

FEED Engineering Inc

📍 Clean Technology Vancouver, BC, Canada

"A revolutionary natural gas power generator that reduces energy costs in half "



Company Summary

FEED Engineering has been providing consulting services to businesses in the energy, oil & gas, bio-gas and HVAC sectors for 12 years. We are currently transitioning to a product company by developing an innovative system of waste heat recovery. Our product, SmartGen, helps energy intensive industries significantly lower their energy costs.

Executive Summary

Management

CEO. Mehrdad Gharibnavaz. (M.Sc., P. Eng., PMP) 26 years of industry experience in energy processing design. Director, Marketing & Sales.
Masood Radpey. (M.Sc) 18 years international sales Director, Product.
Nasir Mirlohi. (P. Eng) 20 years developing products HVAC industry.
Manager, Mechanical Design. Danyal Bahrami Designer P.Eng, 18 years experience Manager, Electrical Design. Dariosh Mirsaeidi 28 years experience.

Customer Problem

Energy is a large part of the operational costs for organizations around the world. Costs are high and growing. Energy that comes from carbon sources is being taxed at an increasing rate which contributes to overall costs. As well, electrical, wind and solar energy can be unreliable.

Product/Services

Our flagship product, SmartGen, is a natural gas-powered electricity generator combined with a waste heat recovery system. It creates energy that is a substitute for electricity drawn from the electrical grid. It uses waste heat from the exhaust of the generator to create energy in the form of heat and thus, can save up to 50% of energy costs. The recovered heat can be used for many purposes, such as hot water, space heating and cooling.

Target Market

Our primary market is owners of commercial buildings. Our initial focus is North America. According to a 2015 University of Michigan study, there are 5.6 million commercial buildings in the US alone. Building owners are constantly looking for ways to maximize profits by reducing costs.

Business Model

Initially, SmartGen will be sold directly to end customers using an internal sales team. The key benefit will be energy cost savings. We will also licence SmartGen technology to manufacturers that will incorporate our IP into their products and processes.

Company

URL:

<http://www.feedengineering.com>

Founded: December 2008

Employees: 5

Entrepreneur

Mehrdad Gharibnavaz

mgharib@feedengineering.com

Round Overview

Funding Stage: series_seed

Capital Raised: \$100k

Capital Seeking: \$500k

Pre-Money Valuation: \$3M

Run Rate: \$200k

Net Burn: \$16k

Team

Mehrdad Gharibnavaz President and CEO

Masood Radpey Director, Marketing

Nasir Mirlohi Director, Product Development

Advisors

Mark Grist - Foresight Cleantech Accelerator

Ean Jackson

Customers

Segments of the commercial building market include multi story buildings, greenhouses, shopping malls, schools, municipal heating systems, swimming pools and fabrication shops. Our focus markets are: Commercial buildings that range in size from 10,000-50,000 square feet. Our total market is US (5.6M) and Canada (250,000). Greenhouses. Our total market is US (20M million square meters) and Canada (26.1 million square meters)

Sales/Marketing Strategy

Our key sales channel is direct to customer using our experienced business development team. We provide prospects with a free assessment that estimates annual savings. Initial sales will be in the \$50K range plus 10% annual maintenance costs, depending on building size. Over time, we will develop a licensing strategy for manufacturers of energy products and processes. These customers will pay an annual licensing fee based on sales.

Competitors

FEED is the only company to offer a standalone heat recovery package that reduces the cost of any energy source. There are, however, many ways to recover waste heat. Indirect competitors include manufacturers of power generating equipment such as GE, Tedom or Capstone that use a built-in heat exchanger for heat recovery. Customers then use external engineering services to install other necessary system components.

Competitive Advantage

SmartGen is a standalone unit that functions with the exhaust component of a heating system. It can be used to refurbish existing low efficiency generators, thereby saving the cost of replacement. It has lower upfront cost of acquisition. Remote control and monitoring makes it easy to operate. It offers the highest efficiency and lowest operating and maintenance cost in the market . It's modular design allows it to be scalable as required.

FEED Engineering Inc Annual Financials

	2018	2019	2020	2021	2022	2023
Engineering Consulting	3	5	3	20	100	300
Revenue\$	81,665	200,000	200,000	7,140,000	37,128,000	115,839,360
Expenditure\$	199,372	280,000	480,000	5,712,000	29,702,400	92,671,488
Profit (Loss)\$	-117,707	-80,000	-280,000	1,428,000	7,425,600	23,167,872