.

Renewable energy

renewable, sustainable, and clean energy sources and solutions. HomeBiogas systems generate green, renewable energy, produced in a natural process, based on routine, on-site handling of organic waste.

Cleantech

innovative technologies focused on finding and offering solutions that are adapted to climate change and mitigate its effects. HomeBiogas system efficiently treats organic waste onsite and converts it from a hazard to a resource.

Sustainable agriculture

promotes growth without damaging soil and ecological habitats. HomeBiogas systems convert organic waste into liquid organic fertilizer, which has been demonstrated to make soil healthier and more fertile, and reduce the need for chemical fertilizer and synthetic pesticides.

Our Products

HomeBiogas develops biodigesters that convert food waste and animal manure into biogas for clean cooking, and liquid Bio-fertilizer for gardening or agriculture.

HomeBiogas 2

Best market fit

Households with a backyard.

Features

- International patents
- Easy to scale up
- User-friendly
- Fast installation and simple maintenance

HomeBiogas 4

Large households, community gardens and hospitality accommodation. E.g: glamping, yurts, eco-lodges.

- International patents
- Easy to scale up
- User-friendly
- Fast installation and simple maintenance

HomeBiogas 7

Small-scale farmers with livestock.

- International patents
- Easy to scale up
- User-friendly
- Fast installation and simple maintenance

Our Products

HomeBiogas Bio-toilet

The HomeBiogas Bio-Toilet Kit offers a highly comfortable bathroom experience for self-sustainable households.

Best market fit

areas that lack access to sewage connections.

Features

- Saves 80% water consumption compared to a regular toilet
- Completely off-grid
- Does not need any infrastructural work

HomeBiogas Farmers

System is an affordable and innovative solution that converts livestock manure into clean cooking gas and liquid Bio-fertilizer.

small-scale farmers who have livestock and field crops.

- Installation in less than 2 hours
- Product with best ROI in the market

Spotlight on Kenya

43 workers, 23 of whom were women. They successfully installed over 1,000 systems for converting farm waste into fuel in Kiambu, Machakos, Murang'a, Embu, Kirinyaga, Meru, and Tharaka Nithi. On average, the team received eight hours of training per month.

Watch video >

Sharing our knowledge:
Our Kenyan team collaborated with the UN on a project in East Rwanda, to bring HomeBiogas systems to 500 families. Our technical teams are assisting with installations, and our Customer Success team will be in charge of offering exceptional customer care.

Giving back to the community:
We have donated systems to children's homes in the surrounding areas.

Increasing biogas awareness:
Our multifaceted marketing strategy increases awareness and generates new leads for our sales team through targeted social media ads, SEO, and on-the-ground activities in our key operational areas.

To reach a wider audience, our dedicated sales team both carries out door-to-door sales, and sets up large meetings with dairy cooperatives. Through these efforts, we aim to provide access to our innovative solutions to as many people as possible, and promote sustainability.

Looking ahead to 2023:
We're on a mission to serve tens of thousands of households across Kenya. We are also excited to showcase our demo farm and host events at our headquarters in Kiambu for potential new clients, investors, NGOs and government organizations.

Over **1,000** systems installed in Kenya in **2022**

Project Spotlight:

UNDP Project in Rwanda

> **Advancing sustainable energy and waste management in Rwanda, and improving the lives of farmers and families.**

In 2022, HomeBiogas was selected as an official supplier of the United Nations, with access to UN tenders for the supply of waste treatment systems globally.

Having already won two UN tenders for the installation of biogas systems in refugee camps in Zimbabwe and Malawi, in 2022 we were awarded a third, in Rwanda.

The project goal is to install 500 systems.

At the time of writing this report, 392 systems had been installed – in just 4 months.

This project aimed to introduce HomeBiogas technology to rural farmers in the Ngoma district, providing them with efficient and effective waste-to-resource solutions, improving crop outputs and reducing inputs by using the biofertilizer created as a sustainable alternative to chemical fertilizers, stimulating soil, strengthening plants, and generating new revenue opportunities.

> We are proud to have been selected by the UN for a third project, to bring our technology to hundreds of families in Rwanda. We see this win as an important business development that we believe will lay the foundation for additional opportunities, especially as global demand for climate tech and waste management innovation continues to grow.
>
> **Oshik Efrati,**
> Founder & CEO of HomeBiogas

Project Spotlight:

CSR Project with HCL Foundation

The HCL Foundation is committed to improving the health, sanitation, sustainability, and economic & social development of local communities.

> **In partnership with HomeBiogas, the Foundation introduced the company's technology as a tool for rural development in India, implementing 75 HomeBiogas systems in the Hardoi district of Uttar Pradesh.**

As well as promoting better rural sanitation, a cleaner environment, and sustainable agriculture practices, this project also served to improve the health and livelihood of women in the region.

Project highlights:

- **Empowerment of women**
  - No longer exposed to smoke
  - Count on a reliable source of cooking fuel
  - Feel safer, healthier, and less worried
  - Have time for other activities
- **Economic savings**

  Reduced use of chemicals / LPG / fire wood saves farmers an average of:

  2,165 INR ($29) per month » **25,974 INR ($346)** per month
- **Organic farming**
  - No chemical fertilizer required
  - Increase in soil fertility
  - Higher yields
  - Crops stay fresh longer
  - Crops have stronger colors and sweeter taste
  - Plants are more resilient – less pesticides required
  - Project forecasts (per 75 families over 10 years)

Project forecasts

(per 75 families over 10 years)

196,547
Trees saved

866,250
Hours of clean cooking fueled

11,137,500 kg
Animal manure treated

123,750
Women work hours saved

165,000 USD
Saved

Case Study:

Begin School, Dimona

Educating the next generation about sustainability.

Begin School in Dimona is a unique elementary school for science and excellence. It has a science garden that includes greenhouses, a hydroponic garden, research greenhouses, a compound for growing spirulina, and more.

In order to expand its research activities, the school chose to include the HomeBiogas system as part of the curriculum dealing with climate change and sustainability.

Every Tuesday, 5th grade students work with the system for two hours. The gas produced is used in a course for young chefs, and the fertilizer is used in the science garden, the hydroponic systems and the greenhouse. Left over fertilizer is distributed to parents and school students.

The HomeBiogas is more than just a functional and educational system. It is a significant part of the school, and has even been given a name: Elizabeth! The students make sure to 'feed' her, take care of her and show her off at every opportunity.

The impact of the system on our students is first and foremost in understanding that a solution can be found, or created, for everything. The use of gas always amazes them, and they enjoy using their homemade fertilizer, diluting it and recommending it to anyone who is willing to listen. It gets them thinking about correct consumption and reuse, in a very meaningful way.

Adi Levy,

English teacher, science coordinator and district instructor at the school

Case Study:

Renu Kumari Mahato, Nepal

Making a difference, every day.

Renu Kumari Mahato has a farm in Ramnagar, Gaushala Municipality in the Mahottari District of south-eastern Nepal, where he grows onions, garlic, wheat, beans, cereals, yellow pigeon peas and more. Thanks to an initiative by the local municipality, he was given an HBG 7 system, which is designed specifically for use by farmers.

Since installing the system, he and his family use it on a daily basis, turning animal manure that is readily available into biogas for use in cooking, and bio-fertilizer that is collected, mixed with water and applied to the crops in the fields.

”

The HomeBiogas system can be used easily by anyone in the family, and it means we are not dependent on anyone else. Since we got the system, we have been able to save around Rs. 15,000 a year that we used to spend on firewood, chemical fertilizers and pesticides.

Renu Kumari,
farmer in Ramnagar

Stakeholders

Customers, shareholders, investors, partners an entire ecosystem driving positive change.

HomeBiogas

HomeBiogas Strategy

We're passionate about progress guided by a desire to promote global sustainability, we've developed groundbreaking biogas systems that benefit communities worldwide.

The HomeBiogas vision is bold & ambitious; our method takes us back to basics – harnessing the 'technology of nature' through the simplest, most efficient, and most sustainable methods, to reduce the environmental impact of organic waste, & convert it into energy.

Our portfolio of products optimally serves a wide range of customers by enabling on-site treatment of organic waste.

Sales channels:

Direct Sales:

- Global E-commerce sales
- Direct to consumers in Israel and Kenya
- International projects with governments & organizations

Indirect Sales:

- Global network of distributors and partners.

HomeBiogas Strategy

We aim to promote on-site modular biogas systems to as many households, farmers, and commercial enterprises as possible. The focus is on providing the most efficient and reliable biogas systems, utilizing nature-based technologies and front-of-the-line design.

As part of our commitment to sustainability, the company is also actively pursuing environmental, social, and governance (ESG) initiatives to ensure that its operations are aligned with the highest ethical standards. By prioritizing ESG considerations and offering innovative biogas solutions, the company aims to become a leader in the clean energy sector.

In high-income countries our approach is to minimize food waste and reduce harmful methane emissions, while also cutting costs associated with waste removal, transportation, and landfill management. By doing so, we aim to contribute to a more circular economy while mitigating environmental impacts.

The Bio-fertilizer is a byproduct of our systems. Promoting professional support is key to enhancing the use and awareness of alternative fertilizers. Return organic material to the soil, promoting healthy crops and reducing the need for harmful pesticides. This approach supports sustainable agriculture and promotes better nutrient absorption.

In middle-low-income countries, our strategy is to provide free clean cooking gas and proper sanitation facilities, which can improve the quality of life and reduce exposure to harmful cooking smoke. By reducing deforestation, we aim to promote sustainable practices that benefit people and the planet.

We aim to provide dignified toilets and sanitation facilities to people lacking basic sanitation access. This approach promotes hygiene, prevents the spread of diseases, and improves the quality of life for these communities while reducing water and soil pollution.

Our Customers

Customer Portfolio

HomeBiogas has over 30,000 customers in over 100 countries across six continents.

- **Private customers:** environmentalists, underserved communities, and green buildings sector.
- **Business customers:** restaurants, farmers, private companies and businesses.
- **International and national organizations:** UN, EU, USAID, WWF.
- **Public and institutional customers:** the IDF, municipalities & government organizations.

Customer Support

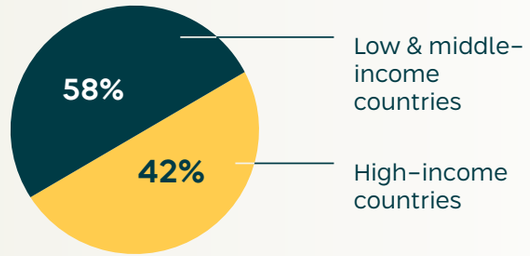
We offer extensive support to ensure that our customers get the most out of their HomeBiogas system.

The HomeBiogas Chatbot provides assistance and information to customers, 24 hours a day. Out of 25,632 enquiries, only 20% required additional human assistance.

Customer and Distributor Training (in 2022)

- 2 weeks long seminar for distributors in Latin America.
- Two weekly week-long seminars for distributors in Latin America.
- Monthly remote training for customers.
- 50 training hours delivered in educational institutions.
- 10 new training and troubleshooting videos produced.

Revenue Sources



B2C Satisfaction Survey

70% of customers — say that the system meets (and even exceeds) their expectations.

87% of customers — are satisfied with HomeBiogas' service.

76% of customers — would recommend HomeBiogas to friends/family.

Shareholders

Institutional holdings

Migdal Insurance and Financial Holdings Ltd. – 8.86%

Phoenix Holdings and Excellence Investment House Ltd. – 8.47%

Public holding

Major shareholders

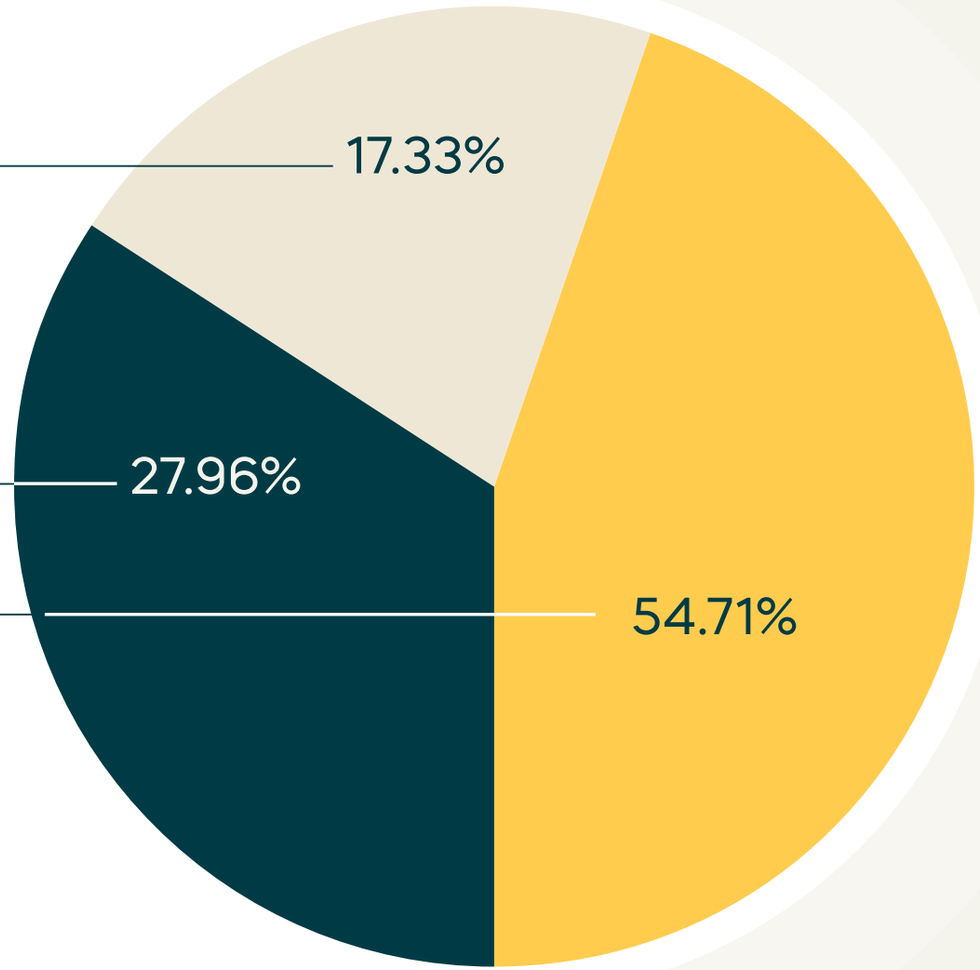
Closed Loop Partners – 31.52%

Engie New Ventures – 7.68%

JSCapital – 6.00%

Founders –

- CEO Mr. Oshik Efrati – 3.17%
- Co-founder & Deputy CEO Mr. Yair Lev Teller – 3.17%
- Co-founder & Deputy CEO Mr. Erez Lanzer – 3.17%



As of the date 16.04.23 [15]

Investors

Closed Loop Partners

Closed Loop Partners is a leading investment firm dedicated to the transition to the circular economy. The firm innovates, invests, and operates to optimize supply chains, advance natural resource efficiency, and drive economic value with corporate, institutional, and family office partners.

Migdal

Migdal is an Israeli insurance, pension and financial group. The group has over 2.3 million customers and operates in the insurance, pension and provident fund fields.

The group's insurance activities are carried out through Migdal Insurance and the group's pension and provident fund activity is executed through Migdal Insurance's subsidiaries.

Phoenix

Phoenix (including Excellence) is an Israeli multiline insurance, asset management and financial services company.

Managing over $60 billion in assets, the company accesses Israel's vibrant and innovative economic activity through a robust investment portfolio, creating value for both customers and shareholders.

Engie

ENGIE is a global energy provider which is committed to accelerating the transition towards a carbon-neutral world, through reduced energy consumption and more environmentally-friendly solutions.

" From smallholder farmers to restaurants, HomeBiogas is transforming the ways we sustainably manage organics. Given the large impact organic waste has on the environment, HomeBiogas's systems can play a pivotal role in addressing climate change, and revolutionizing the future of sanitation, organics management and renewable energy generation. We are proud to support their team as a longstanding investor, and look forward to their continued expansion to advance positive economic, social and environmental outcomes at scale."

Rom Gonen, Founder & CEO of Closed Loop Partners

Environmental

Environmental responsibility at all levels: evaluating our impact on our business & the world around us.

HomeBiogas

Protecting the Environment

> **The HomeBiogas environmental impact is inherent in the impact our customers are able to achieve when using our products and services. We implement our environmental policy by:**

As a cleantech company, our mission is to also uphold the principles of sustainability and the circular economy in our own operations and practices. Therefore, we strive to reduce as much as possible the carbon footprint of all company assets, supply chains, and production processes as much as possible.

Our environmental policy is also put into action through our volunteering activity, where we strive to promote the values of circular economy, sustainability, and preserving the environment.

At HomeBiogas, we comply with all relevant environmental regulations and standards, and work continuously to improve our operation, production, and transportation processes. We also take a leading role in formulating regulations – which we consider to be critical to advancing our policy – including helping to formulate **ISO 23590:2020–** Household biogas system requirements, and **ISO 20675:2018** – Biogas.

We implement our environmental policy by:

- Maintaining and promoting proper environmental conduct in our production processes.
- Using renewable energy in the countries where we operate.
- Making our systems accessible to people in developing countries.
- Promoting the values of sustainability and circular economy.
- Reducing our customers' environmental impact by using our systems.
- Working with suppliers that conform to high environmental standards.
- Prioritizing suppliers that operate according to a comprehensive and strict environmental policy.
- Instituting Meatless Monday at our in-house lunches.

Our Environmental Impact & Efforts to Reduce it

Our core business is to reduce our environmental impact and that of our customers by converting organic waste into a resource and promote circular economy.

In the past year alone, our products reduced:

124,591 tons
CO2-eq mitigated[2]

196,547 trees
Saved in developing countries[1]

6,812 tons
Food waste upcycled[5]

On-site treatment of organic waste by our systems reduces many environmental costs inherent in the haulage of organic waste to treatment facilities.

Our system lifecycle:

Materials
HomeBiogas systems are made almost entirely of polypropylene, with a protective exterior layer of polyethylene. These are synthetic thermoplastic polymers that are extensively used in numerous industries.

Properties
Polypropylene is characterized by moderate compressibility, light weight and resistance to heat and to acidic and alkaline conditions. Polyethylene is known for its high chemical flexibility and conformity to use requirements, making it the most common plastic in the world. We use HDPE polyethylene in our systems, owing to its UV resistance, compressibility, and easy recyclability properties.

Long lifespan
Both materials are highly durable, giving our products a long lifespan of about 15 years.

Recyclable
Both materials are fully recyclable, so they can be efficiently, economically, and environmentally recycled and reused at the end of the system's lifespan.

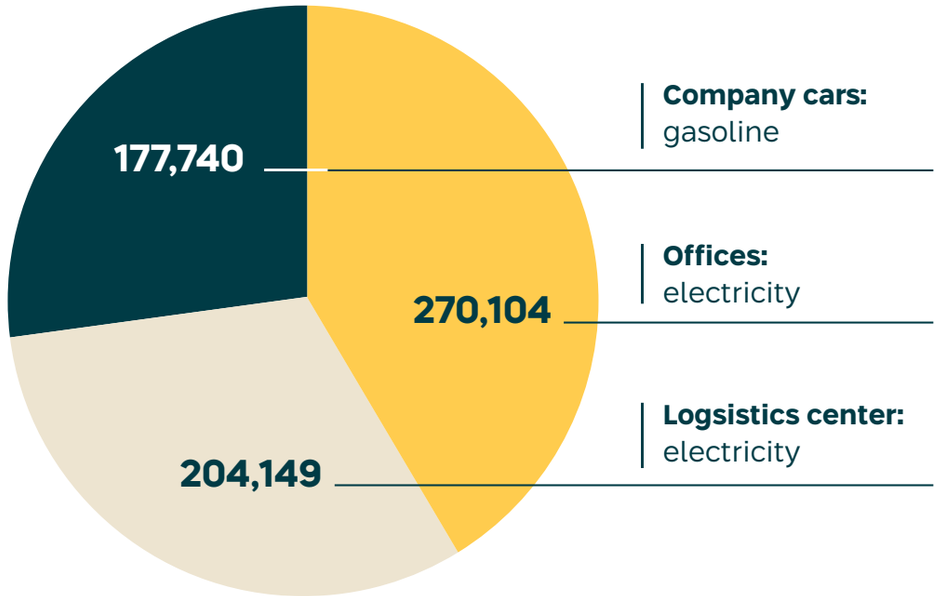
Energy

We have undertaken several energy efficiency steps at our headquarters in Hadassah Neurim and logistics center in the Caesarea Industrial Zone:

- Utilizing HomeBiogas systems to recycle organic waste and produce biogas for cooking and heating water.
- Connecting the toilets at our headquarters to HomeBiogas systems to reduce water consumption.
- Establishing a front warehouse in the USA for energy efficiency and to reduce our carbon footprint. We are in the process of establishing an additional front warehouse in Australia.
- Seeking approval for drop-shipment from our supplier in India directly to Kenya (and, in the future, to other places), reducing shipments around the world.
- Transitioning to fuel-efficient vehicles with low emission ratings. Even though the company's fleet is small, all employee cars will be electric or hybrid (in all their forms) by the end of 2024.
- Enabling remote working. Many company employees now work at least one day a week from home, thereby reducing the environmental costs of commuting by car.

Total energy consumed in the organization in 2022 - 651,993 MJ[16]

Distribution of energy consumption (MJ)



Emissions

Scope 1	Scope 2	Scope 3	Total
38 (ton CO2e)	**62 (ton CO2e)**	**784 (ton CO2e)**	**884 (ton CO2e)**

> **In 2022, we mitigated a total net 124,591 tons of CO2-equivalent emissions** [17]

The greenhouse emissions in scopes 1 and 2 directly relate to our business activities.

Scope 1: describes all direct emissions from the use of company vehicles.

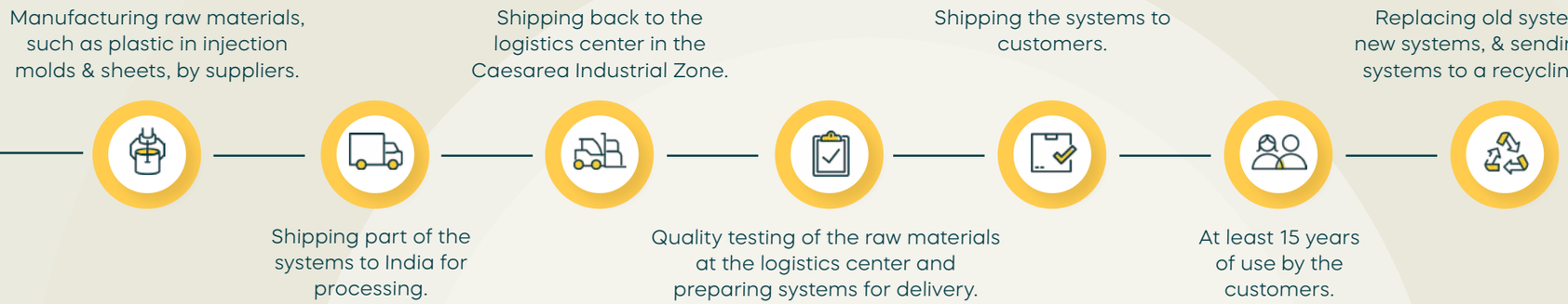
Scope 2: describes indirect emissions from the consumption of electricity at the company's assets in Israel (HQ and the logistics center).

Scope 3: describes indirect emissions in the HomeBiogas supply chain, such as upstream and downstream transportation, distribution of raw materials, goods and products, business commuting and travel, and production of raw materials and goods.

Streamlining our Supply Chain

Focus on scope 3 emissions - indirect emissions in the supply chain related to company operations We are constantly undertaking action to streamline our supply chain, both in order to lower costs and

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



To reduce the supply chain's environmental impact, and so reduce our own carbon footprint.

To this end, we have transitioned our manufacturing from a global process to a geographically-focused process. Our core systems are manufactured in Israel and India, and the stoves are sourced from China.

We have also opened a logistics center in the Caesarea Industrial Zone, where all the company's core logistics and warehousing operations are now concentrated. To maximize storage and increase our inventory, in 2022 we obtained approval of a new business license to increase the warehouse height limit.

Our supply chain has been further streamlined with the opening of a front warehouse in the USA, and we are in the final process of also establishing one in Australia. This enables us to consolidate in-market logistics at one site, and reduce delivery times and costs to the customer. The warehouse facility also enables us to increase the number of systems in each shipment (275 systems or 400 toilets or 165 bundles of systems and toilets), which reduces the number of transatlantic shipments required to serve the market.

In another initiative to reduce shipments around the world, we are currently awaiting approval to introduce drop-shipments from our supplier in India directly to Kenya (and, in the future, to other places).

We have also optimized our supply chain process with our bio-toilet supplier. These are now delivered directly from the US supplier to our customers in the USA, Central and South America, eliminating the need for double-shipping and double-packaging.

All these activities serve to streamline company operations and reduce emissions in our logistics operations.

Waste & Recycling

Applying accepted worldwide waste management methodologies and the principles of the circular economy, we have implemented a number of initiatives to reduce the amount of waste generatedby HomeBiogas as a company, as well as by our suppliers and customers.

Company

- Private ordering of recycling services.
- On-site separation of waste for recycling.
- New partnership with a recycling company for plastic, bottles, & paper.

Company employees

- Switching to multi-use utensils rather than ordinary and 'biodegradable' disposable utensils.
- Switching from individual delivery of meals ("Just Eat") to an in-house catering service.

Suppliers & subcontractors

- Demanding use of multi-use cartons for packaging raw materials.
- Demanding that raw materials not be packaged in plastic bags.
- Reusing pallets and recycling broken and defective pallets.

Social

At the heart of our business are people building a culture of collaboration & innovation.

HomeBiogas

Our People

Our employees are a critical resource in our operations and in driving the business forward as an innovative, breakthrough company.

HomeBiogas invests heavily in personal and professional development, so that our employees can achieve their full potential. We are also committed to providing full employment rights, in strict accordance with the labor laws in the territories in which they work.

HomeBiogas attaches importance to gender equality and promotes diversity in its hiring.

Company Executives

Oshik Efrati
Co-founder & CEO

Yair Teller
Co-founder & Deputy CEO

Erez Lanzer
Co-founder & Deputy CEO

Yossi Rosenblum
CTO

Shlomi Malka
CFO

A look at our 123-member team in 2022:

85 in Israel

37 in Kenya

1 in India

33% of the workforce is female

33% of management positions are held by women

The average employee age at the company is

37

Corporate Culture

It is of great importance to us that HomeBiogas provides a pleasant and inviting work environment for our employees, within a professionally inclusive, effective, and emotionally rewarding corporate culture.

Employee training hours in 2022:

Total: 1315

Average: 11 hours of training per employee.

We strongly adhere to a corporate culture of respect that includes detailed procedures regarding the way in which the company manages:

- Recruitment.
- Employee onboarding.
- Sexual harassment and assault prevention – two female executives are responsible for this program.
- Prohibition on receipt of gifts from customers.

Commitment to Diversity, Equal Employment, and Prevention of Discrimination

With a firm commitment to employee diversity, HomeBiogas scrupulously complies with the legal requirements for fair and equal employment.

We emphasize recruiting and hiring female employees with appropriate skills to fill a range of positions. Women are also promoted to management positions according to their merit, and currently account for 33% of the company's management team.

Training & certification

We provide general and professional training and certification to our employees, managers and directors on a range of subjects, including time management, safety, environmental protection, manager development, communication skills, interfacing between departments, thinking in English and information security.

To promote employee involvement in ongoing training and development, employees are encouraged to deliver lectures on any topic of interest.

So far, we have enjoyed presentations about the environment, the circular economy, trips around the world, biology, plastics and more.

Philanthropy & Community Volunteering

HomeBiogas views volunteering as an integral part of the company's character and nature.

All employees volunteer continuously or periodically, both in their capacity as company employees and as individuals.

Our main volunteering ventures are:

- Mentoring students at the Hadassah Neurim Youth Village in robotics, along with other activities, such as youth cycling programs.
- Cleaning the Mikhmoret beach – once a month, as a company, we clean up waste left by hikers.
- Volunteering day at an NGO called "Saving Surplus Foods" to make packages of agricultural leftovers to distribute to families in need.

Safety

Employee safety is a priority for HomeBiogas. We have therefore implemented revised and improved safety procedures, with the guidance of external safety experts.

Annual safety training for all employees

- Every employee received at least four hours of safety training in 2022.
- Every new employee receives general safety training before starting to work.
- Warehouse workers receive additional safety training at each workstation.
- In 2022 we had 9 safety incidents, 4 of which caused light injuries. Our safety incident rate is 6.8.

Product safety

The safety of our customers when using our products is of paramount importance to us. Our products ensure clean and safe production, use, and storage of biogas.

In rural and underserved communities, HomeBiogas provides an alternative to open fires and wooden-based fuels usually used for cooking, and the associated harmful health issues. When compared to cooking gas (LPG), the HomeBiogas system pressure discharge mechanism ensures that gas accumulation does not exceed 14 millibars, compared to 2,000 millibars in LPG cylinders. Furthermore, unlike cooking gas, if biogas (methane) leaks, it disperses in the open air with no risk of explosion or fire.

Governance

What drives our governance is making an impact. What enables it is integrity, transparency, and responsibility.

HomeBiogas

Corporate Governance

The company management and the board of directors

are committed to maintaining a transparent, proactive, and innovative corporate culture, while ensuring proper corporate governance in relation to our partners, investors, and the public.

This commitment is embodied in our daily conduct and integral to our success.

We operate fairly and transparently towards all our stakeholders, including maintaining contact with our investors and frequently issuing detailed disclosures to the capital market.

By keeping our stakeholders, including customers, suppliers, and the public updated regarding our routine operations, we are able to retain their confidence and trust in us.

Board of Directors

The HomeBiogas Board of Directors

is responsible for overseeing management activity and verifying that it conforms to the interests of the company's shareholders and stakeholders.

The Board, which operates both through the plenum and special committees, comprises seven directors – two are managers at Closed Loop, an interested party, one is the CEO of HomeBiogas, three are independent directors, and one is classified as an interested party.

7
Directors

43%
Classified as independent

29%
Women

50
Average age

Our Directors

Name	Boaz Schweiger	Moshe Oshik Efrati	Ron Gonen	Arik Rashkes	Limor Wiesel	Orit Stav	Shai Levy
Position	Chairman	Director and CEO	Director	Director	External director	External director	Independent director
Date Appointed	06/01/2021	16/02/2012	11/06/2018	21/03/2021	21/03/2021	21/03/2021	25/01/2021

Skills and expertise profile

The skills and experience of each director contributes to the ongoing operations and strategy of the company.

This experience ranges from management of large-scale projects to understanding of processes, knowledge of the law and corporate governance to familiarity with the company's field of business – waste management, renewable energy, and cleantech, and more.

Experience of HomeBiogas directors – at a glance

Managerial	Legal	Financial	Public company director	Waste management, renewable energy, and cleantech	International/ marketing in emerging markets
100%	**29%**	**71%**	**29%**	**43%**	**57%**

Board of Directors Meetings

In 2022, the Board of Directors plenum met seven times, with a director participation rate of 100%.

Once a year, management presents the company's updated strategy to the Board of Directors, with each Chief Officer reviewing the objectives and challenges in their field of activity.

This forms the basis of discussions that formulate the company's strategic goals.customers, suppliers, and the public updated regarding our routine operations, we are able to retain their confidence and trust in us.

Board of Directors Committees

The Board of Directors operates through two subcommittees: the audit committee, which is responsible for supervising business and financial conduct; and the compensation committee, which is responsible for the compensation of company officers. The independent directors– Ms. **Limor Wiesel**, Ms. **Orit Stav**, and Mr. **Shai Levy** – serve on both the audit committee and the compensation committee.

The audit committee convened three times in 2022 and the compensation committee convened twice, with a 100% attendance rate.

Internal Auditor

HomeBiogas first appointed an outsourced provider as its internal auditor in March 2021, following the company's IPO on the Tel Aviv Stock Exchange. In 2021, the auditor reviewed the company's risks and prepared a multi-year work plan for the coming years, which was approved by the audit committee in August 2021.

> **In 2022, according to the scheduled plan, the internal audit covered the company's sales and marketing regulations.**

Internal Enforcement Program

> **In accordance with the Israel Securities Authority laws and regulations, HomeBiogas has adopted an internal enforcement program that determines the rules to which its employees commit.**

The internal enforcement program is a voluntary mechanism adopted by HomeBiogas to identify and prevent violations of laws and regulations within the company, and to mitigate the risk of violating the law by one of its employees.

It aims to create an ethical corporate culture in which all company employees and those representing the company in public develop awareness and self-enforcement of company rules and the law.

The program also sets out a process by which the company and audit committee oversee its implementation, and the actions they are to take to ensure that third parties with which the company engages are also in compliance.

Preventing Bribery & Corruption

> **HomeBiogas is committed to managing its business with integrity, honesty, trust, and responsibility.**

The company does its utmost to verify that all business activity, including overseas, is conducted in accordance with the highest moral standards, and complies with any laws and regulations applicable in the relevant territories.

To avoid risks related to corruption, we have adopted an anti-bribery and anti-corruption procedure that ensures compliance with anti-bribery, anti-corruption, and anti-money laundering laws and provisions.

The procedure identifies countries and areas in which there is a higher risk of bribery and corruption, and defines employee behavior that complies with the company's procedures and relevant legislation and regulations.

Since most of the company's business is overseas, the procedure emphasizes proper business conduct with foreign entities and public officials

Recognizing that there is a higher risk of corruption in the developing countries in which a significant part of our current business is conducted, we are scrupulous in following proper, audited business conduct.

Transparency

> **The HomeBiogas management team and Board of Directors operate with maximum transparency for all the company's shareholders and stakeholders.**

This transparency is a core value at HomeBiogas, which we believe strengthens our relations with our capital market shareholders and other stakeholders.

It also enhances understanding and enables mapping of major business and non-business conduct issues, reducing exposure to operational and administrative risks.

Risk Management

HomeBiogas is aware of the risks inherent in its businesses, and risk management is a critical component of our operations. The company makes every effort to classify core risks and identify the best tools to optimally manage and mitigate them.

Core risks

- **Technology:**
  The HomeBiogas Pro system is currently still under development.
- **Finance:**
  Dependence on the financial support of governments and aid organizations.
- **Competition**
- **Regulation:**
  Changes in regulations.
- **Supply chain:**
  Dependence on suppliers, shipment costs and times, imposition of quotas.

HomeBiogas contends with these risks daily, because of its global operations and the ongoing development of all its product lines.
The company seeks to mitigate the risks by: keeping up to date with regulatory changes in the markets where it operates, so as to be prepared to take relevant action to ensure compliance; and signing agreements with international organizations, such as the UN, and governments in developing countries, enabling HomeBiogas, as a well-established company with well-known customers, to secure more funding, attract priority supplier, and engage in further collaborations.

The company aims to diversify its suppliers, and de-risk its business models by launching the HomeBiogas Pro system and adding a services model alongside a product sales model.

To ensure that the products are competitive, in terms of high quality and ease of use, HomeBiogas continues to develop low-maintenance systems and maintain high manufacturing quality.

Cyber Security Risk Management

Ensuring information security is a priority for HomeBiogas, and we take measures to ensure that our employees, customers and suppliers comply with information security laws. We have appointed an information systems manager, who is responsible for implementing our information and cyber security policy, the integrity of our IT systems and controlling cyber threats with the help of cyber consultants.

Code of Conduct & Ethics

In 2022, HomeBiogas established a set of values and rules of conduct, forming a Code of Conduct & Ethics by which all company employees, managers, and the Board of Directors are required to act. The Code formulates standards intended to facilitate the creation and sustaining of an organizational values culture, which will strengthen connections between employees, and between employees and management, thereby establishing relationships based on trust, reliability, and integrity.

The following principles are detailed in the Code of Conduct & Ethics

- Preventing discrimination and harassment
- Maintaining a pleasant, professional and productive work environment for all
- Cultivating a diverse workforce
- Protecting employee privacy
- Commitment to upholding the provisions of the law in every matter
- Contributing to environmental protection.

The implementation of the Code of Conduct & Ethics is a significant step in the consolidation of the company's values, combining mutual respect, innovation, aspiration to excellence, continuous learning, integrity, responsibility, commitment, team spirit, open communication and joint work, as key components of an organizational culture that will lead the organization to success.

Index

Reporting methodology & disclosure index

HomeBiogas

Reporting Methodology

This is HomeBiogas's second Environmental, Social, and Governance (ESG) impact statement.

Meeting disclosure requirements relevant to all its stakeholders, the statement reviews the company's corporate responsibilities in 2022, in particular those relating to environmental, social, and ethical matters, while taking into account its business, strategy, and vision, combined with its values and commitments for the coming years.

The statement has been written in accordance with Global Reporting Institute (GRI) transparency standards. It includes every subject identified as material to the company's operations, management approach, and work procedures.

The statement also conforms to the core subjects of the Sustainability Accounting Standards Board (SASB), shows the company's commitment to the UN SDGs, and includes calculations of 1, 2, and 3 scope emissions pursuant to the Israel Ministry of Environmental Protection and the GHG Protocol.

The impact report has been written with the full cooperation of relevant parties at HomeBiogas, including the company's executives and Board of Directors, and with the assistance of external consultants from Entropy Corporate Governance.

Stakeholder Dialogue

HomeBiogas has mapped & defined issues that are material to the organization and to its main stakeholders.

In addition to the aforesaid methodologies, several relevant information sources were examined in the writing of this statement, including other cleantech companies with a similar scope of operations to that of HomeBiogas, and renewable energy companies that are considered key players in the domestic and global markets. The company also contacted several stakeholders for their input.

Below is a sample of HomeBiogas's key stakeholders who were consulted in the writing of this impact statement:

Partners & investors – HomeBiogas has different partners, including the UN, governments, and human rights organizations. Its investors include Closed Loops Partners and ENGIE, with which it conducts an ongoing dialogue.

Customers – the company has a variety of customers with whom it maintains an open dialogue in order to provide the best user experience, and the highest levels of transparency.

Distributors – HomeBiogas holds annual meetings and training for its key distributors in every territory in which it has substantial business. At these meetings, the company discusses its operations and systems with its distributors.

The Israel Innovation Authority – from the day it was founded, HomeBiogas has been supported by the Israel Innovation Authority. The company also maintains a purposeful dialogue with the Innovation Authority to promote R&D in areas in which both parties seek to make joint progress.

The UN – HomeBiogas has been selected as an official UN supplier, and the company has undertaken several joint projects worldwide, including in Africa. The company's agreement with the UN includes regular dialogue to advance, improve, and reliably reflect aspects of the company's operations.

HomeBiogas executives and Board of Directors – as set forth at length in the human resources chapter, HomeBiogas conducts evaluations, regular updates, training, and certification for all its employees, on a range of subjects. It is important to note that the company's executives, the Board of Directors and the employees have participated in the writing and formulation of this impact statement, mapping issues and values, and the vision for the UN Sustainable Development Goals.

Other stakeholders include private and institutional customers, business partners, Israeli and foreign regulators, and social, environmental, and other organizations. In addition to this stakeholder dialogue, HomeBiogas has mapped its main risks, both as part of its quarterly financial statements and for inclusion in rating selected critical issues for reporting, according to their effects.

Social

- Activities and workers
- Occupational health and safety
- Training and Education
- Diversity and equal opportunity
- Non-discrimination
- Supplier social assessment
- Customer health and safety
- Marketing and labeling
- Customer Privacy

Environment

- Materials
- Energy
- Emissions
- Waste
- Supplier environmental assessment

Governance

- Board of directors & skills
- Strategy, policies, and practices
- Economic performance
- Stakeholder engagement
- Anti-corruption

GRI content index	
Statement of use	HomeBiogas has reported in accordance with the GRI Standards for the period 01.01.2022 to 31.12.2022.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	Not applicable

Gri standard	**Disclosure**	**Location/response**
General disclosures		
GRI 2: General Disclosures 2021	2-1 Organizational details	**HomeBiogas LTD** **Beit Yanai, Israel 4029300, IL** HomeBiogas LTD is a publicly traded company and listed on the Tel Aviv Stock Exchange. Countries & geographical regions where HomeBiogas LTD operates and that are relevant to the topics covered in this report are: Israel, USA, Europe, Latin America, Australia, Kenya, the Far East and the Pacific.
	2-2 Entities included in the organization's sustainability reporting	Operations data in this report is from HomeBiogas LTD, its subsidiary and official distributors. Countries and geographical regions where HomeBiogas LTD operates and that are relevant to the topics covered in this report are: Israel, USA, Europe, Latin America, Australia, Kenya, the Far East, and the Pacific.
	2-3 Reporting period, frequency, and contact point	01.01.2022 to 31.12.2022. / Yearly reporting. / Julia@homebiogas.com
	2-4 Restatements of information	Not Relevant
	2-5 External assurance	This report has not passed an external assurance.
	2-6 Activities, value chain and other business relationships	Page 11,20,23,36
	2-7 Employees	Page 37, 39
	2-8 Workers who are not employees	All HomeBiogas' workers are company's employees.
	2-9 Governance structure and composition	Page 44-46
	2-10 Nomination and selection of the highest governance body	Page 44-46

Gri standard	Disclosure	Location/response
Material topics		
GRI 2: General Disclosures 2021	2–11 Chair of the highest governance body	Page 44–46
	2–12 Role of the highest governance body in overseeing the management of impacts	Page 46,48
	2–13 Delegation of responsibility for managing impacts	Page 53,67
	2–14 Role of the highest governance body in sustainability reporting	Page 44
	2–15 Conflicts of interest	Annual Report 2022
	2–16 Communication of critical concerns	Transparency in the organization is a key element in HomeBiogas corporate procedures and culture and there is constant communication between all parties within the organization. Page 42–44, Annual Report 2022
	2–17 Collective knowledge of the highest governance body	Page 45
	2–18 Evaluation of the performance of the highest governance body	The audit committee is evaluating the performance of the Board of Directors.Page 42–44
	2–19 Remuneration policies	Annual Report 2022
	2–20 Process to determine remuneration	Annual Report 2022
	2–21 Annual total compensation ratio	The information was unavailable to obtained with sufficient quality to enable reporting due to the increase in the number of employees during the reporting period. As our processes, controls and systems evolve, we will evaluate our ability to report on these metrics on an annual basis.
	2–22 Statement on sustainable development strategy	Page 04,11,26–27
	2–23 Policy commitments	Page 32
	2–24 Embedding policy commitments	Page 09, 26
	2–25 Processes to remediate negative impacts	Page 26, 53

Gri standard	Disclosure	Location/response
Material topics		
GRI 2: General Disclosures 2021	2–26 Mechanisms for seeking advice and raising concerns	HomeBiogas has a clear organizational structure (see annual report 2022) and work procedures in each department.
	2–27 Compliance with laws and regulations	Page 39, 47–48
	2–28 Membership associations	Homebiogas' is a member of the Clean Cooking Alliance.
	2–29 Approach to stakeholder engagement	Page 53
	2–30 Collective bargaining agreements	All Homebiogas' workforce is employed by personal employment agreements.
Material topics		
GRI 3: Material Topics 2021	3–1 Process to determine material topics	Page 53
	3–2 List of material topics	Page 52
Economic performance		
GRI 3: Material Topics 2021	3–3 Management of material topics	Page 52–53
GRI 201: Economic Performance 2016	201–1 Direct economic value generated and distributed	Page 13, 22,33
	201–2 Financial implications and other risks and opportunities due to climate change	page 30
	201–3 Defined benefit plan obligations and other retirement plans	The information was unavailable to obtained with sufficient quality to enable reporting. As our processes, controls and systems evolve, we will evaluate our ability to report on these metrics on an annual basis.
	201–4 Financial assistance received from the government	Annual report 2022

Gri standard	Disclosure	Location/response
Anti-corruption		
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 48
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Page 48
	205-2 Communication and training about anti-corruption policies and procedures	Page 48
	205-3 Confirmed incidents of corruption and actions taken	Homebiogas had zero confirmed incidents of corruption in 2022.
Materials		
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 18-19, 33
GRI 302: Energy 2016	301-1 Materials used by weight or volume	The information was unavailable to obtained with sufficient quality to enable reporting. As our processes, controls and systems evolve, we will evaluate our ability to report on these metrics on an annual basis.
	301-2 Recycled input materials used	Page 17, 33-34
	301-3 Reclaimed products and their packaging materials	Page 36-37
	302-3 Energy intensity	Page 34
	302-4 Reduction of energy consumption	Page 34
	302-5 Reductions in energy requirements of products and services	Page 34

Gri standard	Disclosure	Location/response
Emissions		
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 07, 15,35
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Page 35
	305-2 Energy indirect (Scope 2) GHG emissions	Page 35
	305-3 Other indirect (Scope 3) GHG emissions	Page 36
	305-4 GHG emissions intensity	Page 36
	305-5 Reduction of GHG emissions	
	305-6 Emissions of ozone-depleting substances (ODS)	
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	
Waste		
GRI 3: Material Topics 2021	3-3 Management of material topics	Pae 37
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Pae 37,45
	306-2 Management of significant waste-related impacts	Pae 37,45
	306-3 Waste generated	The information was unavailable to obtained with sufficient quality to enable reporting. As our processes, controls and systems evolve, we will evaluate our ability to report on these metrics on an annual basis.
	306-4 Waste diverted from disposal	Pae 37,45
	306-5 Waste directed to disposal	Pae 37,45

Gri standard	Disclosure	Location/response
Supplier environmental assessment		
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 32,37, 49
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	As of today, we do not screened suppliers by environmental criteria because of the scope of our business activities and our dependence on certain suppliers. However, we are aware of the importance of reducing our supply chains' negative impact and are committed to continue off setting this impact.
	301-2 Recycled input materials used	HomeBiogas does not use recycled materials in its products. However, all HomeBiogas systems' materials are recyclable, and it will keep evaluate the use of recyclable materials.
	301-3 Reclaimed products and their packaging materials	Page 36-37
	302-3 Energy intensity	10.58 KwH/HBG system
	302-4 Reduction of energy consumption	Page 07, 12,-13, 15, 17, 26
	302-5 Reductions in energy requirements of products and services	Page 21, 27, 32, 34
Occupational health and safety		
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 42
GRI 403: Occupational Health and Safety 2018	308-1 New suppliers that were screened using environmental criteria	As of today, we do not screened suppliers by environmental criteria because of the scope of our business activities and our dependence on certain suppliers. However, we are aware of the importance of reducing our supply chains' negative impact and are committed to continue off setting this impact.
	308-2 Negative environmental impacts in the supply chain and actions taken	

Gri standard	Disclosure	Location/response
GRI 403: Occupational Health and Safety 2018	403–1 Occupational health and safety management system	Page 42
	403–2 Hazard identification, risk assessment, and incident investigation	Page 49
	403–3 Occupational health services	The information was unavailable to obtained with sufficient quality to enable reporting. As our processes, controls and systems evolve, we will evaluate our ability to report on these metrics on an annual basis.
	403–4 Worker participation, consultation, and communication on occupational health and safety	Page 42
	403–5 Worker training on occupational health and safety	Page 42
	403–6 Promotion of worker health	The information was unavailable to obtained with sufficient quality to enable reporting. As our processes, controls and systems evolve, we will evaluate our ability to report on these metrics on an annual basis.
	403–7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	
	403–8 Workers covered by an occupational health and safety management system	
	403–9 Work–related injuries	Page 42
	403–10 Work–related ill health	Homebiogas' workforce does not exposed to work–related ill health.
Training and education		
GRI 3: Material Topics 2021	3–3 Management of material topics	Page 28, 40
GRI 404: Training and Education 2016	405–1 Diversity of governance bodies and employees	Page 40
	405–2 Ratio of basic salary and remuneration of women to men	The information was unavailable or cannot be obtained with sufficient quality to enable reporting. As our processes, controls and systems evolve, we will evaluate our ability to report on these metrics on an annual basis.

Diversity and equal opportunity		
GRI 405: Diversity and Equal Opportunity 2016	3–3 Management of material topics	Page 40
GRI 405: Diversity and Equal Opportunity 2016	405–1 Diversity of governance bodies and employees	The information was unavailable or cannot be obtained with sufficient quality to enable reporting. As our processes, controls and systems evolve, we will evaluate our ability to report on these metrics on an annual basis.
	405–2 Ratio of basic salary and remuneration of women to men	Page 40, 50
Non–discrimination		
GRI 3: Material Topics 2021	3–3 Management of material topics	Page 40, 50
GRI 406: Non–discrimination 2016	406–1 Incidents of discrimination and corrective actions taken	Homebiogas had zero incidents of discrimination in 2022 and committed to comply to all laws and regulation related to discrimination.
Occupational health and safety		
GRI 3: Material Topics 2021	3–3 Management of material topics"	Page 13, 22, 27
GRI 414: Supplier Social Assessment 2016	414–1 New suppliers that were screened using social criteria	As of today, we do not screened suppliers by social criteria because of the scope of our business activities and our dependence on certain suppliers. However, most of our suppliers are based in Israel and committed to the Israeli labor laws and we are working on a questionnaire to screen our current and future suppliers
	414–2 Negative social impacts in the supply chain and actions taken	
Customer health and safety		
GRI 3: Material Topics 2021	3–3 Management of material topics	Page 42
GRI 416: Customer Health and Safety 2016	416–1 Assessment of the health and safety impacts of product and service categories	Our products does not have any negative impacts on the customers health and safety.
	416–2 Incidents of non–compliance concerning the health and safety impacts of products and services	Homebiogas had zero incidents of non–compliance concerning the health and safety impacts of products and services.

Marketing and labeling		
GRI 3: Material Topics 2021	3–3 Management of material topics	Page 27
GRI 417: Marketing and Labeling 2016	417–1 Requirements for product and service information and labeling	Homebiogas has no requirements for product and service information and labeling.
	417–2 Incidents of non–compliance concerning product and service information and labeling	HomeBiogas had zero incidents of non–compliance concerning product and service information and labeling.
	417–3 Incidents of non–compliance concerning marketing communications	Homebiogas had zero incidents of non–compliance concerning marketing communications.
Customer privacy		
GRI 3: Material Topics 2021	3–3 Management of material topics	Page 27
GRI 418: Customer Privacy 2016	418–1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	HomeBiogas had zero substantiated complaints concerning breaches of customer privacy and losses of customer data.

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Waste management

Sustainability Disclosure Topics & Accounting Metrics

Topic	Accounting Metric	Category	Unit of Measure	Code	Response/Location in the Report
Greenhouse Gas Emissions	(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	Quantitative	Metric tons (t) CO -e, 2Percentage (%)	IF-WM-110a.1	Page 35
	(1) Total landfill gas generated, (2) percentage flared, (3) percentage used for energy	Quantitative	Million British Thermal Units (MMBtu), Percentage (%)	IF-WM-110a.2	Page 7, 15, 27
	Discussion of long-term and short-term strategy or plan to manage Scope 1 and lifecycle emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	IF-WM-110a.3	Page 35
Fleet Fuel Management	(1) Fleet fuel consumed, (2) percentage natural gas, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	IF-WM-110b.1	Not Relevant
	Percentage of alternative fuel vehicles in fleet	Quantitative	Percentage (%)	IF-WM-110b.2	Not Relevant

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Waste management

Sustainability Disclosure Topics & Accounting Metrics

Topic	Accounting Metric	Category	Unit of Measure	Code	Response/Location in the Report
Greenhouse Gas Emissions	(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	Quantitative	Metric tons (t) CO -e, 2Percentage (%)	IF-WM-110a.1	Page 35-36
	(1) Total landfill gas generated, (2) percentage flared, (3) percentage used for energy	Quantitative	Million British Thermal Units (MMBtu), Percentage (%)	IF-WM-110a.2	Page 7, 15, 34
	Discussion of long-term and short-term strategy or plan to manage Scope 1 and lifecycle emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	IF-WM-110a.3	Not Relevant
Fleet Fuel Management	(1) Fleet fuel consumed, (2) percentage natural gas, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	IF-WM-110b.1	Not Relevant
	Percentage of alternative fuel vehicles in fleet	Quantitative	Percentage (%)	IF-WM-110b.2	Not Relevant
Air Quality	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	Quantitative	Metric tons (t)	IF-WM-120a.1	Not Relevant
	Number of facilities in or near areas of dense population	Quantitative	Number	IF-WM-120a.2	Not Relevant
	Number of incidents of non-compliance associated with air emissions	Quantitative	Number	IF-WM-120a.3	Not Relevant

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Sustainability Disclosure Topics & Accounting Metrics

Topic	Accounting Metric	Category	Unit of Measure	Code	Response/Location in the Report
Management of Leachate & Hazardous Waste	(1) Total Toxic Release Inventory (TRI) releases, (2) percentage released to water	Quantitative	Metric tons (t), Percentage (%)	IF-WM-150a.1	Not Relevant
	Number of corrective actions implemented for landfill releases	Quantitative	Number	IF-WM-150a.2	Not Relevant
	Number of incidents of non-compliance associated with environmental impacts	Quantitative	Number	IF-WM-150a.3	Not Relevant
Labor Practices	Percentage of active workforce covered under collective bargaining agreements	Quantitative	Percentage (%)	IF-WM-310a.1	All Homebiogas' workforce is employed by personal employment agreements
	(1) Number of work stoppages and (2) total days idle	Quantitative	Number, Days idle	IF-WM-310a.2	Not Relevant
Workforce Health and Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees	Quantitative	Rate	IF-WM-320a.1	Homebiogas had zero incidents and injuries in 2022.
	Safety Measurement System BASIC percentiles for: (1) Unsafe Driving, (2) Hours-of-Service Compliance, (3) Driver Fitness, (4) Controlled Substances/Alcohol, (5) Vehicle Maintenance, and (6) Hazardous Materials" Compliance	Quantitative	Percentile	IF-WM-320a.2	Not Relevant
	'"Number of road accidents and incidents	Quantitative	Number	IF-WM-320a.3	Homebiogas had zero road accidents and incidents in 2022.

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Waste management

Sustainability Disclosure Topics & Accounting Metrics

Topic	Accounting Metric	Category	Unit of Measure	Code	Response/Location in the Report
Recycling & Resource Recovery	(1) Amount of waste incinerated, (2) percentage hazardous, (3) percentage used for energy recovery	Quantitative	Metric tons (t), Percentage (%	IF-WM-420a.1	Page 14-15, 17
	Percentage of customers receiving (1) recycling and (2) composting services, by customer type	Quantitative	Percentage (%)	IF-WM-420a.2	Not Relevant
	Amount of material (1) recycled, (2) composted, and (3) processed as waste-to energy	Quantitative	Metric tons (t)	IF-WM-420a.3	Page 33-34
	Amount of electronic waste collected, percentage recovered through recycling	Quantitative	Metric tons (t), Percentage (%)	IF-WM-420a.4	Not Relevant
Activity Metrics		**Category**	**Unit of Measure**	**Code**	**Response/Location in the Report**
Number of customers by category: (1) municipal, (2) commercial, (3) industrial, (4) residential, and (5) other		Quantitative	Number	IF-WM-000.A	Page 9, 28, 44, 53
Vehicle fleet size		Quantitative	Number	IF-WM-000.B	10
Number of: (1) landfills, (2) transfer stations, (3) recycling centers, (4) composting centers, (5) incinerators, and (6) all otherfacilities4		Quantitative	Number	IF-WM-000.C	Page 17, 37
Total amount of materials managed, by customer category: (1) municipal, (2) commercial, (3) industrial, (4) residential, and (5) other		Quantitative	Number	IF-WM-000.D	Not Relevant

Legal Disclaimer

| Important notice

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References

1. The number of trees saved is calculated based on professional literature exploring the potential of biogas technology to substitute traditional fuel sources in developing countries.
2. Tones of CO2-eq mitigated was estimated based on a calculation of the UNCDM methodoloy. The carbon reduction calculation is taking into account the baseline emission reduction in regard to the location of the systems: In developing countries we included the reduction of fuels as charcoal/firewood; In developed countries we included the avoidance of waste transportation and landfill. In this calculation the Global Warming Potential (GWP) of methane (CH4) is according to the IPCC AR5, and Gold Standard rules, in a 100 year time horizon accounts for 28 Global warming potential of that of Carbon.
3. The number of cooking hours was estimated based on the average cooking time using HomeBiogas system.
4. Estimation based on the treatment capacity of Homebiogas bio-toilet, and its water use in comparison to the average water use of regular toilet.
5. The amount of food waste up-cycled in developed countries was estimated based on HomeBiogas systems waste treatment capacity.
6. The Bio-fertilizer produced was estimated based on the average Bio-fertilizer capacity of HomeBiogas systems.
7. The amount of biogas produced was estimated based on the average biogas production capacity of HomeBiogas system.
8. Number of HomeBiogas systems installed in schools in 2022
9. IPCC, A. (2014). IPCC Fifth Assessment Report (p. 731)
10. World Health Organization
11. World Health Organization
12. World Health Organization and UNICEF. Progress on household drinking water, sanitation and hygiene 2000-2020: Five years into the SDGs [PDF – 164 pages]. Geneva: World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), 2021.
13. World Bank. Reducing Inequalities in Water Supply, Sanitation, and Hygiene in the Era of the Sustainable Development Goals: Synthesis Report of the WASH Poverty Diagnostic Initiative; WASH Poverty Diagnostic; World Bank: Washington, DC, USA, 2017.
14. Worldwide food waste | ThinkEatSave (unep.org)
15. MAYA- Tel Aviv Stock Exchange
16. Energy calculation
HomeBiogas has purchased electricity only from Israel Electric Corporation.
HomeBiogas energy intensity represent the electricity used to produce a single HBG system.
17. Emissions calculation
The calculation of scopes 1,2 and 3 was based on the GHG Protocol. Furthermore,to calculate scopes 1 and 2, we used the emissions calculator of Israeli Ministry of Environmental Protection. The calculation of Scope 3 was carried out in accordance with the GHG Protocol and the UK Government GHG Conversion Factors for Company Reporting.
Scope 1 – Scope 1 describes all direct emissions from the use of company vehicles.
Scope 2 – Scope 2 describes indirect emissions from the consumption of electricity at the company's assets in Israel (HQ and the logistics center)
Scope 3 – Scope 3 emissions describe indirect emissions in the supply chain, which are related to company operations, such as transportation of raw materials to the company and shipments of products to customers by distributors and/or other parties, employees' commuting, business air travel and purchase of goods As HomeBiogas increases its business activities, and strives to improve people's lives and reduce its carbon footprint, HomeBiogas will further refine scope 3 emissions data collection procedures. HomeBiogas GHG intensity represent the emission polluted in scope 1 and 2 to each HBG system produced The GHG Protocol (Greenhouse Gas Protocol) is a global standardized frameworks to measure and manage greenhouse gas (GHG) emissions. The WRI (World Resources Institute) partnered with the WBCSD (World Business Council for Sustainable Development) in the late 1990s to establish an international standard for corporate GHG accounting and reporting.

HomeBiogas

HomeBiogas LTD, Beit Yanai, Israel 4029300, IL Julia@homebiogas.com www.homebiogas.com