HOMEBIOGAS®

IMPACT 2021 REPORT

Environmental, Social and Governance

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Boaz Schweiger
Executive Chairman

Oshik Efrati
Co-founder & CEO

Yair Teller
Co-founder & Deputy CEO

Erez Lanzer
Co-founder & Deputy CEO

Dear HomeBiogas Stakeholders,

It is with great pride and immense gratitude to our dedicated partners and shareholders, hardworking team and inspiring customers, that we present our 2021 Impact Report, which demonstrates the ongoing contributions of HomeBiogas and our company's vision for the future.

Over the past 12 years, our mission to make waste-to-resource solutions accessible to all through the technology of nature has become a reality. With the vision to revolutionize the way we interact with waste, we set out to to create a product that harnesses the technology of nature and transforms waste from a burden into a resource. We began as a team of three friends with this common goal and grew into a company of one hundred people, who share a driving force to continue to develop a product that benefits the environment and helps people transform their lives. The HomeBiogas team is comprised of passion driven people who believe in the power of embracing change and innovation to create the future we desire.

Since founding HomeBiogas, we have worked to make biogas accessible to people around the world and from all backgrounds by developing, manufacturing and providing systems that turn organic waste into renewable energy and rich organic fertilizer, onsite. HomeBiogas systems can be found being used off-grid, in rural areas across India and Africa, reducing reliance on the use of fossil fuels and enabling people to generate clean and safe cooking gas. By transitioning from the use of polluting fuels such as coal and smoke producing wood, HomeBiogas helps improve the health, safety and environment surrounding our customers. Our product helps individuals, communities and businesses reach the 13 UN Sustainable Development Goals which serve as a blueprint to achieve a better and more sustainable future for all.

As our company has grown so has our impact. HomeBiogas systems are currently used across the world and for a variety of reasons. With a wide portfolio of products, HomeBiogas helps businesses achieve Environmental, Social, and Governance (ESG) Criteria, enabling them to demonstrate their commitment to safeguard the environment.

By measuring and presenting our impact through the lens of these recognized Environmental, Social and Governance measurements, we ensure that HomeBiogas continuously acts to improve, not just by selling innovative products and services that create positive change, but also by meeting the highest legal, sustainable and transparency standards.

We would like to thank our customers, employees, partners and shareholders for their continued trust and support on our journey. This report illustrates how together we are creating the positive change we envision for the world.

Boaz Schweiger
Executive Chairman

Oshik Efrati
Co-founder & CEO

Yair Teller
Co-founder & Deputy CEO

Erez Lanzer
Co-founder & Deputy CEO

Snapshot

HOMEBIOGAS® serves thousands of

households businesses farmers schools

seeking a sustainable way of living and improving life quality for underserved communities all around the world.

HOMEBIOGAS® is a **public company** listed on the Tel Aviv Stock Exchange.

93 Employees
third of whom are women

7 Directors
in diverse disciplines

43% independent

1/3 women

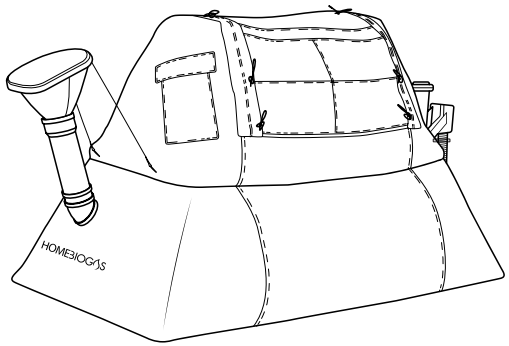
HomeBiogas systems designed for a circular economy

100%
Recyclable materials

Extended product shelf life
+15 years

Offering a
Servicizing
business model

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



Expand infrastructures and streamline

to reduce carbon dioxide emissions by:

- Streamlining logistics and manufacturing
- Investing in a logistics center
- Establishing a warehouse facility in the US
- Reducing deliveries and establishing a subsidiary in Kenya

HomeBiogas making an impact for a better world in 2021:

124,891
Trees saved[1]

76,725
Tons of CO_2-eq mitigated[2]

15,851,293
Hours of cooking on clean energy[3]

5,805
Tons food waste up-cycled[4]

70,080,000
Liters of water conserved[5]

Educating future generation

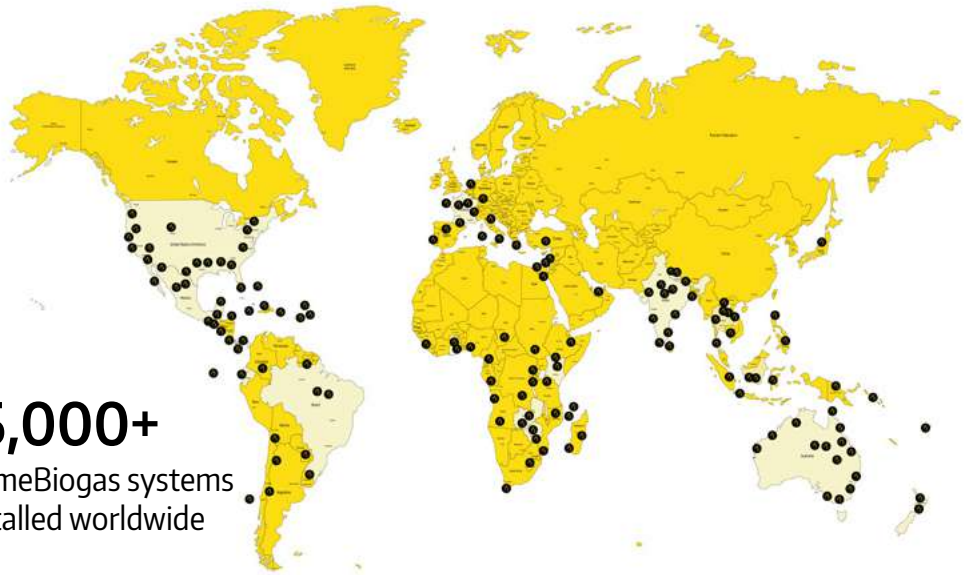
200+ systems

installed in schools and community centers globally

Leading the industry forward by initiating an international biogas standard

ISO 23590:2020

Household biogas system requirements: design, installation, operation, maintenance and safety



15,000+
HomeBiogas systems installed worldwide

100+ countries

HomeBiogas Customers HomeBiogas Distributors

Income from sales doubled:

2,482,000$
in 2021

1,016,000$
in 2020

Boosting our positive environmental impact to promote a waste-free world

47%
of sales in developing countries
Making renewable energy and organic fertilizer accessible to all

Rapid innovation
25%
of HomeBiogas expenditures are invested in R&D to promote a waste free world

Established a subsidiary in Kenya offering a
pay as you go
business model to small farmers

1.1 BILLION$
Total addressable market

1 Million
Small dairy farmers - without access to energy infrastructure

1000`s
Of systems In a pay as you go business model - target by the end of 2022

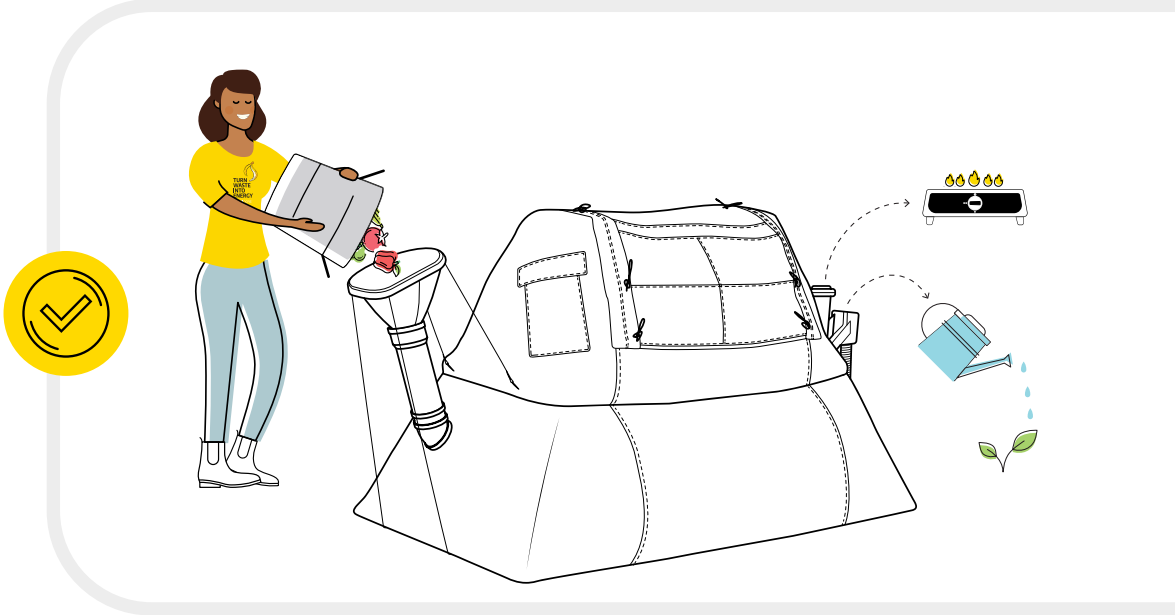
Who we are

HomeBiogas is advancing circular economy solutions in the waste management and clean energy sectors around the world.

HomeBiogas develops, produces and markets biogas systems for onsite handling of organic waste.

The company's systems apply an environmentally friendly biological process converting organic waste into biogas, a clean energy, and organic fertilizer, thereby upcycling organic waste into a resource.

HomeBiogas helps countries, cities, organizations, and companies achieve **Zero Waste and Net-Zero CO2 Emissions** targets and reduce their environmental footprints, thereby taking action on climate change & sustainability. The company's products **treat organic waste onsite**, generating biogas as a renewable energy and producing organic fertilizer. Local, **onsite** treatment eliminates the transport of waste to landfills, or other treatments sites. Currently, organic waste in most countries is landfilled, creating one of the major sources of methane emissions – a greenhouse gas that is 84 times more potent than carbon dioxide.[6]



Our vision

Our vision is to transform the world of waste. We see waste as a resource that can better our lives today, and our planet tomorrow.

HomeBiogas is an active partner in enabling a ZERO WASTE and Net Zero - GHG Emission world using its systems to convert organic waste into a resource.

We worked hard for more than ten years to promote our vision, investing long hours and resources on research and development, operating in more than 100 countries on 6 continents to make our systems available worldwide, achieving our vision of changing our customers' lives.
Our solutions offer onsite treatment of organic waste, an important and efficient solution for dealing with two of the world's biggest challenges: Waste and Climate Change. Onsite treatment of waste reduces environmental and economic costs of transporting waste. Instead, HBG systems treat organic waste onsite, generating added value for its customers: biogas as renewable energy and an organic fertilizer.

HOMBIOGAS makes biogas accessible to all

According to the World Bank, the UN and the FAO reports, between 2.4 to 3.5 billion people worldwide do not have access to clean cooking energy and technology. [7]

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

Environmental - inefficient fuel production and consumption leads to increased greenhouse gas emissions, solid fuel cooking is tied to catalytic warming effects of black carbon emissions and to **deforestation** due to fuel collection and production.

Health - a broad range of health conditions are associated with indoor air pollution; hundreds of thousands of burns, deaths, and injuries are associated with traditional fuels/cooking appliances; and firewood collection leads to chronic and acute physical ailments.
According to the World Health Organization **Each year, close to 4 million people die prematurely from illness attributable to household air pollution from inefficient cooking practices.**

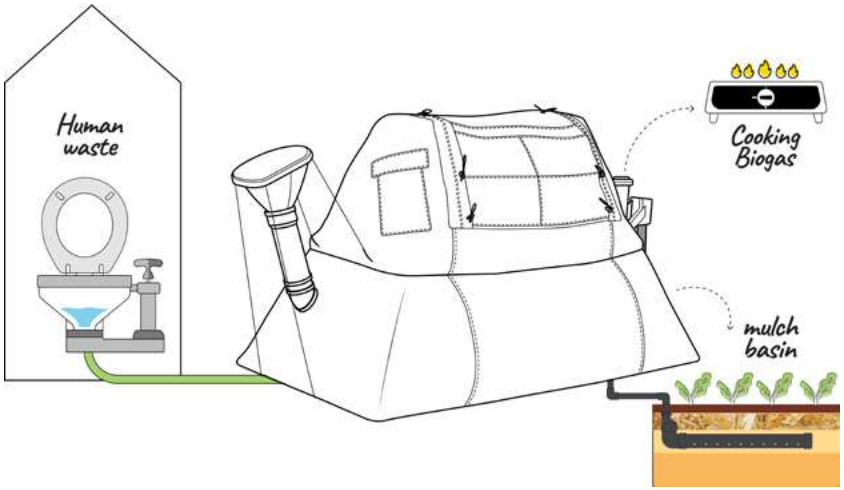
Economic - extensive avoidable spending on fuel, and lost opportunities for income generation on time spent collecting fuel and cooking. Reports indicate that the problem is not lack of consumer expenditure but the need for business models and technologies that make superior alternatives affordable and accessible.

HomeBiogas helps cut reliance on fossil fuels by enabling people to generate their own cooking gas using organic waste.

Using HomeBiogas also cuts spending associated with cooking fuel while improving the environment, health, and safety of its users.

HOMEBIOGAS provides access to basic sanitation, improving people's health & contributes to water conservation

Sanitation is a basic necessity that contributes to better human health, dignity, and quality of life. The UNSDG (goal 6) water and sanitation monitoring program reported that in 2017 **over 2 billion lacked** basic **sanitation services**, and **673 million people were still practicing open defecation**, with 91% living in rural areas. The result is that the poor are deprived of decent and dignified lifestyles leading to the deterioration of health, wellbeing, and the environment. According to the World Health Organization, **poor sanitation and hygiene practices contribute to over 820,000 deaths from diarrhea annually.**[8]

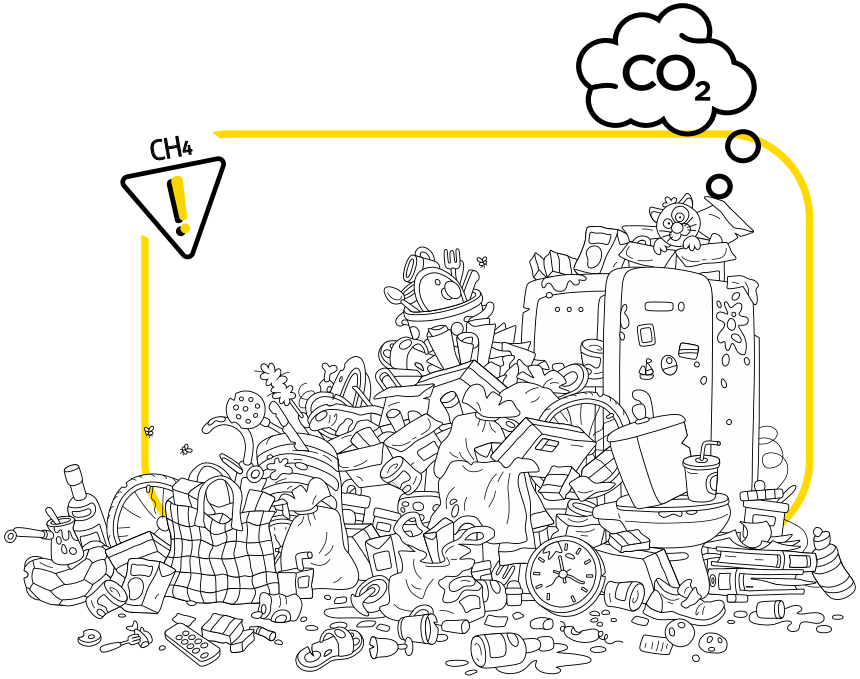


The HomeBiogas Bio-Toilet offers a comprehensive solution for waste management, renewable energy creation, clean cooking, fertilizer production, and sanitation.
The Bio-toilet is completely off-grid and saves over 80% of water with every flush compared to a regular toilet.
The Bio-Toilet solution connects to the HomeBiogas biogas system, enabling the human waste from the toilet to be converted into cooking fuel in a user-friendly way that does not require a connection to the sewage or water grid.
This solution can significantly help improve people's health while decreasing their water footprint and overall environmental impact, as reducing water usage also decreases energy use, pollution and resource use.

HOMEBIOGAS turns organic waste into renewable energy & biofertilizer onsite

Humans generate a significant amount of waste:
over 2 billion tons of solid waste produced annually around the world, and this is expected to increase **to 3.4 billion tons by 2050.**[9]
44% of this global waste includes foods and organics, and this is where the HomeBiogas solution comes in.

Landfills are the most common resting spot for your garbage. When organic waste decomposes in landfills, it naturally produces a gas called Methane. **A greenhouse gas with 84 times more warming power than CO2.** In an era of rapid urbanization and population growth, waste management is critical for sustainable, healthy, and inclusive cities. If no action is taken, the world will be on a dangerous path to more waste and overwhelming pollution. The time to act is now.



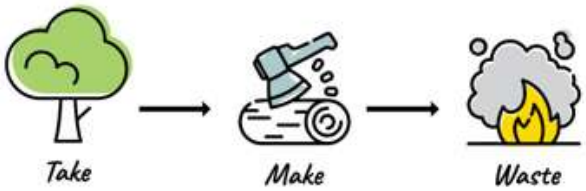
Innovative technology is the fastest way to disrupt a static industry. The driving force behind HomeBiogas is to develop a portfolio of products that will treat organic waste on-site and in turn, will benefit the environment and help people and businesses worldwide turn their organic waste into renewable energy and liquid biofertilizer on-site.

HOMEBIOGAS® **Renewable** energy

Biogas is an environmentally-friendly, renewable energy source. It is produced when organic matter, such as food or animal waste, is broken down by microorganisms in the absence of oxygen, in a process called anaerobic digestion.[10]

Biogas consists mainly of methane and carbon dioxide. The Biogas produced by HomeBiogas systems is used as a replacement for natural gas and liquefied petroleum gas (LPG) - this can include use for cooking or heating water. HomeBiogas biogas production has no negative environmental impact in contrast to LPG and natural gas production.

Circular economy



Energy from finite sources

Energy from renewable sources

Circular economy (CE) strives to prevent waste of resources and promote a waste-free world based on the principles of Reduce, Reuse and Recycle of materials and products. A circular economy is regenerative by design, and aims to keep products, components, and materials at their highest quality.[11]

> ***HomeBiogas Circular economy thinking enables new and innovative ways of creating, delivering and capturing value – building better, more sustainable business models. HomeBiogas offers its customers a servicizing business model, and provides system support and maintenance throughout the product lifecycle. Moreover, the company has adopted a Circular sourcing business model, using recyclable materials for its products aiming for closed loop production.***

Yamit Naftali, Director of Strategy and Business Development

HOMEBIOGAS is proud to be part of the circular economy environmental impacts of multinationals such as:

We are focused on new ways to harness the power of technology, partnerships, and investments to drive impact at scale and pace to help the world more effectively transform to a circular economy. HomeBiogas (HBG), based in Israel, is a leader in developing affordable, simple-to-use biogas systems, enabling people and businesses around the globe to turn their own organic waste into renewable energy and liquid fertilizer on site.

Microsoft

Microsoft[12]

Germany's international development agency, GIZ, which supports renewable energy projects in 120 countries, has recognized HomeBiogas for the successful implementation and operation of its systems in a joint project in Nepal.

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Small-scale anaerobic digestion would thus not only help cut costs and decrease inefficiencies in waste transportation, but it would also help residents and businesses turn waste into renewable energy and get the City closer to its OneNYC plan of sending zero waste to landfill by 2030. HomeBiogas has installed a number of smaller anaerobic digesters in single-family homes and is also piloting these systems in some multifamily homes.

JACOBS TECHNION-CORNELL INSTITUTE AT CORNELL TECH

The Jacobs Technion-Cornell Institute at Cornell University recommends HomeBiogas systems as one of the easiest and most efficient systems for the local treatment of organic waste in New York City.[13]

HomeBiogas also cooperates with international organizations of the UN, EU, USAID, the Red Cross, and is a member of the Clean Cooking Alliance.

UNITED NATIONS

USAID

WWF

ICRC

CLEAN COOKING ALLIANCE

The main sectors in which HomeBiogas operates to promote the circular economy

Waste management

in the circular economy seeks a Zero Waste World.

CE strives for an efficient use of materials and resources that reduces waste throughout supply chains.
This sector includes industries engaged in the collection, treatment, and disposal of waste materials. HomeBiogas systems treat organic waste onsite, turning it from a hazard into a resource.

Renewable energy

is one of the cornerstones of the circular economy, an energy source driven by a sustainable and sound process. HomeBiogas systems generate green and renewable energy, produced in a natural process based on the routine of onsite handling of organic waste.

Cleantech

is an innovative technology that is a cornerstone of the circular economy and critical for the creation of an efficient supply chain that reduces pollution and waste at every stage. Our system efficiently treats organic waste onsite and does not require transporting, thereby shortening the supply chain.

Sustainable agriculture

is based on circular economy principles and emphasizes the use of sustainable farming techniques through the value chain. The emphasis In agriculture the emphasis is on generating growth without damaging the soil and ecological habitats, and on reducing organic waste. Our systems convert organic waste into liquid organic fertilizer, which has been demonstrated to fertilize the soil and reduce the need for synthetic pesticides.

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 in the world. After analyzing and testing current biodigester designs, the limitations and great opportunities became clear. Our founders were determined to modernize the technology so it is easy to install and accessible to all.

2014

The first HBG prototype was piloted.

First global sales.

2015

Our CEO was appointed chairman of the ISO biogas committee.

A project with the European Union and the Peres Center for Peace & Innovation -

Installation of Homebiogas systems for 100 families in the Palestinian Authority.

2016

The first-generation of HBG systems were commercially available.

2017

Won a European Commission Horizon 2020 project 'Homebiogas'.

2018

The latest- HBG generation is our most advanced model, following further research and fine-tuning. It comes in three sizes: HomeBiogas 2, 4, and 7CM!

Won European Commission Horizon 2020 'Housefull' project.

2019

Launch of Homebiogas Bio-toilet.

2020

CSR projects in India in collaboration with Adani Foundation to provide HBG systems in rural India to improve the life of small farmers.

Publication of ISO-23590:2020 - Household Biogas System Requirements.

2021

TASE IPO - HomeBiogas is listed for trading on Tel Aviv Stock Exchange under the symbol HMGS.

First installation of the commercial system in a kibbutz dining room.

IDF pilot financed by Israel Innovation Authority and Ministry of Defense to use HomeBiogas commercial system in a dining room at an IDF base.

First installation of the premium system prototype.

UN projects with the UN High Commissioner for Refugees (UNCR) to supply biogas systems to refugee camps in Zimbabwe and Malawi.

The first subsidiary is established in Kenya for direct sale of HomeBiogas systems.

Emerson Electric Co. collaboration agreement with Emerson Electric Co. (NYSE: EMR) for technological integration and integrated product development.

Logistics center established in Caesarea.

Global trends

A global waste challenge - Approximately **1.3 billion tons** of food produced for human consumption is thrown out.[9]

USA

In 2020, according to the US Environmental Protection Agency (EPA)[14], Methane emissions accounted for **11% of greenhouse gasemissions**

In the US alone, within just ten years, it will not be possible to landfill waste in **20 states**[15]

7 U.S states have already passed waste recycling laws, with an emphasis on reducing the landfill of organic waste[16]

ISRAEL

Israel's landfills are due to be closed in the second half of 2022 and early 2023 as they reach capacity[16]

Israel's Ministry of Environmental Protection designed a strategy to create a sustainable economy, setting ambitious targets by 2030:
- Reduce landfill of municipal solid waste **(MSW) to 20%** compared to the current 80%of MSW sent to landfill
- **Mandate organic waste separation** and ban on organic waste landfill[17]

EUROPE

European Directive on waste management requires all EU countries to limit landfilled waste to a **maximum of 10% by 2035**[18]

The EU launched a renewable energy plan, with a target to double the use of biogas by 2030[19]

HOMEBIOGAS aims to revolutionize the way we manage & capture organic waste

Instead of treating waste as a hazard we have to dispose, it will and should be a resource we want to keep and use for our benefit.

The HomeBiogas simple-to-use biogas systems continue to help people and businesses around the globe turn their organic waste into renewable energy and liquid biofertilizer on-site

The Commercial System reduces waste treatment costs through an onsite organic waste solution for large kitchens. The system also saves energy costs by producing hot water, resulting in reduced electricity use and GHG emissions

The Premium System, is designed for use in modern homes. Organic waste is fed directly into the system through the kitchen waste disposal unit and is then turned into renewable energy, which is used as a water heating source for the home and as fertilizer for the garden.

Methane (CH4) emissions as a global challenge

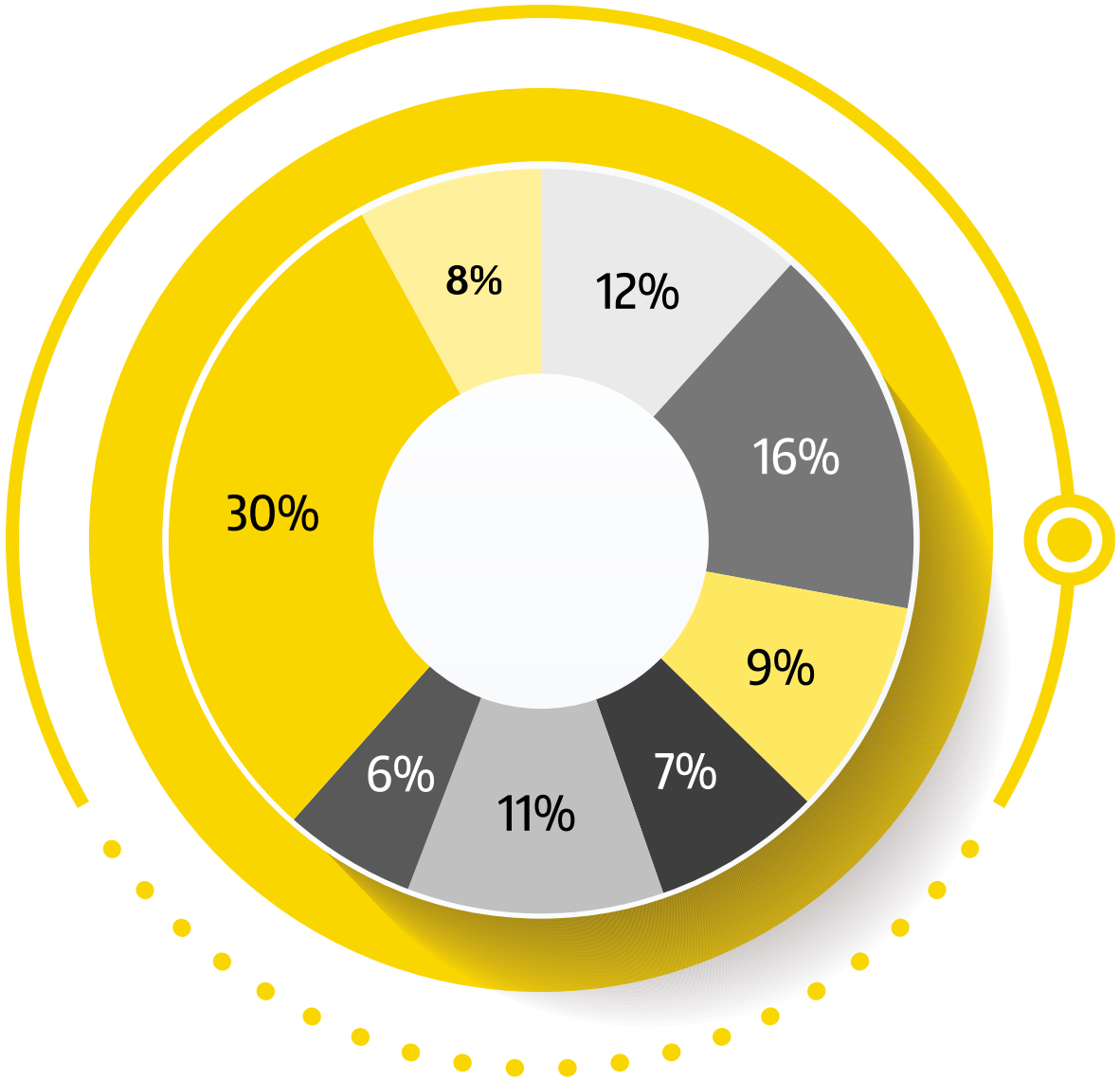
Landfill waste, especially organic waste, is one of the main sources of methane emissions into the atmosphere. Methane is created by the natural decomposition of organic waste. The same natural process takes place in our systems, but in a controlled process in which the methane is exploited to generate green renewable energy. Methan is a potent greenhouse gas that has **84 times the warming power of carbon dioxide** in the first 20 years after it reaches the atmosphere.[9] Consequently, local and global activity is underway to reduce methane emissions.

HomeBiogas systems help mitigate climate change and offer a comprehensive solution for organic waste treatment: by treating waste onsite we eliminate waste transportation of waste and methane emissions from organic waste in landfills.

This situation highlights the urgent need to find local solutions for the management of organic waste, and our systems offer a holistic, environmentally-friendly, and green solution to upcycle waste into a resource.

We seek to change the global perception of organic waste from a hazard to a resource, and to make our natural technologically-based solutions accessible to all.

Our ecosystem of partners



30.34% **Public holding**

24.77% **Institutional holdings**
Migdal Insurance and Financial Holdings Ltd. (about 11%);
Altshuler Shaham Investment House Ltd. (about 5.63%);
Phoenix Holdings and Excellence Investment House Ltd. (about 7.99%)

44.80% **Major shareholders**
Closed Loop Partners (16.2%);
Engie New Ventures (9.43%);
JSCapital (7.36%).

Founders
CEO Mr. Moshe "Oshik" Efrati (3.9%);
VP Business Development and Sales Mr. Yair Lev Teller (3.9%);
COO Mr. Erez Lanzer (3.9%).

- Public
- Closed-loop partners
- Founders & employees
- Migdal
- Engie
- Phoenix
- JS capital

Investors

Closed Loop Partners is a hybrid investment firm and innovation center, with an extensive network of Fortune 500 corporate investors, industry experts and impact partners. Closed Loop Partners invests in the circular economy, a new economic model focused on a profitable and sustainable future.

> As an early investor in HomeBiogas, we are thrilled to see their tremendous progress in becoming a local and global solution for sanitation and renewable energy," says Ron Gonen, founder and CEO of Closed Loop Partners. "Their HomeBiogas systems have revolutionized the way we manage and recover value from organic waste, helping people and businesses transform 'waste' into valuable resources. We look forward to seeing their continued impact and growth as they enter new markets and extend their reach around the world.

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

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.

Altshuler Shaham Investment House was established in 1990 by Gilad Altshuler and Kalman Shaham, and now incorporates a group of companies in various finance fields. The investment house currently manages some 260 billion shekels for 1.8 clients and investors, and offers its clients a broad range of products and services, including managing investment portfolios, provident funds, study funds, pension funds and mutual funds.

Phoenix (including Excellence) is an Israeli multiline insurance, asset management and financial services company. The group serves a significant portion of Israeli households with a broad set of activities and solutions across business and customer segments. 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.

Business partners

Emerson is a leading global technology, software, engineering, and manufacturing company providing innovative solutions for customers in industrial, commercial, and residential markets.

DAI works on the frontlines of global development to transform ideas into action and action into impact, and is committed to shaping a more livable world.

Rheem Manufacturing Company offers and manufactures innovative and efficient solutions for heating, ventilation, and air conditioning (HVAC) systems and for water heaters.

Xylem is a leading water technology company committed to "solving water" by creating innovative and smart technology solutions to meet the world's water, wastewater, and energy needs.

VALUES that guide us

Leadership

Driven by personal responsibility. Be the change you want to see in the world. Take the lead.

Commitment

Driven by passion.
Put your heart and soul into everything you do.
Act with true intention.

Optimism

Driven by never giving up.
Difficulties are opportunities in disguise.
Overcome challenges.

Agility

Driven by embracing change. Navigate with confidence in uncertainties.

Progress

Driven by constant improvement. There is always a better way to do things.
Eager to advance.

HOMEBIOGAS operations reflect the highest level of multifaceted and intersecting social, environmental, human, and corporate values. We continuously seek to provide the best, simplest, and most efficient solutions for treating organic waste, converting it into a resource accessible worldwide, while promoting our core values on which the company is founded.

We work meticulously with suppliers and partners who share our values to establish diverse values and ethics for diversified populations, and we uphold a rich array of environmental and social procedures instilled in our DNA.

HOMEBIOGAS is a story of Israeli pride in an advanced innovative company. Our employees work together with leading international organizations to improve standards of living for diversified population groups around the world.

By relying on natural principles for a shared and reciprocal holistic solution, we seek to create a community that fulfills and espouses the values of reciprocity and cooperation.

These values guide HOMEBIOGAS, its subsidiaries, directors, executives, and employees in building our relationships with our customers, suppliers and business partners.

HOMEBIOGAS strategy

HomeBiogas seeks to offer a broad solution that can optimally serve a wide range of customers through the "technology of nature" and to promote the circular economy. We aim to reduce the environmental impact of organic waste through the simplest, most efficient and sustainable methods by converting it into energy using our biogas systems.

The driving force behind HomeBiogas is the goal to develop a portfolio of products that will treat organic waste on-site, and in turn will benefit the environment and help people and businesses worldwide transition to clean renewable energy.

The main steps to reach sustainable growth in the coming years

HomeBiogas has two sales channels:

Direct Sales:
- Global E-commerce sales
- HomeBiogas Subsidiary in Kenya

Indirect Sales:
- Global net of distributors and partners

HomeBiogas conducts marketing activity, such as sales campaigns and community events for its customers, while scrupulously maintaining uncompromising high-quality customer service.

- Establish subsidiaries in our primary markets.
- Sign agreements with international organizations, such as the UN.
- Develop an additional business model for commercial systems.
- Expand our marketing logistics by opening a third forward warehouse in the Far East.
- Recruit more marketers and distributors in current and new markets.
- Expand the suppliers of raw materials for manufacturing our products.
- Streamline production and logistics processes and define follow-on steps for further improvement.

HOMEBIOGAS Impact Strategy Methodology

Strategy

Adopt UN SDG

Initiate an international **biogas standard**

Establish **vision and values**

Execution

Identify dimensions of impact

Reporting methodology (GRI & SASB)

Audit

Data collection

Data monitoring

Transparency

Publish impact statements for all stakeholders

Audit by an authorized third party expert **certifications**

Expand future **commitments**

Our contribution to UN SDG

As a company that is focused on sustainability and the circular economy, our business activities inherently align with many of the United Nations Sustainable Development Goals (SDG).

HomeBiogas has sold systems in more than **100** countries, most of them emerging economies in Africa, Asia, and South America. We attach great importance to undertaking these goals as members of the worldwide community with the capacity to be catalysts for change.

In this report HomeBiogas demonstrates the congruence between its business, social, and environmental activities and the **17 SDG** & **169** secondary **UN** goals.

Combining the goals strengthens our commitment to promoting sustainability. See below briefly summarizes HomeBiogas operations' serving the **UNSDG** and secondary goals.

Goal	Secondary goal	Commitments	Implementation in practice
1 NO POVERTY 	1.5 Build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters. 1.a Ensure significant mobilization of resources from a variety of sources, to implement programs and policies to end poverty in all its dimensions.	HomeBiogas undertakes to strengthen impoverished populations through its business and volunteering & philanthropy activity.	The biogas and organic liquid fertilizer produced by HomeBiogas systems enable impoverished rural populations to reduce their dependence on firewood for cooking, synthetic fertilizers and pesticides. HBG systems contribute to building resilience in these communities by reducing their future energy expenditures. 47% of our total sales in 2021 were in developing countries. HomeBiogas and the UN High Commissioner for Refugees signed an agreement to supply HBG systems to refugee camps in Zimbabwe and Malawi.
2 ZERO HUNGER 	2.3 Increasing agricultural productivity and incomes of small-scale food producers. 2.4 Ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production.	HomeBiogas undertakes to continue promoting natural technological solutions advancing sustainable agriculture.	HBG system's liquid fertilizer has demonstrated excellent economic and operational efficiency. Farmers reported higher crop yields, a stronger natural flavor, larger harvests, healthier and more fertile soil, and less need for pesticides.
3 GOOD HEALTH AND WELL-BEING 	3.3 End infectious diseases.	HomeBiogas undertakes to continue promoting nature-based technology solutions to reduce disease caused by waste mismanagement.	HomeBiogas seeks to make HBG systems available to the general public in developing countries, that is affected by poor health and wellbeing. HBG systems generate biogas - a clean natural gas for cooking - from organic waste, replacing prevailing polluting methods for cooking, such as firewood and other fuels. Onsite treatment prevents the contact of waste and/or effluents with food and/ or water sources, thereby preventing contamination, and resulting diseases.
4 QUALITY EDUCATION 	4.7 Ensure that all learners acquire the knowledge and skills needed to promote sustainable development. including, among others, through education for sustainable development.	HomeBiogas undertakes to continue promoting education for sustainable development.	HomeBiogas has installed more than 200 systems in schools and community center globally as part of sustainability educational programs. HomeBiogas collaborates with universities and research institutions in the fields of organic fertilizer and regenerative agriculture. HomeBiogas designed an educational kit for schools, teaching about the upcycling of organic waste into clean biogas for cooking and the use of organic fertilizer from our waste.

Goal	Secondary goal	Commitments	Implementation in practice
5 GENDER EQUALITY 	5.b Enhance the use of enabling technology to promote the empowerment of women.	HomeBiogas undertakes to promote, support & strengthen women in society by making its biogas technology available to women in developing countries, and through extra-enterprise activities.	In most cultures women are still responsible for the main household tasks, including cooking. HomeBiogas systems generate clean energy for cooking - biogas - instead of polluting fuels that emit smoke and harm women's health. Women in developing countries such as India, who use HBH systems, report that the simplicity of use and availability of biogas saves the time needed to light fires and cook, greatly easing their work. HomeBiogas promotes equal employment opportunities and complies with legal requirements for fair and equal employment. HomeBiogas also empowers and promotes women, who comprise 33% of all company employees and 29% of the board of directors.
6 CLEAN WATER AND SANITATION 	6.2 Achieve access to adequate and equitable sanitation and hygiene for all. 6.3 Improve water quality by reducing pollution, eliminating dumping, and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and substantially increasing recycling and safe reuse globally. 6.4 Substantially increase water-use efficiency across all. 6.a Expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities. 6.b Support and strengthen the participation of local communities in improving water and sanitation management.	HomeBiogas undertakes to continue promoting adequate and equitable sanitation & water use efficiency through its business and social activities.	HomeBiogas promotes the use of its systems to treat organic waste and effluent to prevent them coming into contact with water sources. Use of the company's bio-toilet cuts water use by 80% compared to ordinary toilets. Additionally, compared to local sewage systems such as cesspits, HomeBiogas systems completely isolate the waste and effluents from the environment, preventing odor and/or air pollution hazards. Volunteering and community service are an integral part of HomeBiogas. In the past year we cleaned waste in rivers and continued our monthly and quarterly beach cleaning activities.

Goal	Secondary goal	Commitments	Implementation in practice
7 AFFORDABLE AND CLEAN ENERGY	7.2 Increase substantially the share of renewable energy in the global energy mix. 7.b Expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, least developed countries, small island developing countries, and landlocked developing countries.	HomeBiogas's core activity is the development of biogas systems for upcycling waste into renewable and clean energy to reduce GHG emissions.	HomeBiogas systems contribute to a waste-free world by converting organic waste into an energy resource - biogas - which is used to generate clean and renewable energy. Local organic waste treatment and conversion into a resource enables a transition to the use of renewable energy in developed and developing countries with limited resources. As of the Impact Statement date, use of the systems has prevented approximately 76,725 tons of CO2 equivalent emissions.
8 DECENT WORK AND ECONOMIC GROWTH	8.8 Protect labor rights and promote safe and secure working environments for all workers.	HomeBiogas works extensively to ensure a healthy, safe & pleasant work environment for all its employees.	HomeBiogas support the advancement of employees by funding professional training & enrichment courses offered to employees. In the past year HomeBiogas began working with an external safety consultant to help the company write and implement safety procedures. In 2021, all company employees received 11 hours of training on a range of topics.

Goal	Secondary goal	Commitments	Implementation in practice
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	9.1 Develop quality, reliable, sustainable, and resilient infrastructure to support economic development and human well-being, with a focus on affordable and equitable access for all. 9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological, and technical support to African countries, least developed countries, landlocked developing countries, and small island developing countries.	HomeBiogas works diligently & is committed to developing sustainable technological innovation based on natural processes and making its solutions accessible to all.	HomeBiogas systems help bring existing and new buildings to a neutral net energy balance and even net negative energy balance. The company's basic systems and bio-toilets are off-grid. Their technology does not require any connection to infrastructures, thereby enabling access to renewable energy and to organic waste treatment solutions for developing countries with poor energy and sanitation infrastructures. In Q4 2021, HomeBiogas established a subsidiary in Kenya to directly sell its basic off-grid biogas systems in a pay-as-you-go business model in which after 24 payments the customer owns the system. About 90% of Kenya households do not have any access to gas or energy infrastructures. The HomeBiogas basic system gives them access to clean cooking energy and organic fertilizer. The company invests major resources in R&D, designing solutions for the household and commercial sectors: HomeBiogas developed a commercial system designed for the commercial kitchen, to treat organic waste onsite and produce renewable energy, providing hot water to the customer and producing organic fertilizer. The company is developing the Premium system for households, to treat organic waste onsite and avoid landfill. The company also helped draw up ISO-23590:2020 - Household biogas system requirements: design, installation, operation, maintenance and safety.
11 SUSTAINABLE CITIES AND COMMUNITIES 	11.6 Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.	HomeBiogas seeks to promote onsite organic waste treatment in any place which turn waste from a hazard to a resource and mitigate the waste's environmental impacts.	Current HomeBiogas systems, and those under development, offer systemic solutions for cities and communities to treat organic waste and change it from a hazard to a resource. HomeBiogas systems and solutions promote and support sustainability and the circular economy in every area by converting organic waste into a resource- biogas and organic fertilizer - at the local level, avoiding the transportation and internment of organic waste, boosting energy efficiency, reducing emissions, and improving land use. HomeBiogas premium systems will help reducing the carbon footprint of buildings and houses thanks to reducing the need of waste management and reducing the building energy consumption.

Goal	Secondary goal	Commitments	Implementation in practice
12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	12.5 Substantially reduce waste generation through prevention, reduction, recycling, and reuse. 12.8 Ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.	HomeBiogas, inspired by nature technology, advances sustainable consumption and production. The company's biomimetic technology reduces waste generation.	HomeBiogas systems treat organic waste onsite and avoid waste transportation and landfill. In the production process of HomeBiogas systems, sustainability principles were implemented. HomeBiogas systems are fully recyclable with a lifecycle of more than 15 years. Our production processes emphasize repair rather than replacing the entire system. HomeBiogas is rigorously committed to reducing waste in its production processes, using 100% of raw material.
13 CLIMATE ACTION 	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.	HomeBiogas was founded on the principles of sustainability & circular economy to mitigate climate change.	Use of HomeBiogas systems strengthens climate sustainability in several ways: by treating organic waste onsite, avoiding transportation and landfill of waste, by generating renewable energy, and by producing organic fertilizer replacing the use of chemical fertilizer. Avoiding landfill of waste reduces methane emissions, the fastest opportunity we have to immediately slow the rate of global warming
15 LIFE ON LAND 	15.1 Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services.	HomeBiogas onsite organic waste treatment preserves & strengthens land ecosystems.	Onsite treatment of organic waste and conversion into a resource prevents risk of soil and water contamination and the consequential ecological damage. HomeBiogas systems turn organic waste into organic fertilizer, enriching the soil and reducing the use of chemical fertilizer.
17 PARTNERSHIPS FOR THE GOALS 	17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology, and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.	HomeBiogas initiates global collaborations to promote the circular economy.	HomeBiogas cooperates with NGOs to promote human rights, aid organizations, and community, government, and international organizations, including the UN, WWF, EU, USAID, and the Israeli Ministry of Foreign Affairs. HomeBiogas is a UN official supplier. HomeBiogas is a UN official supplier and, in December 2021, it signed a cooperation agreement with the UNHCR to supply HBG systems to refugee camps in Zimbabwe and Malawi.

Case study | Vitkin Elementary School

Using the HomeBiogas school kit

HomeBiogas developed a kit tailored to the needs of the education system and education centers. In addition to installing the system, HomeBiogas provides a series of educational tutorials and manuals, guiding the teaching staff on how to operate the system.

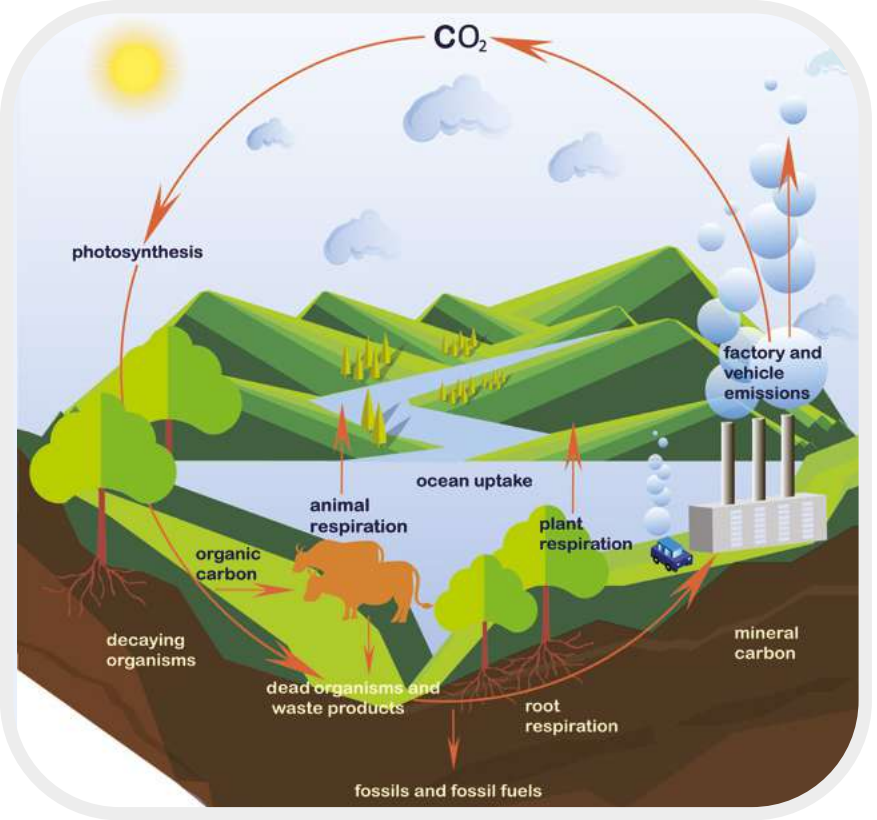
> The HomeBiogas teaching kit enables me to teach a range of science topics in a more tangible and interesting, and therefore more illustrative manner! We found many topics that can be taught through HomeBiogas system: materials science, life sciences, ecosystems, technology and more.
> Owing to the HomeBiogas systems in our school, the students' familiarity with the system and the ensuing learning, our students are part of an exceptional group of people in Israel and around the world, who take it upon themselves to act and find solutions. I have no doubt that learning with the HomeBiogas system contributes to the improvement of learning methods, to raising the sense of environmental responsibility among students and to the diversity required today in any educational system.

Anna Yemini
Science Coordinator
Science Teacher and Class Educator
Vitkin Elementary School

Our technology

Our systems apply the power of nature and are based on biomimetic emulation of natural chemical processes.

Anaerobic digestion is a process in which bacteria break down organic material in an oxygen-poor environment, resulting in the output of a natural gas mix of methane (CH4) and carbon dioxide (CO2), known as biogas. Biogas is a renewable green fuel; its source is organic material that is part of the carbon cycle and does not require external investment of energy to drive it. [20]



HomeBiogas was granted several patents for its innovative technology contributing to worldwide Knowledge.

Our products



The HomeBiogas system (HBG) is a small to medium-scale biodigester that converts animal manure and kitchen waste into clean cooking gas and liquid bio-fertilizer.

The system has been sold to tens of thousands of customers worldwide, in countries including Australia, India, Kenya, and the United States.

The system comes in three different sizes (2 m3, 4 m3 and 7 m3) to meet customer needs.

The system can treat up to 20 kg of organic waste per day.

The system can produce between 43 to 129 liters of bio-fertilizer per day (depends on the organic feed composite).

The system is very simple to assemble.

ZERO WASTE

The only waste that comes with the system is recyclable carton packaging and a paper brochure.

Our products

The system's onsite organic waste treatment reduces greenhouse emissions by eliminating the need to transport the waste, while preventing soil and prevents soil and water contamination from landfills or improper waste management.

An infrastructure-free bio-toilet which

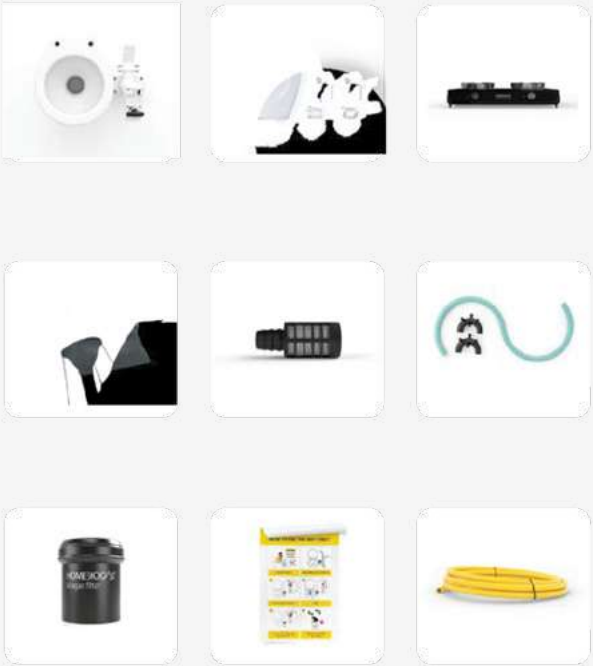
saves 80% of water use

compared to a regular toilet

A stove - generating up to 6 hours of cooking with biogas

A water heater - the biogas is used as a renewable energy source for heating water.

Additional products



Our products

The HomeBiogas commercial system is a large-scale biogas system designed for commercial kitchens in municipalities, hotels, restaurants, and cafeterias, which generate large quantities of organic waste.

The HomeBiogas Commercial System can reduce up to 1,000 tons of CO2 emissions each year by treating organic waste onsite and eliminating the need for transport and waste treatment. Furthermore, reducing our customers' carbon footprint can generate further value in the carbon market.

Treat up to **one ton of organic waste per day**, equivalent to 3,000 meals a day.

Generate up to 1,800 MBtu [21] per day of free clean energy in the form of heat to generate hot water.

Can be part of or supplement the building infrastructure.

Generates up to 860 liters of bio-fertilizer per day.

The system has already been deployed at several locations in Israel.

Offered based on a circular service business model in which customers pay a monthly fee based on the amount of organic waste treated and the savings from reduced energy use and elimination of transport and waste treatment.

Case study | Oscar & Ezequiel

Small farmers using the HomeBiogas system

Oscar Contreras Mejía and his father Ezequiel live in Municipio de San Felipe del Progreso, Estado de México. They grow tomatoes, producing 570 tons per season on 2 hectares. They are both visionaries with a vision to establish self-sufficient farms. They fertilize 80% with organic fertilizers, using a combination of the HomeBiogas system biofertilizer with synthetic fertilizer.

The use of HomeBiogas system fertilizer replaces the use of synthetic fertilizer, thus reducing GHG emission resulting from chemical use. Moreover synthetic fertilizer prices have been on the rise this past year, and using HomeBiogas fertilizer reduces their expenditures and contributes to their income.

Oscar and his father use HomeBiogas fertilizer in an automatic irrigation and fertilizer system , as well as manual application of fertilizer (backpack spray).

They started with one HomeBiogas system, using animal manure and organic fertilizer for their crops. Very soon they purchased another two HBG systems, to increase use of the system's organic fertilizer.

Watch a video about Oscar:

https://www.youtube.com/watch?v=aOLAhiDHsfI

Protecting our environment

HomeBiogas environmental policy is inherent in our impact, the impact of our products and services, and the environmental impact of our customers. As a cleantech company, our mission is to uphold the principles of sustainability and circular economy. 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. We assess our success by the reduced environmental impact of our customers using our systems.
Our environmental policy is also intertwined with our systems.
Our environmental policy is also entwined with our volunteering activity, where we strive to promote the values of circular economy, sustainability and preserving the environment.
At HomeBiogas, we are bound by all the environmental regulations and standards, and we continuously work to improve our operation, production, and transportation processes. Moreover, we will continue to expand the regulatory realm which, in our opinion, is critical for the advancement of our policy, just as the company did in helping to formulate ISO-23590:2020 - Household biogas system requirements and just as it meets ISO-20675:2018 - Biogas.

We are contributing to
the UN Sustainable Development Goals

Our actions to implement our environmental policy:

- Maintain and promote proper environmental conduct in the production process.
- Use renewable energy in countries where HomeBiogas operates.
- Make our systems accessible to people in developing countries.
- Promote the values of sustainability and circular economy.
- Reduce our customers' environmental impact by using our systems.
- Work with suppliers that conform to high environmental standards.
- Prioritize suppliers that operate according to a comprehensive and strict environmental policy.

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 promoting circular economy.

In the past year alone, our products cut the equivalent of 76,725 tons of CO2- emissions, preventing the uprooting of 111,176 trees, and preventing the dumping of 5,805 tons of organic waste in landfills.

Furthermore, onsite treatment of organic waste by our systems reduces many environmental costs inherent in the treatment and haulage of organic waste.

Our system lifecycle

We devoted considerable thought to achieving a sustainable lifecycle for our HBG systems. They are built almost entirely of polypropylene with a protective exterior layer of polyethylene. Both materials are highly durable, giving our HBG products a long lifespan of about 15 years. Both materials are fully recyclable, which means that at the end of a system's lifespan, they can be efficiently, economically, and environmentally recycled and reused.

Polypropylene and polyethylene are synthetic thermoplastic polymers that are extensively used in numerous industries. Polypropylene properties include moderate compressibility, light weight and resistance to heat and resistant to heat and 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.

We are contributing to
the UN Sustainable Development Goals

Energy[22]

Headquarter operations at the Hadassah Neurim Youth Village.

A logistics center in the Caesarea Industrial Zone.

A forward warehouse in Delaware, USA.

We have undertaken several energy efficiency steps at all our sites, including replacing the light fixtures with energy saving fixtures, using our HBG systems to reduce organic waste and produce biogas for cooking and heating water, and using HomeBiogas bio-toilets to reduce water consumption.

Even though the company's fleet is small, we also set a target to replace the company's commercial and private vehicles with fuel-efficient vehicles with a low emission rating. As part of this effort, all company cars will be electric or hybrid (in all its forms) by the end of 2023.

Another step, which began during the COVID pandemic, and has become an important element in achieving our goal to reduce our environmental impact, is to encourage work from home. Many company employees now work at least one day a week from home, thereby reducing the environmental costs of commuting by car.

We are contributing to
the UN Sustainable Development Goals

Emissions

The greenhouse emissions in scope 1 and 2 are directly related 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 emissions describe indirect emissions in the supply chain, which are related to company operations, such as transport of raw materials and shipment of products to customers by distributors and/or other parties.

Scope 3 represents most of HomeBiogas' indirect emissions. Mapping Homebiogas supply chain indicates that upstream and downstream transportation, distribution of its goods and products, business commuting and travel and purchase of goods are the most GHG intensive operation and are the main contributor to its scope 3 emissions.

Measurement of the company's GHG emissions by upstream and downstream transportation and distribution of products was performed using the GHG PROTOCOL distance-based method. This method considers the mass of goods, the distance the goods travelled and the emission factor of transport mode or vehicle type.

Measurement of the company's GHG emissions by purchased of goods and services was performed using the GHG PROTOCOL spend-based method. This method considers the value of purchased of goods and services and the emission factor of goods and services industries.

While increasing its business activities, HomeBiogas strives to improve people lives and reduce its carbon footprint. The company will further refine its scope 3 emission data collection procedures.[23]

In 2021, we mitigated 76,725 tons CO2 equivalent emissions

Scope 1	Scope 2	Scope 3	Total
35 tons **CO2-eq**	**31** tons **CO2-eq**	**647** tone **CO2-eq**	**713** tons **CO2-eq**

We are contributing to
the UN Sustainable Development Goals

We note that the average household in the EU and US is responsible for 8.4 tons and 19.5 tons of CO2 equivalent emissions a year, respectively.

Streamlining our supply chain

Over the past two years we undertook several actions to streamline the supply chain, both in order to lower costs and to reduce the supply chain's environmental impact, with am emphasis on reducing our carbon footprint.

First, we completely changed the manufacturing process of our systems, with an emphasis on transitioning from a global process to a geographically focused process. In the past, production moved between five countries - Italy, India, Israel, China, and the Philippines. The core systems are manufactured in Israel and India and certain devices in China.

Second, we changed the logistics of the manufacturing process by opening a logistics center in the Caesarea Industrial Zone and a forward warehouse in the US. The logistics center concentrates all the company's core logistics and warehousing operations in one place. We are also preparing to request a new business license to change the current warehouse height limit. These two actions will enable us to concentrate the movement of all goods in these two sites and to increase our inventory.

Opening the forward warehouse in the US enabled us to consolidate all the logistics in the US market in one site and to reduce delivery times to the customer. The warehouse also enables us to reduce transatlantic shipments and increase the number of systems in each shipment (about 150 systems and 120 toilets).

All these activities have streamlined company operations and reduced emissions in the logistics operations. We are committed to pursuing the streamlining of our supply chain and to reducing our environmental impact by establishing forward warehouses in key markets, in addition to further measures.

We are contributing to
the UN Sustainable Development Goals

Streamlining our supply chain

We have scores of suppliers, mostly Israeli and local. We concentrated most of the manufacturing process and suppliers in Israel in order to reduce our supply chain carbon footprint, and to create a reliable, efficient, and fast manufacturing chain.

Scope 3 emissions

Scope 3 emissions describe indirect emissions in the supply chain related to company operations, such as transportation of raw materials to the company and shipment of products to customers by distributors and/or other parties.

We are contributing to
the UN Sustainable Development Goals

The supply chain

Manufacturing raw materials such as plastic pipes & sheets by suppliers.

Transporting raw materials to the logistics center in the Caesarea Industrial Zone.

Quality testing of raw materials at the logistics center, and partial assembly of the systems.

Shipping part of the systems to India for processing

Shipping systems back to the logistics center.

Preparing systems for delivery.

Shipping systems to customers.

At least **15** years of use by customers.

Replacing old systems with new systems and sending the old systems to a recycling center.

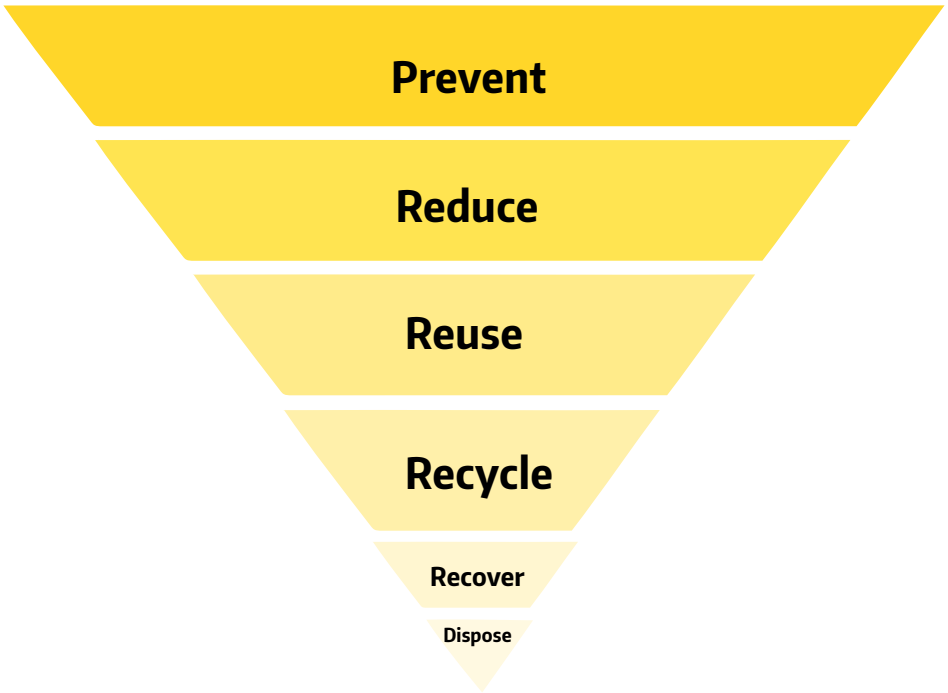
Waste & recycling

Therefore we undertook several actions to reduce all waste that we generate as a company. We apply the accepted worldwide waste management methodologies and the principles of the circular economy.
We have therefore undertaken a number of actions to reduce the waste that we generate as a company as well as by our suppliers and customers.

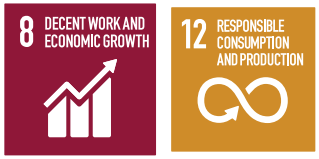
Company
- Private ordering of recycling services.
- Onsite separation of waste for recycling.

Company employees
- Stop using ordinary and "biodegradable" disposable utensils and switch to multi-use utensils.
- Switch from individual shipping of meals ("Just Eat") to preparing local meals.

Changing packaging by suppliers and subcontractors
- Use of multi-use cartons for packaging raw materials.
- Demand not to package raw materials in plastic bags.
- Reuse pallets and recycle broken and defective pallets.



We are contributing to
the UN Sustainable Development Goals



HOMEBIOGAS & THE UNITED NATIONS

In December 2021, following our selection as an official United Nations supplier, we won a UN tender to supply biogas systems for treating organic waste in refugee camps in Africa. Under the tender, we supplied HBG systems to refugee camps in Zimbabwe and in Malawi.

Refugee camps are known for their high population density and lack of sanitation, which can cause the spread of diseases and unfortune death. The UN chose us, because our systems are the most sustainable for onsite treatment of organic waste and converting it into an energy resource, biogas for cooking and bio-fertilizer. Moreover, the UN appreciates the HBG system's simplicity and durability, together with its small size and ease of transportation that does not create unnecessary waste by the users.

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

We were responsible for implementing the project at the refugee camps and for its success. The project joins a series of humanitarian projects and collaborations with governments, aid agencies and humanitarian organizations, such as USAID, EU, International Red Cross (IRC), and World Wildlife Fund (WWF).

HOMEBIOGAS & Israel's Ministry of Foreign Affairs

As part of the Israel-Pacific Food Security Alliance (IPFSA), Israel's Ministry of Foreign Affairs collaborates with us to promote sustainable agriculture, strengthen food security, and empower people in 12 islands in the Pacific.

We supplied and installed HBG systems for the residents of 12 islands and trained them in operating the systems. We carried out quality testing to verify that the systems operate properly.

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

The HomeBiogas systems provide the residents with biogas for cooking and bio-fertilizer for farming, thus reducing the exposure of women and children to smoke from cooking fires, to cutting trees, soil and groundwater contamination, and the use of chemical fertilizers.

CSR PROJECT WITH ADANI FOUNDATION

The Adani Foundation is committed to helping rural communities in India, with an emphasis on improving health and sanitation and developing local infrastructures. The Foundation collaborates with us to install HBG systems in rural households with extensive farmland and animals.

WOMEN REPORTED

- Smoke-free cooking.
- Cleaner cooking.
- Less time spent on preparations and cooking.
- More time for rest and recreation.

Our Impact in Numbers:

Quantity of agricultural waste/manure (tons)	**2,053**
Cooking time with the biogas produced (hours)	**159,687**
Biogas volume produced (tons)	**4.3**
Quantity of firewood not used (tons)	**125**
Total time saved collecting wood for firewood and management (hours)	**23,375**
Total reduction in annual costs ($)	**315**
Total savings from reduced LPG consumption ($)	**$ 509,125**
Reduction in carbon dioxide emissions (tons)	**625**

FARMERS REPORTED

- Higher soil fertility
- Higher crop durability
- Greater crop use
- Better appearance and tastier crops
- Less use of pesticides

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

Our customers

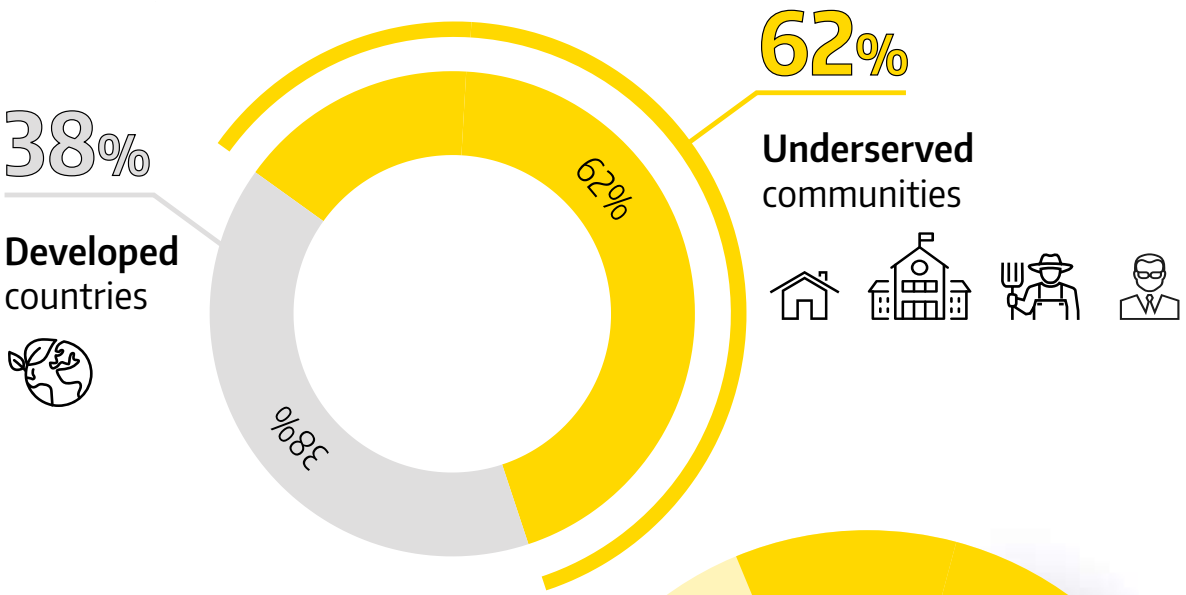
The company has numerous customers in more than 100 countries on six continents. We attach great importance to customer satisfaction when using our systems and we promote customer relations and remote support.

Customer and Distributor Conferences

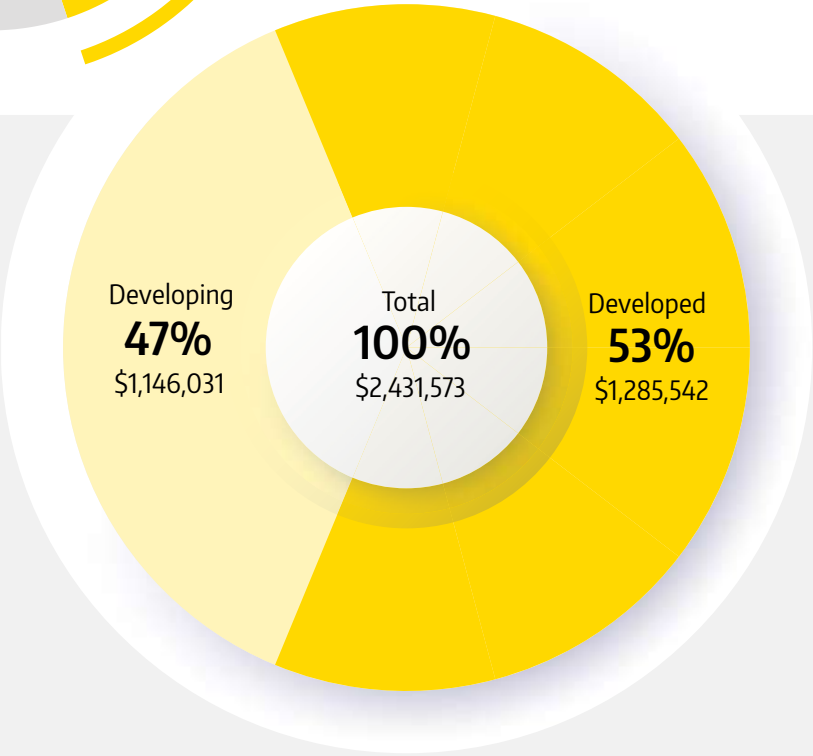
- Monthly webinars with distributers around the world.
- In the past year we conducted 2 weekly seminars for distributers in Latin America.
- monthly remote training for customers.

Customer portfolio

- Private customers - environmentalist, underserved communities, and green building sector.
- Business customers - restaurants, farmers, private companies and businesses.
- International and national organizations - UN, EU, USAID, WWF.
- Public and institutional customers - IDF, municipalities and government companies.



Revenues developed & developing



Human resources

HomeBiogas considers its employees to be a critical resource in its operations and in driving the company forward as an innovative and breakthrough company. There company therefore invests heavily in employee development so that our employees can achieve their full personal potential. The company is also committed to ensuring employees their full employment rights and meticulously examines the labor laws in the territories where it establishes operations, and, of course, upholds them in full. HomeBiogas attaches importance to gender equality and promotes diversity in its hiring.

We are contributing to
the UN Sustainable Development Goals

In the past year we nearly doubled, the number of employees to

93

8 in Africa
1 in South America
3 in the Far East
81 in Israel

Women comprise
1/3
of the total workforce

24%
of management

Employee training hours totaled
857
in 2021

with an average of
11
hours of training per employee

The average employee age at the company is
41

Company executives

Moshe Oshik Efrati
Co-founder and CEO

Erez Lanzer
Co-founder and COO

Yossi Rosenblum
CTO

Yair Teller
Head of Global Impact, Co-Founder

Marcelo Rubin
CBO

Or Gottlib
CMO

Shlomi Malka
CFO

Corporate culture

We attach great importance to promoting a pleasant and inviting work environment and to creating a professionally inclusive, effective and emotionally rewarding corporate culture. We strongly adhere to a corporate culture of respect that includes detailed procedures regarding several company procedures:

- Recruitment process.
- Employee onboarding procedures.
- Sexual harassment and assault prevention procedures and training. Two women executives are responsible for the prevention of sexual harassment.
- Procedures prohibiting receipt of gifts from customers.

Commitment to Diversity, Equal Employment, and Prevention of Discrimination

We are committed to employee diversity and scrupulously comply with the legal requirements on equal and fair employment. We promote women to management positions, and women currently account for 24% of company managers. HomeBiogas emphasizes recruiting and hiring women with appropriate skills to fill a range of positions.

Training and Certification

We provide general and professional training and certification to our employees, including time management, safety, environmental protection, manager development, and courses regarding the information security policy. In 2021 we initiated a project in which employees can deliver lectures on any topic of interest. In the beginning of 2022 we organized a company day for all employees, to present all our activities and achievements in 2021.
We provide training to employees, managers and directors.

We are contributing to
the UN Sustainable Development Goals

Philanthropy & community volunteering

The company views volunteering as an integral part of its character and nature. All employees volunteer either 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 and other activities such as youth cycling programs.
- Cleaning the Mikhmoret beach - once a month, as a company, we clean up waste left by hikers at the Mikhmoret beach.
- In 2021 we undertook volunteering projects to clean up the Ofer stream and the El Al stream.

We are contributing to
the UN Sustainable Development Goals

Safety

Employee safety is a priority for us, and, therefore, with the increase in personnel in 2021, we revised and improved our safety procedures with the guidance of external safety experts and integrated them into our corporate culture.

We conduct annual safety training for all employees. Every employee received at least one hour of safety training in 2021.

It is important to note that our systems main contain methane, which is lighter than air, in contrast to cooking gas (LPG). A methane leak disperses in open air, not in low places. Biogas also has a natural odor, which helps identify leaks.

Owing to the HomeBiogas system pressure discharge mechanism, gas accumulation does not exceed 14 millibars, very low pressure compared to 2,000 millibars in cooking gas cylinders.

We are contributing to
the UN Sustainable Development Goal

ZERO ACCIDENTS

There were no safety incidents or near accidents in 2021

Seven Directors

43%
of the **directors** are classified as independent

29%
of the **directors** are **women**

The **average age** of the directors is

49

Corporate Governance

Company management and the board of directors underscore maintaining a transparent, proactive, and innovative corporate culture, together with our commitment to ensure proper corporate governance in relation to our partners,, investors and the general 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 frequent detailed disclosures to the capital market. We believe that maintaining close ties... to remain updated regarding our routine operations enabling us to retain their confidence and trust in us.

The Board of Directors

The Board of Directors is responsible for overseeing management activity and verifying that it conforms to the interests of HomeBiogas shareholders and stakeholders. The Board of Directors operates both through the plenum and special committees.

The Board of Directors is comprised of seven directors, two are managers at Closed Loop, an interested party, one director is the CEO of HomeBiogas, three are independent directors and one is classified as an interested party.

Board of directors

Boaz Schweiger
Chairperson, Board of Directors
06/01/2021

Moshe 'Oshik' Efrati
Director and CEO
16/02/2012

Ron Gonen
Director
11/06/2018

Arik Rashkes
Director
21/03/2021

Limor Wiesel
External director
21/03/2021

Orit Stav
External director
21/03/2021

Shai Levy
Independent director
25/01/2021

Skills and expertise profile
of HomeBiogas directors

Every director brings their expertise to the board, contributing to the company's ongoing operations and strategy. This includes the management of large-scale projects, understanding processes, knowledge of the law and corporate governance, and familiarity with the company's business - - waste management, renewable energy, and cleantech.

100%
Managerial experience

29%
Experience as directors in other public companies

71%
Financial experience

29%
Legal experience

43%
Experience with the company's business - waste management, renewable energy, and cleantech

57%
International/ marketing experience in emerging markets

Board of directors meetings

The Board of Directors plenum met six times in 2021. The director participation rate was 100% in 2021.

Once a year, Management presents the company's updated strategy to the Board of Directors once a year. Every CO presents the objectives and challenges in their field of activity in strategic discussions with the Board, in order to formulate the company's strategic goals together with management.

In 2021 the company conducted two training and enrichment days in the company's business content worlds, alongside training regarding regulations and the company's market.

6

Board of director meetings were convened in 2021

The director participation rate was

100% in 2021

Board of directors committees

The Board of Directors operates through two subcommittees: the audit committee which is responsible for overseeing company business and financial conduct; and the compensation committee, which is responsible for different functions at the company, including its company officers.

The independent directors - Ms. Limor Wiesel, Ms. Orit Stav and Mr. Shai Levy - serve on the audit committee and the compensation committee.

The audit committee convened three times in 2021 and the compensation committee convened four times. All the independent directors attended all the meetings.

(100% attendance).

Internal auditor

The internal auditor is an outsourced provider to the company and was first appointed in March 2021, following the company's IPO on the Tel Aviv Stock Exchange. During 2021, the auditor reviewed the company's risks and prepared a multi-year work plan for the coming years, which was approved in August 2021. The internal audit report for 2021 covered the company's operating regulations.

Internal enforcement program

HomeBiogas adopted an internal enforcement program which determines the rules HomeBiogas employees commit to in accordance with the Israel Securities Authority laws and regulations. The 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. The program goal is to create an ethical corporate culture in which all company employees and those who represent the company in public develop awareness and self-enforcement of company rules and the law. The internal enforcement program also sets forth how the company and the audit committee will oversee implementation of the programs, and the actions they will take to ensure third parties with which the company engages are also in compliance.

Bribery & corruption prevention

HomeBiogas is committed to managing its business with integrity, honesty, trust, and responsibility and verifying that all business activity, including overseas, expresses the highest moral standards and complies with the applicable laws and regulations in the territories in which it operates. The company seeks to avoid risks related to corruption and has therefore adopted an anti-bribery and anti-corruption procedure. This procedure is intended to ensure compliance with anti-bribery, anti-corruption, and prohibition of money laundering laws and provisions. The procedure defines the applicable parties cases, and red flags. Since most of the company's business is overseas, the procedure emphasizes proper business conduct with foreign entities and public officials.

A significant part of the company's current business is in developing countries with a higher risk of corruption and the company therefore scrupulously follows proper and audited business conduct.

Transparency

Management and the Board of Directors operate with maximum transparency in respect of all HomeBiogas shareholders and stakeholders, to disclose, maintain relations and provide an ongoing response to their needs. Transparency is a core value at HomeBiogas; we believe that transparency strengthens relations with the capital market shareholders, and all stakeholders, and helps understand and map major business and non-business conduct issues, including reducing exposure to operational and administrative risks.

Risk management

HomeBiogas is aware of the characteristic risks in its businesses. Risk management is a critical component of HomeBiogas operations and therefore the company makes every effort to classify core risks and to find the best tools to optimally manage and mitigate them.

Core risks

Technology
emphasis on completing development of the premium system

Finance
emphasis on dependence on financial support of governments and aid organizations

Competition

Regulation
lifting supporting regulations

Supply chain
dependence on suppliers, shipment costs and timetables, imposed quotas.

HomeBiogas contends with these risks daily, because of its global operations and as it has not completed the development of all its product lines. The company seeks to mitigate their effects by keeping up to date of regulatory changes in the markets where it operates and signing agreements with international organizations, such as the UN, and with governments in developing countries. The company is currently dependent on several suppliers and aims to diversify its suppliers. The company is also diversifying its business models with the launch of its commercial system and adding a services model alongside a product sales model. Regarding product warranties, HomeBiogas continues to develop low-maintenance systems and to maintain high manufacturing quality.

Information & cyber security

HomeBiogas attaches great importance to information security, and that its employees customers, and suppliers comply with information security laws. Consequently, the company has appointed an information systems manager, who is responsible for implementing the company's information and cyber security policy and the integrity of its IT systems and controlling against cyber threats with the help of cyber consultants.

Ethics

We are committed to strict corporate ethics and expect all company stakeholders - managers, employees, customers, and suppliers - to fulfill their commitments in compliance with our principles and guidelines. The company is currently writing a Code of Ethics, which will cover its operations and guide employees and managers on ethical conduct.

Reporting methodology, disclosure index & additional information

Reporting methodology

HomeBiogas is writing its first full and detailed Environmental, Social, and Governance (ESG) impact statement, which reflects the ethics, social, and environmental aspects of HomeBiogas in a way that best discloses and reflects all its stakeholders. The statement considers thinking and examination of the company's business, strategy, and vision, combined with its values and commitments for the coming years.

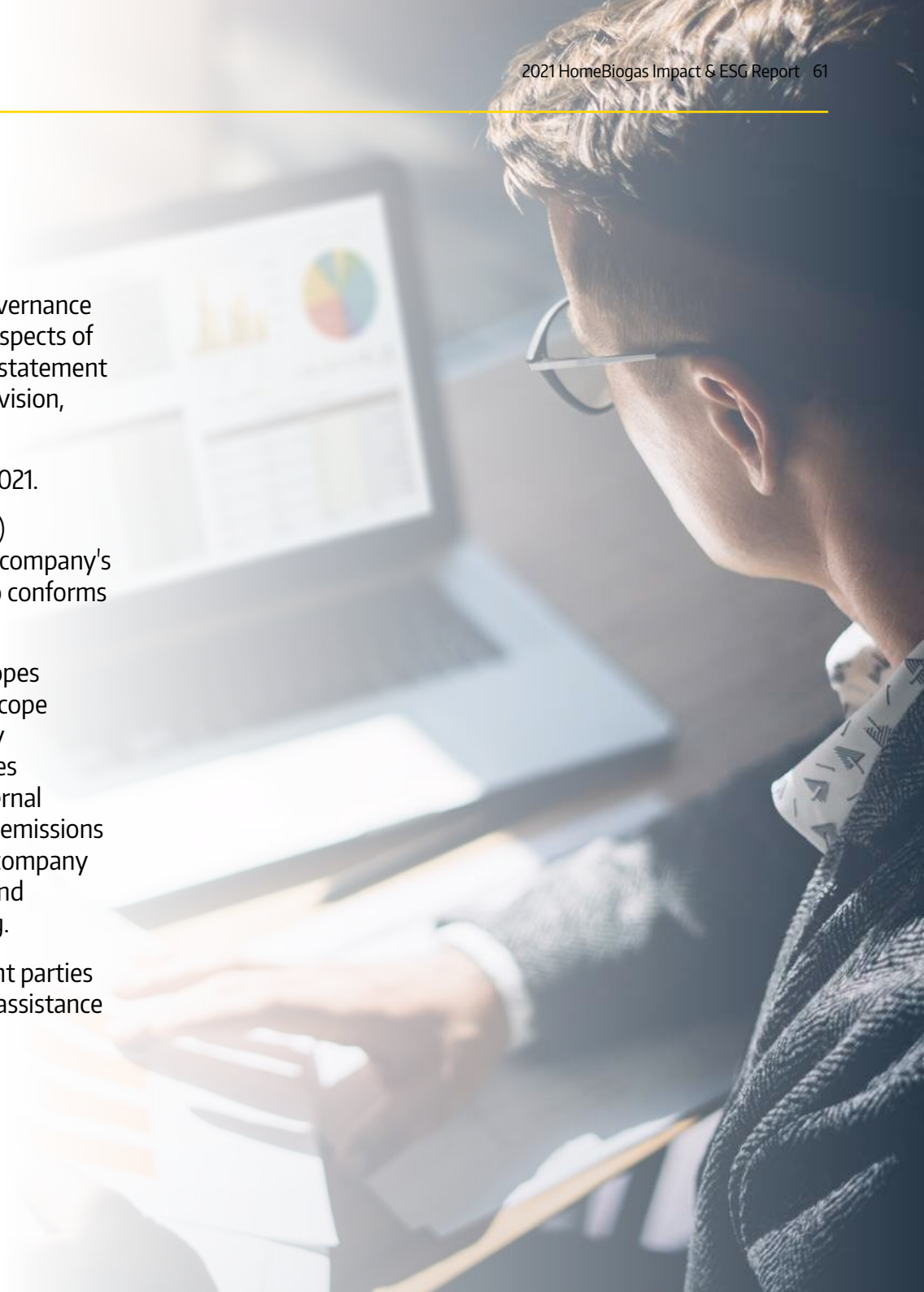
The statement reviews the company's corporate responsibilities in the year of 2021.

The statement was 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).

The impact statement includes the emissions calculations of the 1, 2, and 3 scopes pursuant to Israel Ministry of Environmental Protection GHG Protocols. The Scope 1 emissions calculation includes all emissions for which the company is directly responsible, including company vehicles. Scope 2 emissions calculation includes all indirect emissions related to the company's energy consumption from external sources, such as power consumption from Israel Electric Corporation. Scope 3 emissions calculation includes all other indirect emissions related to activities up to the company gates and afterwards, including emissions from the transportation of goods and products, purchase of goods and services, and business travel and commuting.

The impact ESG report is being written with the full cooperation of the relevant parties at HomeBiogas, including its executives and Board of Directors, and with the assistance of external consultants from Entropy Corporate Governance.

Entropy
Corporate Governance



Selected material issues for reporting

Weighting and cross-referencing subjects resulted in 19 material issues selected for reporting.

The subjects below are randomly dispersed by environmental, social, and corporate governance, with reference to their intra-organization and extra-organizational effects.

Based on HomeBiogas' comparison groups, reporting methodology, working with management and the Board of Directors, dialogue with stakeholders, and risks in accordance with their effects in its statements, the most important issues identified are as follows:

Issues identified as material by strength according to the matrices/ scenarios	Place in the matrices/ scenarios	Reporting boundary	Chapter in the report
Materials	1	Internal	Our Products Protecting Our Environment Our Environmental Impact Streamlining our supply chain Waste and Recycling
Energy	2	Internal and external	Energy
Emissions	3	Internal and external	Emissions
Waste	4	Internal and external	Waste and Recycling
Supplier environmental assessment	5	External	Streamlining our supply chain
Activities and workers	6	Internal	Human Resources
Occupational health and safety	7	Internal	Safety
Training and education	8	Internal	Training and Certification
Diversity and equal opportunity; Non-discrimination	9-10	Internal	Commitment to Diversity, Equal Employment, and Prevention of Discrimination
Supplier social assessment	11	External	Our Suppliers
Customer health and safety; Marketing and labeling; Customer privacy	12-14	Internal and external	Our Customers
Governance – Board of Directors and skills	15	Internal	Corporate Governance The Board of Directors Board of Directors Committees
Strategy, policies, and practices	16	Internal	Our Vision HomeBiogas' Strategy HomeBiogas Sectors Protecting Our Environment
Economic performance	17	Internal	Snapshot
Stakeholder engagement	18	External	Stakeholders Dialogue
Anti-corruption	19	Internal	Internal Enforcement Program; Bribery and Corruption Prevention Ethics

Stakeholder Dialogue

HomeBiogas is mapping and defining issues that are material to the organization and to its main stakeholders. In addition tot the aforesaid methodologies, several relevant information sources were examined, including other cleantech companies with similar operations scope to that of HomeBiogas, and renewable energy companies that are considered key players in the domestic and global markets. HomeBiogas also contacted several stakeholders in a special dialogue for the purpose of this impact statement.

Below are selected issues of key stakeholders and the dialogue with them for the writing of this impact statement:

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

2. **Customers** - several company products are still under development, such as the Premium system, and company customers are of different sizes with different requirements. The company therefore maintains an open dialogue to provide the best user experience at the highest transparency about its business.

3. **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.

4. **The Israel Innovation Authority** - from the day it was founded, HomeBiogas has been supported by the Israel Innovation Authority, and was awarded $1,095,000 in grants in 2012-2021. Under the agreement between the parties, HomeBiogas has completed four out of five approved plans set forth therein. 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.

5. **The UN** - HomeBiogas was 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.

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

In addition to this 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 based on their effects. It is important to state that HomeBiogas has additional stakeholders: private and institutional customers, business partners, Israeli and foreign regulators, and social, environmental, and other organizations. HomeBiogas intends to continue to deepen its dialogue with all its stakeholders.

GRI Content Index

Statement of use	HomeBiogas has reported in accordance with the GRI Standards for the period 1.01.2021 to 31.12.2021
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	Not applicable

GRI STANDARD / OTHER SOURCE	DISCLOSURE	REFERENCE/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, listed on the Tel Aviv Stock Exchange. 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.
	2-2 Entities included in the organization's sustainability reporting	Operations data in this report is from HomeBiogas LTD, owned subsidiary and official distributor. Countries and geographical regions where HomeBiogas LTD operate 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	01.01.2021 to 31.12.2021 Contact us: yamit@homebiogas.com
	2-4 Restatements of information	Not applicable, this is the first report by HomeBiogas.
	2-5 External assurance	This report has not passed an external assurance.
	2-6 Activities, value chain and other business relationships	who we are (p. 7) Part of Environmental Impacts of Multinationals (p. 14) Our Ecosystem of Partners (p. 20-22) Our Products (p. 34-36) HomeBiogas and the UN (p. 45) HomeBiogas and the Israeli Ministry of Foreign Affairs (p. 46) CSR Project with ADANI Foundation (p. 47) Our Customers (p. 48)

GRI Content Index

GRI STANDARD / OTHER SOURCE	DISCLOSURE	REFERENCE/RESPONSE
GRI 2: General Disclosures 2021	2-7 Employees	Human Resources (p. 49)
	2-8 Workers who are not employees	All HomeBiogas' workers are company's employees.
GRI 2: General Disclosures 2021	2-9 Governance structure and composition	Corporate Governance (p. 53) The Board of Directors (p. 54) Board of Directors Committees (p. 55)
	2-10 Nomination and selection of the highest governance body	Corporate Governance (p. 53) Board of Directors (p. 54) Board of Directors Committees (p. 55)
	2-11 Chair of the highest governance body	Corporate Governance (p. 53) Board of Directors (p. 54)
	2-12 Role of the highest governance body in overseeing the management of impacts	Corporate Governance (p. 53) Board of Directors (p. 54)
	2-13 Delegation of responsibility for managing impacts	Responsibility for managing impacts has been delegated to the Director of Strategy and Business Development.
	2-14 Role of the highest governance body in sustainability reporting	Corporate Governance (p. 53)
	2-15 Conflicts of interest	Annual Report 2021
	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. Corporate Governance (p. 53) Board of Directors (p. 54) Board of Directors Committees(p. 55) Annual Report 2021
	2-17 Collective knowledge of the highest governance body	The Board of Directors (p. 54)
	2-18 Evaluation of the performance of the highest governance body	The audit committee is evaluating the performance of the Board of Directors. Board of Directors (p. 54) Board of Directors Committees (p. 55)

GRI Content Index

GRI STANDARD / OTHER SOURCE	DISCLOSURE	REFERENCE/RESPONSE
GRI 2: General Disclosures 2021	2-19 Remuneration policies	Annual Report 2021 (p.124)
	2-20 Process to determine remuneration	Annual Report 2021 (p.124)
	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	HomeBiogas' Strategy (p. 24) Protecting Our Environment (p. 38)
	2-23 Policy commitments	Our Vision (p. 8) Values That Guide Us (p. 23) Protecting Our Environment (p. 38) Internal Enforcement Program (p. 56)
	2-24 Embedding policy commitments	Our Journey to Date (p. 16) HomeBiogas' Strategy (p. 24)
	2-25 Processes to remediate negative impacts	HomeBiogas' Strategy (p. 24) Stakeholders Dialogue (p. 64)
	2-26 Mechanisms for seeking advice and raising concerns	HomeBiogas has a clear organizational structure (see annual report 2021, p.144) and work procedures in each department.
	2-27 Compliance with laws and regulations	HomeBiogas had zero instances of non-compliance with laws and regulations during the reporting period.
	2-28 Membership associations	Homebiogas' is a member of the Clean Cooking Alliance.
	2-29 Approach to stakeholder engagement	Stakeholders Dialogue (p. 64)
	2-30 Collective bargaining agreements	All Homebiogas' workforce is employed by personal employment agreements.

GRI Content Index

GRI STANDARD / OTHER SOURCE	DISCLOSURE	REFERENCE/RESPONSE
Material Topics		
GRI 3: Material Topics 2021	3-1 Process to determine material topics	HomeBiogas Sectors (p. 15) Stakeholders Dialogue (p. 64)
	3-2 List of material topics	Reporting Methodology, Disclosure index & additional information (p. 63)
Economic Performance		
GRI 3: Material Topics 2021	3-3 Management of material topics	HomeBiogas investors and business partners are key stakeholders. Our Ecosystem of Partners (p. 20) Stakeholders Dialogue (p. 64)
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Snapshot (p. 6) Annual report 2021
	201-2 Financial implications and other risks and opportunities due to climate change	HomeBiogas has not appraise the positive and negative implication of climate change
	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 government	Annual report 2021
Anti-Corruption		
GRI 3: Material Topics 2021	3-3 Management of material topics	Internal Enforcement Program (p. 56) Bribery and Corruption Prevention (p. 57)
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Internal Enforcement Program (p. 56) Bribery and Corruption Prevention (p. 57)
	205-2 Communication and training about anti-corruption policies and procedures	Internal Enforcement Program (p. 56) Bribery and Corruption Prevention (p. 57)
	205-3 Confirmed incidents of corruption and actions taken	Homebiogas had zero confirmed incidents of corruption in 2021.

GRI Content Index

GRI STANDARD / OTHER SOURCE	DISCLOSURE	REFERENCE/RESPONSE
Materials		
GRI 3: Material Topics 2021	3-3 Management of material topics	Our Products (p. 34) Protecting Our Environment (p. 38) Our Environmental Impact (p. 39) Streamlining our supply chain (p. 42-43) Waste and Recycling (p. 43)
GRI 301: Materials 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	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	Streamlining our supply chain (p. 42-43) Waste and Recycling (p. 43)
Energy		
GRI 3: Material Topics 2021	3-3 Management of material topics	Protecting Our Environment (p. 38) Our Environmental Impact (p. 39) Energy (p. 40)
GRI 302: Energy 2016	302-1 Energy consumption within the organization	51,000 KwH [22]
	302-2 Energy consumption outside of the organization	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.
	302-3 Energy intensity	10.58 KwH/HBG system [22]
	302-4 Reduction of energy consumption	Energy (p. 40)
	302-5 Reductions in energy requirements of products and services	Our products do not consume any additional energy from outer source.

GRI Content Index

GRI STANDARD / OTHER SOURCE	DISCLOSURE	REFERENCE/RESPONSE
Emissions		
GRI 3: Material Topics 2021	3-3 Management of material topics	Protecting Our Environment (p. 38) Our Environmental Impact (p. 39) Emissions (p. 41)
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	35 tCO2-e measuring GHG scope 1 was done with the distance-based method of the GHG PROTOCOL and according to Ministry of Environmental Protection guidelines. [23]
	305-2 Energy indirect (Scope 2) GHG emissions	31 tCO2-e measuring GHG scope 2 was done with the distance-based method of the GHG PROTOCOL and according to Ministry of Environmental Protection guidelines. [23]
	305-3 Other indirect (Scope 3) GHG emissions	154 tCO2-e measuring GHG scope 3 was done with the spend-based method of the GHG PROTOCOL see page PROTOCOL. [23]
	305-4 GHG emissions intensity	0.0137 tCO2-e/HBG system [23]
	305-5 Reduction of GHG emissions	HomeBiogas makes biogas accessible to all (p. 9) HomeBiogas turn organic waste to renewable energy (p. 11) Biogas – Renewable Energy (p. 12) Energy (p. 40) Emissions (p. 41) Streamlining our supply chain (p. 42-43)
	305-6 Emissions of ozone-depleting substances (ODS)	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.
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	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.
Waste		
GRI 3: Material Topics 2021	3-3 Management of material topics	Protecting Our Environment (p. 38) Our Products (p. 34) Our Environmental Impact (p. 39) Streamlining our supply chain (p. 42-43) Waste and Recycling (p. 43)

GRI Content Index

GRI STANDARD / OTHER SOURCE	DISCLOSURE	REFERENCE/RESPONSE
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Streamlining our supply chain (p. 42-43) Waste and Recycling (p. 43)
	306-2 Management of significant waste-related impacts	Streamlining our supply chain (p. 42-43) Waste and Recycling (p. 43)
	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	
	306-5 Waste directed to disposal	
Supplier environmental assessment		
GRI 3: Material Topics 2021	3-3 Management of material topics	Our Suppliers
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 offsetting this impact.
	308-2 Negative environmental impacts in the supply chain and actions taken	
Occupational health and safety		
GRI 3: Material Topics 2021	3-3 Management of material topics	Safety
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	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.
	403-2 Hazard identification, risk assessment, and incident investigation	
	403-3 Occupational health services	

GRI Content Index

GRI STANDARD / OTHER SOURCE	DISCLOSURE	REFERENCE/RESPONSE
GRI 403: Occupational Health and Safety 2018	403-4 Worker participation, consultation, and communication on occupational health and safety	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.
	403-5 Worker training on occupational health and safety	
	403-6 Promotion of worker health	
	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	Homebiogas had zero work related injuries in 2021.
	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	Human Resources (p. 49)
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	11 hours
	404-2 Programs for upgrading employee skills and transition assistance programs	Human Resources (p. 49) Corporate Culture (p. 50)
	404-3 Percentage of employees receiving regular performance and career development reviews	All HomeBiogas employees received a performance review.
Diversity and equal opportunity		
GRI 3: Material Topics 2021	3-3 Management of material topics	Corporate Culture (p. 50)

GRI Content Index

GRI STANDARD / OTHER SOURCE	DISCLOSURE	REFERENCE/RESPONSE
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Corporate Culture (p. 50)
	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.
Non-discrimination		
GRI 3: Material Topics 2021	3-3 Management of material topics	Corporate Culture (p. 50)
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Homebiogas had zero incidents of discrimination in 2021 and committed to comply to all laws and regulation related to discrimination.
Supplier social assessment		
GRI 3: Material Topics 2021	3-3 Management of material topics	Our Suppliers
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	Our Customers (p. 48)
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.

GRI Content Index

GRI STANDARD / OTHER SOURCE	DISCLOSURE	REFERENCE/RESPONSE
Marketing and labeling		
GRI 3: Material Topics 2021	3-3 Management of material topics	Our Customers (p. 48)
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 & 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	Our Customers (p. 48)
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.

SASB - SUSTAINABILITY ACCOUNTING STANDARDS BOARD

WASTE MANAGEMENT

Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	UNIT OF MEASURE	CODE	REFERENCE/RESPONSE
Greenhouse Gas Emissions	(1) Gross global Scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	Metric tons (t) CO -e, ₂Percentage (%)	IF-WM-110a.1	(1) GHG SCOPE 1: 35 ton CO2-eq (2) Not Relevant (3) Not Relevant
	(1) Total landfill gas generated, (2) percentage flared, (3) percentage used for energy	Million British Thermal Units (MMBtu), Percentage (%)	IF-WM-110a.2	Not Relevant
	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	n/a	IF-WM-110a.3	Emissions
Fleet Fuel Management	(1) Fleet fuel consumed, (2) percentage natural gas, (3) percentage renewable	Gigajoules (GJ), Percentage (%)	IF-WM-110b.1	Not Relevant
	Percentage of alternative fuel vehicles in fleet	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)	Metric tons (t)	IF-WM-120a.1	Not Relevant
	Number of facilities in or near areas of dense population	Number	IF-WM-120a.2	Not Relevant
	Number of incidents of non-compliance associated with air emissions	Number	IF-WM-120a.3	Not Relevant

Sustainability Disclosure Topics & Accounting Metrics

TOPIC	ACCOUNTING METRIC	UNIT OF MEASURE	CODE	REFERENCE/RESPONSE
Management of Leachate & Hazardous Waste	(1) Total Toxic Release Inventory (TRI) releases, (2) percentage released to water	Metric tons (t), Percentage (%)	IF-WM-150a.1	Not Relevant
	Number of corrective actions implemented for landfill releases	Number	IF-WM-150a.2	Not Relevant
	Number of incidents of non-compliance associated with environmental impacts	Number	IF-WM-150a.3	Not Relevant
Labor Practices	Percentage of active workforce covered under collective bargaining agreements	Percentage (%)	IF-WM-310a.1	All Homebiogas' workforce is employed by personal employment agreements.
	(1) Number of work stoppages and (2) total days idle	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	Rate	IF-WM-320a.1	Homebiogas had zero incidents and injuries in 2021.
	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	Percentile	IF-WM-320a.2	Not Relevant
	Number of road accidents and incidents	Number	IF-WM-320a.3	Homebiogas had zero road accidents and incidents in 2021.
Recycling & Resource Recovery	(1) Amount of waste incinerated, (2) percentage hazardous, (3) percentage used for energy recovery	Metric tons (t), Percentage (%)	IF-WM-420a.1	Not Relevant
	Percentage of customers receiving (1) recycling and (2) composting services, by customer type	Percentage (%)	IF-WM-420a.2	Not Relevant
	Amount of material (1) recycled, (2) composted, and (3) processed as waste-toenergy	Metric tons (t)	IF-WM-420a.3	Not Relevant
	Amount of electronic waste collected, percentage recovered through recycling	Metric tons (t), Percentage (%)	IF-WM-420a.4	Not Relevant

Activity Metrics

ACTIVITY METRICS	UNIT OF MEASURE	CODE	REFERENCE/RESPONSE
Number of customers by category: (1) municipal, (2) commercial,(3) industrial, (4) residential, and (5) other	Number	IF-WM-000.A	The information 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.
Vehicle fleet size	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	Number	IF-WM-000.C	Not Relevant
Total amount of materials managed, by customer category: (1) municipal, (2) commercial, (3) industrial, (4) residential, and (5) other	Number	IF-WM-000.D	Not Relevant

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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. The amount of food waste up-cycled in developed countries was estimated based on HomeBiogas systems waste treatment capacity.
5. Estimation based on the treatment capacity of Homebiogas bio-toilet, and its water use in comparison to the average water use of regular toilet.
6. IPCC, A. (2014). IPCC Fifth Assessment Report (p. 731).
7. Nearly half the world's population still lacks access to modern energy cooking services (worldbank.org).
8. Home | SDG 6 Data.
9. Worldwide food waste | ThinkEatSave (unep.org)
10. What is biogas? | national grid group.
11. Circular economy: definition, importance and benefits | News | European Parliament (europa.eu)
12. Microsoft 2021, environmental sustainability report.
13. Rebooting NYC – an urban tech agenda for the next administration, the urban tech hub of the jacobs technion-cornell institute at cornell Tech.
14. Overview of greenhouse gases | US EPA.
15. Circular economy: MEPs back plans to boost recycling and cut landfilling | News | European Parliament (europa.eu).
16. HomeBiogas investors presentation March 2022.
17. Waste Management Strategy 2030 | The Israeli Ministry of Environmental Protection
18. EUR-Lex - 32018L0850 - EN - EUR-Lex (europa.eu)
19. Joint European action for more affordable, secure energy (europa.eu).
20. How Does Anaerobic Digestion Work? | US EPA
21. MBtu = Million British Thermal Units
22. Energy calculation
    HomeBiogas has purchased electricity only from Israel Electric Corporation. HomeBiogas energy intensity represent the electricity used to produce a single HBG system.
23. 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 done 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 of HomeBiogas increasing business activities it strives to improve people 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.

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