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INDEPENDENT EQUITY RESEARCH

HOMEBIOGAS LTD – Update Report

29.08.2021

Revenue increased over x3 compared to the corresponding period last year along with a transition to gross profitability; price target remains unchanged

Stock Exchange
TASE

Symbol
HMGS

Sector
Technology

Sub-sector
Cleantech

Stock price target
NIS 19.7

Closing price
NIS 10.5

Market cap
NIS 205.3 Mn

No. of shares
19.6 Mn

Average Daily Trading Volume
110 stocks

Stock Performance (since IPO)
-37.5%

HomeBiogas LTD. (TASE: HMGS) is an Israeli publicly traded company engaged in developing, manufacturing, distributing, and selling domestic and industrial-scale biogas systems that offer a comprehensive solution for waste management, renewable energy creation, clean cooking, fertilizer production, and sanitation.

2021 H1 highlights:

- The company has signed distribution agreements for its products in several countries (including India, Pacific Islands, Colombia, and El Salvador), representing potential growth.
- Pilot agreement for installing an institutional biogas system in the kibbutz's dining room.
- Received grant for a pilot project of its institutional system with the IDF.
- Signed an MOU with Qnergy to provide an integrated solution to their customers.
- Completed the prototype of "smart home," a premium waste-to-energy solution.
- The company increased its employees' number from 35 to 65.
- Raised approx. 100 million NIS in an IPO (February 2021).
- Strong cash position of approx. USD 30 million (June 2021).
- Due to increased sales and streamlining of its production, the company presented considerable revenue growth (x3.3) and a transition to gross profitability.

Recall that the company products address the needs of various markets such as: Cost of handling organic waste created by institutions in the US is estimated at $55 billion; Total global expenditures on wood fuel for cooking are estimated at approx. $50 billion; The anaerobic digestion market is expected to surpass $15 billion by 2025 with a CAGR of 10.62%; The global market of new sanitation technologies designed for low-resource settings is estimated to reach over $6 billion by 2030.

Lastly, the recently published IPCC report prompts calls to tackle methane emissions, stating that methane gas has more than 80 times warming power in the near term than CO2. In parallel, prices of carbon credits are rising. **This is a significant tailwind and opportunity for Homebiogas, which reduces CO2 and methane release in landfills by turning the organic waste into renewable energy on-site.**

In our view, HomeBiogas has demonstrated proper use of its resources, making substantial steps towards penetrating the US market, further developing its technology, and establishing additional collaborations. As the company met our expectations, we believe it is in a great position to execute its strategy.

On the next page, we present the main events in the passing months and H1 2021.

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Key events in the passing months and H1 2021:

- On August 22, HomeBiogas announced a partnership with Qnergy Inc. to develop a combined solution that will enable converting organic waste into biogas and electricity.
- On July 6, the company signed a pilot agreement with a kibbutz to install an institutional biogas system in the kibbutz's dining hall.
- On April 26, the company received approval for a budget from the Innovation Authority for a pilot project of its institutional system with the Israeli Defense forces.
- The company is in advanced conversations with global companies that manufacture kitchens and garbage disposals for the domestic and institutional markets.
- The company is in the advanced stages of planning to install an institutional biogas system in a multi-family residential building in the US, which is expected to be completed in the next two years and will include approximately 300 housing units.
- HomeBiogas is in advanced conversations with several companies with dining halls to turn their food waste into renewable energy for local use.
- Completed the prototype of a domestic system that includes a garbage disposal unit that connects to the sink enables clients to use their organic waste as a water heating source. A commercial launch is expected during 2022.
- The company established a collaboration agreement with DAI to promote projects to improve access to clean energy, reduce carbon emission and provide organic waste treatment and sanitation solutions.
- The company has signed distribution agreements for its products in several countries:
  - El Salvador – 2 years contract, for no less than $375K sales.
  - Colombia - 2 years contract, for no less than $450K sales.
  - Pacific Islands - 3 years contract, for no less than $320K sales.
  - India Islands - 3 years contract, for no less than $720K sales.
  - A $110K contract with the Israeli Ministry of Foreign Affairs.

For further details on the company and its markets, please read our initiation of coverage report here.

Investment Thesis

Sustainability and environmental trends, combined with maturity of micro-funding models in developing countries, and increasing cost of managing organic waste, are driving commercial adoption of small and medium scale on-site biogas systems. The anaerobic digestion market was valued at $7.5 billion in 2018 and is expected to surpass $15 billion by 2025 with a CAGR of 10.62% over the forecast period. Key driving trends for domestic/industrial scale systems are policies and regulations for on-site food waste treatment.

HomeBiogas provides patent-based domestic/industrial scale anaerobic digestion modular biogas systems that enable people and businesses to turn their own organic waste into self-made clean energy on-site. Their vision is to promote sustainability, improve lives, and positively impact the environment by harnessing its expertise in waste treatment and biogas systems. The current line of products for domestic and small farms includes three biogas systems of different sizes - HomeBiogas 2, 4, and 7 cubic meters – which treat organic waste and turn it into cooking gas and fertilizer, a Bio-toilet that turns human waste into biogas (cooking gas), and additional products such as stoves, filters and probiotic tablets. The company's industrial solution (under-development) is expected to convert organic waste into either biogas, hot water or electricity.

As part of its strategy, the company intends to increase its market share in several selected countries, leveraging existing and future agreements with local distributors. In addition, the company plans to offer "Pay as You Go" models, making biogas systems accessible to a larger pool of customers. In the institutional field, the company intends to offer operators of commercial-size kitchens (such as hotel chains) an OPEX-based model for having a small-footprint biogas system that saves costs and meets alternative energy and ESG targets.

We believe that HomeBiogas is on a path for growth and success on a global scale:

- HomeBiogas' novel platform technology and its unique value propositions present great promise in becoming the future incumbent technology for on-site food waste treatment and sanitation services.
- The company is CE, ISO 14001, ISO 9001 certified and has international product liability insurance. HomeBiogas led to the establishment of a new international standard for household biogas systems, ISO 23590, published in December 2020[1].

[1] https://www.iso.org/standard/76157.html

- HomeBiogas has received **significant industry recognition**, which speaks volumes about its growth potential; for instance, the company HomeBiogas is a Phase 1 & Phase 2 SME Instrument winner and was recently granted funds for a pilot project of its institutional system with the Israeli Defense forces.
- **The company has partnered with some of the world's most credible organizations**, including USAID, EU, UN, the International Red Cross, and is a member of the Clean Cooking Alliance. Products are sold online to end customers in the developed countries and via a network of 20+ distributors in various countries.

Therefore, we view HomeBiogas as an excellent opportunity for those seeking to invest in sustainable and positively impact the environment while improving people lives.

1. Company Overview

General

HomeBiogas Ltd., headquartered in Israel, is engaged in developing, manufacturing, distributing, and selling domestic and industrial scale biogas systems that offer a comprehensive solution for waste management, renewable energy creation, clean cooking, fertilizer production, and sanitation.

The company was incorporated in 2012 as a private company. Its shares are listed for trading on the Tel Aviv Stock Exchange since 1 February 2021 (TASE: HMGS) after raising approx. 100 million NIS in an IPO.

Distribution of shareholdings includes 37.89% float, 17.43% institutional, and 44.68% interested parties of which main shareholders are Closed-Loop VC with 16.20%, the three founders with 11.69%, Engie New Ventures with 9.43%, and JS Capital with 7.36%.

Vision

HomeBiogas's vision is to promote sustainability, improve lives, and create a positive impact on the environment by harnessing its expertise in waste treatment and biogas systems.

Business Activities and Strategy

The company is developing, manufacturing, distributing, and selling a line of domestic and industrial scale biogas systems for domestic and commercial use that offer a comprehensive solution for waste management, renewable energy creation, clean cooking, fertilizer production, and sanitation. The biogas systems convert kitchen waste, animal manure, and human waste into clean cooking gas, liquid fertilizer, hot water or electricity.

Figure 1: Feed and output of HomeBioGas systems

The company is active in 3 segments- 1) Biogas systems for domestic use/ small farms, 2) domestic / off-grid sanitation, and 3) institutional kitchens.

To date, the company has sold over 10,000 small biogas systems for domestic use in over 100 countries, demonstrating product-market fit for domestic use in both developed and developing markets. In the coming years, the company intends to increase its market share in several selected countries, leveraging existing and future distribution agreements with local distributors in those countries. In addition, the company explores options to offer "Pay as You Go" models and making biogas systems accessible to a larger pool of customers.

In the institutional field, the company is in the advanced development phase of a system tailored to local treatment of organic waste by turning it into renewable clean energy, on site. In this context, the company intends to partner with local partners to offer operators of commercial-size kitchens such as hotel chains, fast food chains, hospitals, military bases, and others an OPEX-based model for having a small-footprint biogas system that save costs of sending organic waste to landfill, reduce energy costs, reduce carbon footprint and meet alternative energy and ESG targets.

IP and Technology

Patents

Patent #1 "Lightweight assimilable appliance and respective method for production of biogas and liquid fertilizer" Description: First-generation system for domestic biogas, with a flexible digestion container, hung from an external rigid scaffolding. Published: International (2014), Israel (2019), USA (2017), Europe (2017), Australia (2016), South Africa (2017), China (2018), Nigeria (2015) Expire: December 2033	Patent #2 "Lightweight appliance with exoskeletal support respective kit-of-parts and method for production of biogas and liquid fertilizer" Description: Second-generation system for domestic biogas, without external rigid scaffolding, but with external flexible casing. Published: International (2019), USA (2019), Australia (2020), China (2019), India (2018) Expire: December 2037

Trademark

The company registered its name and logo in the US as a trademark.

Grants

The Israeli Innovation Authority backs the company since its inception. During the years 2012-2020, the company received a total of $1.3 million.

Recently, in April 2021, the company was granted funds for a pilot project of its institutional system with the Israeli Defense forces.

HomeBiogas is a Phase 1 & Phase 2 SME Instrument winner, supporting the successful commercialization of HBG 7, launched during the SME Phase 2 project. The company was granted €1.6 million by the European Horizon 2020 SME Phase 2 program in 2017 to develop an institutional biogas system. A second project under the Horizon 2020, part of the Consortium program, for granted €167,000 in May 2018.

Safety and Standards

The company is CE, ISO 14001, ISO 9001 certified and has international product liability insurance. HomeBiogas led to the establishment of a new international standard for household biogas systems, ISO 23590, published in December 2020[2].

Prizes

- ✓ Finalist for 2020 "High-Tech for Humanitarian Aid" Prize (2020)
- ✓ Chivas Venture, UK (2020)
- ✓ Vegas hardware retail choice for innovation (2019)
- ✓ National ENERGY GLOBE Awards, Austria (2018)
- ✓ Green Challenge, Netherlands (2017)

Distribution & Partnerships

The company has partnered with some of the world's most credible organizations, including USAID, EU, UN, the International Red Cross, and is a member of the Clean Cooking Alliance (www.cleancookingalliance.org). Products are sold online to end customers in the developed countries and via a network of 20+ distributors in various countries, including India, Kanya, US & Canada, Costa Rica & Panama, Philippines, Nepal, Thailand, Laos, and Brazil.

Offices, Facilities, and Employees

As of the report date, the company has no real estate or fixed assets of material scope and is renting two facilities; one is used for administrative, marketing, and sales purposes, and the other facility is used for storage, quality control, and packing finished products prior to shipment. Workforce is about 70 people.

[2] https://www.iso.org/standard/76157.html

2. Products Overview

Domestic products

Biogas systems

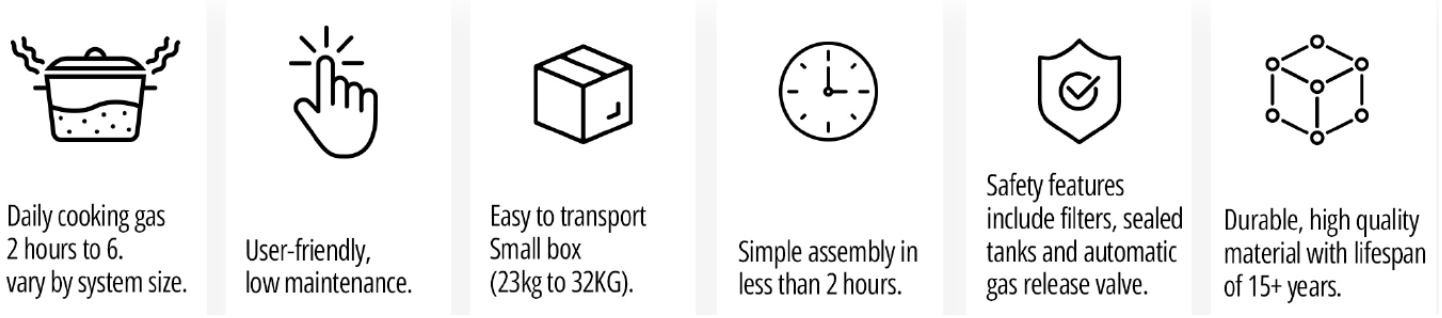
The initial prototype was piloted in 2014. In 2016, the first generation became commercially available.

The current line of products includes 3 biogas systems (HomeBiogas 2, 4, and 7 cubic meters sizes) built from 3 core elements:

1. A welded inner liner designed to contain the gas and digested materials
2. An outer liner specially designed for strength, stability, and UV resistance
3. Injection moldings, including the system's piping, inlet, and outlet

The domestic systems are made of 100% recyclable materials and have a patented mechanical pressure generation mechanism (ensuring that the filtered gas pressure in the storage tank remains constant and controlled).

Key features include:



Bio-toilet

Treating toilet waste, 100% off-the-grid, and only use 1.2 liters of water per flush from a standing source (no electricity is required).

Additional products include cooking stoves, probiotic tablets, and filters.

Institutional products

The company is developing a line of on-site organic waste treatment systems for commercial and industrial kitchens of public institutes, companies, hotels, restaurants, and food complexes. The systems use an

anaerobic digestion process to decompose the organic waste into biogas and organic liquid fertilizer. The biogas is used for water heating or electicity generation, and the liquid is best used as a bio-fertilizer. The kitchen waste is fed to the grinding unit and from there transferred to the anaerobic digester container; the waste is broken down in an anaerobic process; the generated gas is converted immediately into hot water; and the hot water serves the needs of the kitchen.

Key features and advantages

- Affordable Biogas-as-a-service model: all included per use pricing model, based on monthly payments with no additional fees for installation and services. End-users save on waste management costs and renewable energy generation from the first month of use
- Small footprint (starting at 20 m^2)
- A safe and sealed system with no odor
- Fits outdoors under any environmental conditions Internal temperature control system
- Certified technology
- Automated waste sorting
- Easy transportation and installation
- Automatic real-time monitoring and remote control
- Convenient user interface located inside the kitchen

The product portfolio includes a few systems in pilot stages, with scalable volume capacity and size from 100kg per day to 1,000 kg per day, expected to be commercially available during 2022.

3. Market Overview

Global Sustainability Trends

Sustainability Development Goals (SDG's) adopted at the 2015 United Nations Summit provide the principles, framework, and targets for all stakeholders across the value chains to identify key development areas to enhance and seek continual improvement regarding to sustainability, good health, well-being, and climate action.

Figure 5: The 17 United Nations Sustainable Development Goals (SDG's)

HomeBiogas has a strong value proposition matching with 8 of the UN goals, making it attractive and highly-relevant to commercial companies, organizations, banks, and governments.

EU Circular Economy Plan

The updated European Commission's Circular Economy Action Plan from March 2019 is committed to the United Nations SDGs. The plan involves the entire value chain and major focus areas relevant to HomeBiogas: Waste reduction at source, Diversion from landfills, and Sustainable business best practices. One of the targets for 2035 is the reduction of municipal waste landfilling volume by 50%.

Anaerobic Digestion Market

The Anaerobic Digestion market was valued at $7.5 billion in 2018. It is expected to surpass $15.0 billion by 2025 with a CAGR of 10.62% over the forecast period.

According to the American biogas council, investment in new biogas systems in 2018 totaled $1 billion. In recent years, investments in the US biogas industry have been growing at an annual rate of 12%. Although there is already a wide application of biogas technologies worldwide, the industry is still in its initial stages of development. The biogas industry can be analysed in 3 broad categories: micro digesters using biogas, scale digesters generating electricity, and scale digesters producing biomethane[3].

Micro digesters

Biogas from micro-scale digesters is most often used in stoves for cooking or heating, displacing solid, high emission fuels like firewood and charcoal, and play an important role in developing countries, where they are an integral part of farming, waste management, and energy security.

The World Biogas Association estimates that close to 50 million micro-scale digesters are operating worldwide, with 42 million operating in China and another 5 million in India, and some 700,000 installed in the rest of Asia, Africa, and South America[4]. Flexible (balloon/bag digester) systems such as HomeBiogas products are relatively new in the market and have a superior value proposition because it is quick to install (DIY/pre-fabricated), has lower costs and innovative payment models.

Clean Cooking and Sanitation Market

Clean cooking

According to World Bank, the UN, and the FAO reports, between 2.4 and 3.5 billion people worldwide do not have access to clean cooking fuels and technologies. These people use inefficient open fires or simple cookstoves today and rely on wood-based fuel, including wood, charcoal, and coal, for cooking.

There are many negative impacts of these types of fuels. Environmentally, inefficient fuel production and consumption lead to increased GHG emissions, solid fuel cooking is tied to catalytic warming effects of black carbon emissions, and forest degradation/deforestation due to fuel collection and production. In terms of 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. Economically, there is a large amount of avoidable spending on fuel, and lost opportunities for income generation on time spent collecting fuel and cooking.

[3] RENA (2017), Biogas for domestic cooking: Technology brief, International Renewable Energy Agency, Abu Dhabi
[4] World Biogas Association, Global Potential of Biogas, 2019

Costs are the main barrier for adopting clean cooking solutions. The lack of progress in expanding access to clean, modern cooking costs the world more than $2.4 trillion each year, according to a report released in September 2020 by the Clean Cooking Alliance, the World Bank, and the Modern Energy Cooking Services program. The report estimated that US$150 billion is needed annually to reach universal access to modern energy cooking services by 2030.

Reports found that the problem is not a lack of consumer expenditure but the need for business models and technologies that make superior alternatives affordable and accessible. Over the last decade, the industry is transitioning from aid-based to becoming commercially viable. To lower barriers and support the adoption of clean solutions, the World Bank's recently announced $500 million Clean Cooking Fund, housed under the Energy Sector Management Assistance Program (ESMAP)[5].

Sanitation Market

Sanitation is a basic necessity that contributes to better human health, dignity, and quality of life.

The UN's SDG 6 water and sanitation monitoring program reports that in 2017, over 2 billion people lack basic sanitation services, with 673 million people still practiced open defecation, with 91% live in rural areas [6].

The result is that the poor are deprived of decent and dignified lifestyles leading to the deterioration of health, wellbeing, and human environment. According to the World Health Organization, poor sanitation and hygiene practices contribute to over 820,000 deaths from diarrhea annually.

Small-scale off-grid sanitation solutions aim to deliver services for the safe disposal of human urine and feces. Off-grid solutions include traditional and improved latrines (various kinds of pits), container-based sanitation (CBS), flush toilets connected to septic tanks, and various wastewater collection and treatment facilities, such as fecal sludge management technologies.

Lack of proper sanitation costs the world an estimated $223 billion every year. It is estimated that the annual market value for new sanitation technologies designed for low-resource settings, such as the HomeBiogas Toilet, could potentially reach more than $6 billion globally by 2030[7].

[5] https://www.worldbank.org/en/results/2020/11/10/accelerating-access-to-clean-cooking-the-efficient-clean-cooking-and-heating-program-and-the-clean-cooking-fund

[6] https://www.unwater.org

[7] Bill & Melinda Gates Foundation

Food Waste Management

A United States Environmental Protection Agency (EPA) report from July 2020 on Wasted Food Measurements estimated that the Hospitality and Institutional sectors, which are only responsible for 25% of total food waste[8], generated 24 million tons of waste in 2016. Potential solutions to process food waste include centralized (such as large AD facilities at landfill locations) and decentralized systems (small-scale systems near the kitchens).

Key drivers and restraints – micro, small, and medium-scale systems

Key drivers include **price increases and limited availability of alternative energy sources** such as coal, wood, gas, and polluting fuels in developing countries; **increasing awareness of the health damage** of cooing with charcoal or wood; **a growing amount of government regulations** that drive organizations and institutions to look for alternatives to organic waste treatment; **support by government aid organizations and subsidies** including the UN, World Bank, and many other NGO and commercial organizations; the **price and availability of fertilizers**; and the **Solar PV "Pay as You Go" model maturity**, paving the way for growth and adoption scale in the clean cooking and sanitation domains.

The key restraints include **prices and funding alternatives** that reduce the number of customers that can afford to purchase the systems; **poor operational / logistics infrastructure** for delivering systems in rural areas; **local taxes and fees** imposed by the governments increase prices; and **limited partners and local talents** are required for demonstrations, installations, and services.

[8] https://www.epa.gov/sites/production/files/2020-06/documents/food_measurement_methodology_scoping_memo-6-18-20.pdf

4. Competitive landscape

Competitors

There are hundreds of competitors in the 3 segments that HomeBiogas is active in, mostly very small and local companies. Some of the more notable players are: Sistema Bio, ATEC Bio, Puxin, Power Knot, QUBE Renewables and SEaB Energy. For further details read our initiation of coverage report here.

5. Strategy & Growth Opportunity

Product and Market Growth Strategy

HomeBioGas plans to reduce product production costs for the 2.0, 4.0, 7.0, and Toilet. It will expand product offering and differentiation by developing different biodigester models for developing and developed markets. The company will also offer local manufacturing in target countries to decrease costs, increase capacity and shorten supply time. The current annual production capacity is about 20,000 biogas systems. HomeBioGas is committing to a clear development roadmap for the institution systems (HBG 300/500/1000) during 2021-2022 to be commercially ready in 2022 and 2023. They will offer a “smart home” premium waste to energy solution for houses in developed markets. Completed the POC stage and now in the advanced development stage.

Business Approach

HomeBioGas operates on a B2B2C model, recruiting local employees to provide full support for distributors and their customers. It offers customized market support strategies with a “Pay as you go” model in developing countries. HomeBioGas leverages carbon credits, mainly of the institutional systems, for additional revenues or reduce leasing prices to customers. Each unit saves 1,500-2,000 tons of annual carbon emissions, currently values at around $5,000-10,000.

The company’s distribution and partnership channels include online sales, corporate social responsibility (CSR) projects, humanitarian aid projects, government-funded projects and subsidies, international development projects, and additional distributors (B2B) in target countries.

Business Models

Domestic products. The company currently offers one-time sale of biogas systems and recurrent sales of perishable items such as filters and probiotic tablets. The company plans to launch a Pay as You Go model in

developing countries and one-time sale of a biogas systems and recurrent sales of perishable items such as filters and probiotic tablets (via online) in developed markets.

Institutional systems. The company plans to offer Leasing and Pay Per Use (per volume of waste and energy) models.

Summary of the Market Opportunity

Domestic

- Developing countries – some 250 million families in rural and urban areas that do not have access to sanitation and clean cooking.
- Developed countries – tens of millions of environmentally-sensitive families living in rural areas that are not connected to a central sanitation system.

Institutional

- There are over 500,000 medium and large-scale food service facilities in the US and EU markets, of which 60,000 can be targeted as short-term opportunities, driven by stringent state and local policy and regulations for on-site waste management.

6. Valuation Method & Approach

Valuation of a start-up company in its early stages can be challenging due to limited cash flow (if any) and uncertainty regarding the future. As part of a Discounted Cash Flow (DCF), the accepted method used in financial valuations, there are several modifications to a start-up company's valuation. In general, there are four primary methods within the DCF method:

1. Real options – this valuation method is designated for pre-clinical and early-stage clinical programs/companies where the assessment is binary during the initial phases and based upon scientific-regulatory assessment only (binomial model with certain adjustments).
2. Pipeline assessment – a valuation method used for early-stage companies before the market stage where time-to-market may be a few years for full operations. The company's value is the total discounted cash flow for its products/signed agreements plus unallocated costs and its technology platform assessment.
3. DCF valuation - this method applies to companies with products that have a positive cash flow from operations.
4. Market benchmark – this method is based on recent deals (M&A and/or fundraising) within the company's domain and market multiples.

HomeBiogas is a publicly held firm, thus a late-stage firm from a financial aspect. Yet, the company is at the stage of sales ramp up. Therefore, our valuation is based on a market benchmark approach.

Company Financial Overview[9]

HomeBiogas' revenue for H1 2021 amounted to USD 1.2M, compared with USD 370K in the H1 2020. The company gross profit for H1 2021 amounted to USD 260K, compared with USD 303K gross loss in H1 2020. Net loss in H1 2021 was USD 3M, compared to a loss of USD 1.6M H1 2020. The increase in the company net loss is mainly due to increase in the company's selling and marketing costs (due to commercialization efforts), and in salary expenses.

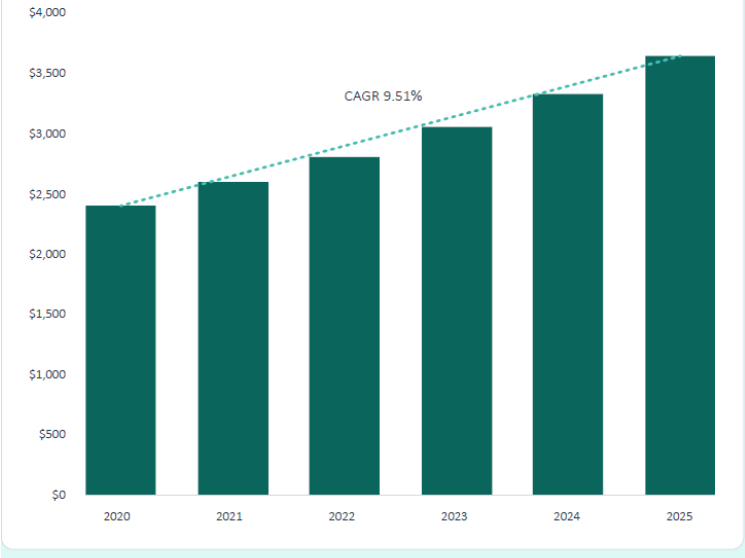
As of June 30, 2021, the company had USD 30.9M in cash and an insignificant amount of loans; the company equity was USD 32.6M.

In January 2021, HomeBiogas closed its TASE listing, raising NIS ~95.5M (after deducting issue expenses).

Financial Overview - Climate Tech

The climate tech sector has gained significant momentum in the past decade. The COVID-19 pandemic reminded nations about the value of international collaboration in solving problems of such immense magnitude and complexity. In the past six months, several governments have committed to act on climate change.

Figure 2. CLIMATE TECH MARKET SIZE ($B)



Source: PitchBook | Geography: Global

Climate tech represents a vast and extensive opportunity that currently amounts to a $2.5 trillion market. In terms of startup investment, the energy sector leads the way with $7.2 billion of capital invested as of October 30, 2020. Developments in this sector are powering innovation across the ecosystem, as participants in the transportation, industrial, and agriculture sectors develop electrified products and processes helping decarbonize the planet.

[9] As of June 30, 2021, based on HomeBiogas financial statement.

As of October 30, 2020, deal value remained strong for Climate Tech companies with $11.4 billion invested across 354 deals, compared with $10.9 billion invested across 454 deals during the whole year of 2019. Key investors in Climate Tech from 2018 to 2020 were: SOSV, Breakthrough Energy Ventures, CPT Capital, and EIT Innoenergy among others.

The average deal value for 2020 was $32.2M. Therefore, we estimate the average implied post-money valuation to be in the range of $161M-$215M (assuming 15%-20% of acquired share on average funding round).

Recent Deals as a Valuation Benchmark

We also estimated HomeBiogas' value based on similar competitors benchmarking using Pitchbook data.[10]

We based our valuation on a top-down market benchmark analysis. Observing HomeBiogas market positioning, we identified 101 similar companies in terms of activity and growth stage. We also screened companies based on their last financial deal type (omitted accelerator, incubator, and angel rounds) and excluded outliers from our sample. **The average post-money valuation for these similar deals is $147.6M** (See appendix 1 of our initiation of coverage report here for the entire data set, n=101). The Company is considered from a financial aspect as a small cap firm in relation to the similar deals we explored. Thus we discount the average deal size by 20%.

Valuation Summary

In our view, HomeBiogas has the potential to become a key player in the growing emerging market of on-site waste to energy (biogas). The company has the products and technology needed and a model compatible with massive scaling.

Based on the aforementioned data and analysis, we evaluate the company's equity value at NIS 383.8M ($118.1M). We estimate HomeBiogas' price target to be in the range of NIS 18.7 and NIS 20.7, with a mean of NIS 19.7.

[10] https://pitchbook.com/

Appendix 1: About Frost & Sullivan

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