Hardware Technology Sustainability Design B2B

FuelGems

A revolutionary fuel additive with potential to change the fuel industry

FUELGEMS.COM AUSTIN TEXAS

We believe the $3.5 trillion fuel market has never seen a fuel additive as powerful as the one we've invented. Our groundbreaking technology is 800x more effective than some fuel additives and is priced 3x – 20x lower.

Kirill Gichunts CEO @ FuelGems

Why you may want to support us...

1. One of the most powerful and clean fuel additives in history.
2. Game-changing technology for the entire $3.5 trillion fuel market.
3. Revenue potential from pilot clients $50+ million.
4. Client pipeline are multi-billion companies: BP, Marubeni, PKN ORLEN, Suncor Energy.
5. FuelGems believes the additive can generate $400+ million in revenue.
6. Massive direct $40 billion market opportunity.
7. VC investor: Sputnik ATX. Managing Partner holds PhD in physics from Ivy League.
8. Patents by top-tier IP law firm

Why investors ❤ us

WE'VE RAISED $60,000 SINCE OUR FOUNDING

I invested in FuelGems for multiple reasons. Their team and product will change the world when it comes to using gasoline and diesel. Using diesel and gasoline produces emissions such as unburnt hydrocarbons and particulate matter which cause air pollution and cause heart disease and cancer. FuelGems will save lives. Equally important is the fact that only a tiny amount of 1 to 5 grams of their nanoparticles, which are made of carbon and are safe, are needed to treat 260 gallons of fuel. This is hundreds of times less of active materials than what competitors use in their additives. This tiny amount of additive needed makes FuelGems product very cheap and universally applicable across

... *read more*

Volodymyr Khmurych COO UFuture

LEAD INVESTOR INVESTING $100,000 THIS ROUND

Kirill is a strong entrepreneur who has a great track record. I know him personally from UC Berkeley. It is clear that the team is super strong as it includes top scientists and PhDs. As a CEO of Rentberry I know that there are two biggest problems people are facing today - shortage of housing and pollution that is being created by people who commute by driving from home to work, business trips, etc. FuelGems is the only company that developed product that has a dramatic impact on our daily lives - reducing harmful emissions by up to 60%. This is crucial for our planet, our health and our kids health. In addition it also saves fuel. I truly believe in this company, its team, disruptive... read more

Alex Lubinsky

Kirill is a great entrepreneur, he is persistent, customer oriented, posseses good commercial experience

Volodymyr Khmurych

SEE MORE

Our team

AND OUR MAJOR ACCOMPLISHMENTS

Kirill Gichunts

CEO

Former Managing Partner of a VC accelerator fund: invested/grew over 15 start-ups, achieved exits. Advised Microsoft. Semifinalist of Cleantech Open. Award winning investment banker. Graduated UC Berkeley.

Jacek Jasinski, Ph.D.

Nanotechnology Scientist

Team Leader at Conn Center for Renewable Energy Research, Post Graduate Researcher at Lawrence Berkeley National Laboratory, Ph.D. Semiconductor Physics at University of Warsaw, M.Sc. Solid State Physics at University of Warsaw.

Dima Vynnichenko, Ph.D.

Scientist

Post Graduate Researcher/Engineer at National Academy of Sciences of Ukraine, over 10 awards including an award from Government of Ukraine, author of 69 publications. Ph.D. Engineering Sciences from National Academy of Sciences of Ukraine

Timothy Rose, Ph.D.

Automotive Engineer and Scientist

Senior Research Fellow in Materials Engineering in Novel Fuels for Transport at Cranfield University. Researcher at British Gas. Ph.D. Surface Science and Engineering at Cranfield University.

Irina Nazarova Ph.D.

Scientist

Researcher and electrical engineer at various research centers, 4 awards for scientific achievements, author of 35 publications. Ph.D. Engineering Sciences from Kyiv Polytechnic Institute.

Yaroslav Bereznitsky, Ph.D. Candidate

Chemical Engineer

Graduate Student Researcher and Chemical Engineer at National Academy of Sciences of Ukraine. Ph.D. Candidate 2020 at National Academy of Sciences of Ukraine.

Roman Tarasenko, Ph.D. Candidate

Chemical Engineer

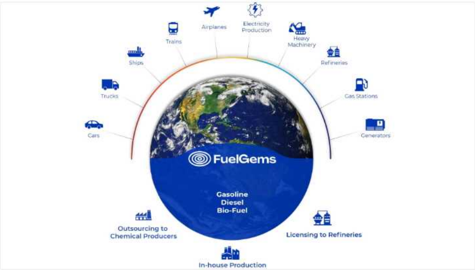
Graduate Student Researcher and Chemical Engineer at National Academy of Sciences of Ukraine, Ph.D. Candidate 2021 at National Academy of Sciences of Ukraine.

Downloads

- FuelGems Investor Presentation.pdf
- FuelGems Investor Presentation Short.pdf

A revolutionary fuel additive is ready for mass production – with potential to create a shock wave across the $3.5 trillion fuel market. And the biggest corporations in the world want in.

There's been a complete revolution in the way fuel can be used – and it's all due to a venture capital-backed company in Austin, Texas. FuelGems Inc. has invented an incredibly powerful new fuel additive that skyrockets the cleanness and performance of Gasoline, Diesel and Bio-fuel used for all modes of transport and electricity generation.



Investor Testimonials

Dr. Oksana Malysheva - Managing Partner at Spuntik ATX

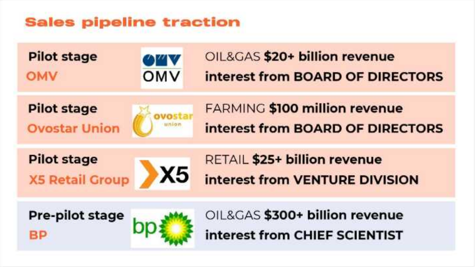
PhD Physicist from University of Pennsylvania

Dr. Malysheva / Managing Partner / Sputnik ATX
from FuelGems Inc.
01:17

Oleksiy Lyubynskyy- CEO at Rentberry

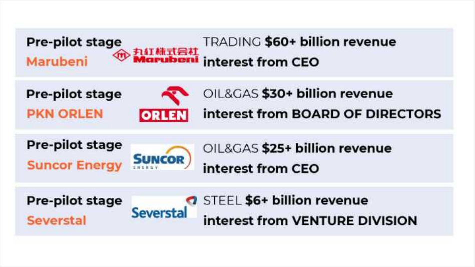
CEO at Rentberry
from FuelGems Inc.
02:52
vimeo

FuelGems is currently at a pilot and pre-pilot stage with some of the world's largest corporations. If the three companies in the pilot stage convert to clients, at full capacity, have the potential to deliver about **$50 million in annual revenue to FuelGems.**



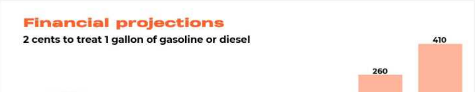
Sales pipeline traction

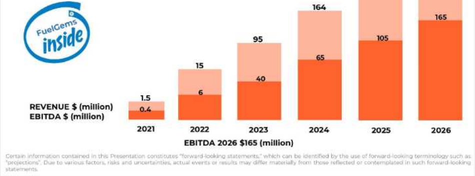
Pilot stage OMV	OIL&GAS **$20+ billion revenue** **interest from BOARD OF DIRECTORS**
Pilot stage Ovostar Union	FARMING **$100 million revenue** **interest from BOARD OF DIRECTORS**
Pilot stage X5 Retail Group	RETAIL **$25+ billion revenue** **interest from VENTURE DIVISION**
Pre-pilot stage BP	OIL&GAS **$300+ billion revenue** **interest from CHIEF SCIENTIST**



Pre-pilot stage Marubeni	TRADING **$60+ billion revenue** **interest from CEO**
Pre-pilot stage PKN ORLEN	OIL&GAS **$30+ billion revenue** **interest from BOARD OF DIRECTORS**
Pre-pilot stage Suncor Energy	OIL&GAS **$25+ billion revenue** **interest from CEO**
Pre-pilot stage Severstal	STEEL **$6+ billion revenue** **interest from VENTURE DIVISION**

We believe we can price our additive 3x-20x less than competition, we believe this pricing advantage will allow us to dominate the market world-wide. We believe we can generate up to **$400 million in annual revenue from only 15-20 clients.**



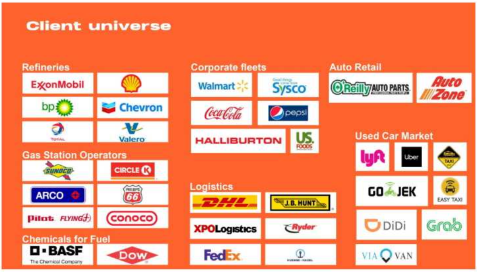


Certain information contained in this Presentation constitutes "forward-looking statements," which can be identified by the use of forward-looking terminology such as "projections". Due to various factors, risks and uncertainties, actual events or results may differ materially from those reflected or contemplated in such forward-looking statements.

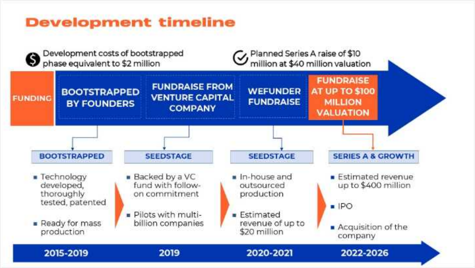
Our immediate goal is to provide our additive to the largest and most lucrative segments.

We estimate that one refinery alone would result in $27 million in annual revenue. There are 220 refineries in USA and Europe.

We estimate that a gas station operator with 500 stations would result in $12 million in annual revenue. There are 220,000 gas stations in USA and Europe.



FuelGems has demand in key regions of the **massive $3.5 trillion fuel market.** FuelGems believes it is on a trajectory to become a billion dollar company.



Development timeline

Development costs of bootstrapped phase equivalent to $2 million

Planned Series A raise of $10 million at $40 million valuation

FUNDING

BOOTSTRAPPED BY FOUNDERS

FUNDRAISE FROM VENTURE CAPITAL COMPANY

WEFUNDER FUNDRAISE

FUNDRAISE AT UP TO $100 MILLION VALUATION

BOOTSTRAPPED

- Technology developed, thoroughly tested, patented
- Ready for mass production

SEEDSTAGE

- Backed by a VC fund with follow-on commitment
- Pilots with multi-billion companies

SEEDSTAGE

- In-house and outsourced production
- Estimated revenue of up to $20 million

SERIES A & GROWTH

- Estimated revenue up to $400 million
- IPO
- Acquisition of the company

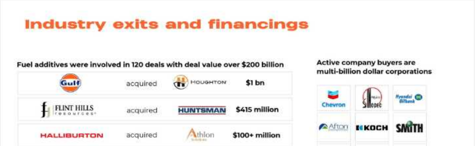
2015-2019

2019

2020-2021

2022-2026

FuelGems has the potential to generate annual revenue of $400 million to $1 billion. At this revenue FuelGems will do an IPO or can be acquired by a company such as Chevron or BP.



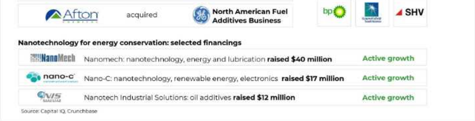
Industry exits and financings

Fuel additives were involved in 120 deals with deal value over $200 billion

Gulf	acquired	HOUGHTON	$1 bn
FLINT HILLS resources	acquired	HUNTSMAN	$415 million
HALLIBURTON	acquired	Athlon	$100+ million

Active company buyers are multi-billion dollar corporations

Chevron
Sinopec
Hyundai Oilbank
Afton
KOCH
SMITH



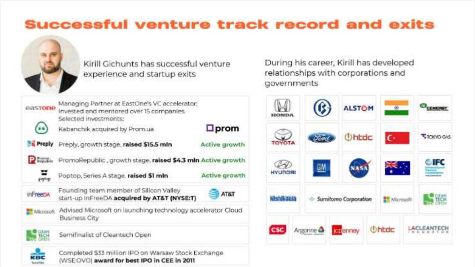
Afton acquired North American Fuel Additives Business

Nanotechnology for energy conservation: selected financings

NanoMech	Nanomech: nanotechnology, energy and lubrication **raised $40 million**	Active growth
nano-c	Nano-C: nanotechnology, renewable energy, electronics **raised $17 million**	Active growth
NIS	Nanotech Industrial Solutions: oil additives **raised $12 million**	Active growth

Source: Capital IQ, Crunchbase

FuelGems' CEO is an award-winning business leader who has vast experience and a winning track record in investing in and running companies, with a number of his startups having achieved successful exits.



Successful venture track record and exits

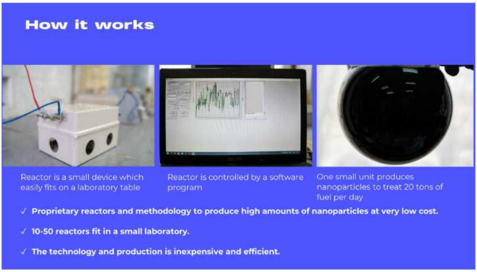
Kirill Gichunts has successful venture experience and startup exits

- Managing Partner at EastOne's VC accelerator; Invested and mentored over 15 companies. Selected investments:
  - Kabanchik acquired by Prom.ua
  - Preply, growth stage, **raised $15.5 mln** — Active growth
  - PromoRepublic , growth stage, **raised $4.3 mln** — Active growth
  - Poptop, Series A stage, **raised $1 mln** — Active growth
- Founding team member of Silicon Valley start-up InFreeDA **acquired by AT&T (NYSE:T)**
- Advised Microsoft on launching technology accelerator Cloud Business City
- Semifinalist of Cleantech Open
- Completed $33 million IPO on Warsaw Stock Exchange (WSE:OVO) **award for best IPO in CEE in 2011**

During his career, Kirill has developed relationships with corporations and governments

Our world-class team has developed a groundbreaking plasma generator that creates powerful carbon-based nanoparticles. These nanoparticles are combined with gasoline or another solvent and are then added to fuel.

What makes these nanoparticles so special is this: Only a micro-dose of 1 to 5 grams of these nanoparticles is needed per 260 gallons of fuel. Some standard fuel additives typically require anywhere 200x to 800x more additive for the same amount of fuel. In addition, our additive comes at a fraction of the cost of competitors (3x – 20x lower) due to our special manufacturing process. We believe, the end result is that our nanoparticle will **create never-before-seen levels of savings and ROI for the fuel industry and reductions in emissions.**



How it works

Reactor is a small device which easily fits on a laboratory table

Reactor is controlled by a software program

One small unit produces nanoparticles to treat 20 tons of fuel per day

- ✓ **Proprietary reactors and methodology to produce high amounts of nanoparticles at very low cost.**
- ✓ **10-50 reactors fit in a small laboratory.**
- ✓ **The technology and production is inexpensive and efficient.**

But it gets better – because our additive is as powerful as it is flexible. It can be added at the refinery level, at the distributor level (added to directly to gas stations, underground tanks and more) or even to fuel tanks by individual drivers.

We believe, the carbon-based nanoparticles are also completely safe for the environment and will gain EPA registration. EPA allows registration and usage of fuel additives which are made from Carbon, Hydrogen, Nitrogen, Oxygen and Sulfur.

On top of this, we've taken exhaustive measures to test our additive for over 5 years at various research institutes and in over 1,000,000 miles of real-world driving in order to guarantee safety and environmental effectiveness.

We've taken every measure to ensure that our solution leads to cleaner air, a better planet and a brighter future for all.

Investor Q&A

– COLLAPSE ALL

What does your company do? ⌄

We developed a revolutionary fuel additive that greatly improves the cleanness/performance of Gasoline, Diesel, Bio-fuel. Tiny amount of 5 grams of nanoparticles are needed to treat 260 gallons of fuel, making our additive the one of the most powerful and affordable on the market. Users gain up to 1000% ROI. Our additive reduces greenhouse gas emissions up to 50%, increases engine/fuel pump lubrication and saves fuel. Our additive has been exhaustively tested and is ready for mass production.

Where will your company be in 5 years? ⌄

We hope to expand rapidly to serve the needs of the massive worldwide fuel market. We believe we can sell our product at a price that is 3x to 20x+ less than some competitors and results up to 1000% ROI for clients. Increasing the price 2x could potentially result in $500-$800 million of annual revenue while still delivering up to 500% ROI for our clients. These projected revenue levels are based upon us obtaining at least 20 clients. Our goal is to become a billion-dollar company.

Why did you choose this idea? ⌄

We believe the $3.5 trillion fuel market has never seen a fuel additive as powerful as the one we've invented. Our groundbreaking technology is 800x more effective than some fuel additives and is priced 3x – 20x lower.

How far along are you? What's your biggest obstacle? ⌄

Our technology is fully developed, tested, patented and ready for mass production. We are in pilot stages with clients which potentially could generate over $50 million in revenue in about 1 year once finalized. Our pipeline has the potential to bring over $100 million annual revenue. Our biggest obstacle is to expand production fast enough to meet the customer demand for trials and purchases. None of these future projections are guaranteed.

Who competes with you? What do you understand that they don't? ⌄

We believe we have no direct competitors because we've developed the most advanced and powerful solution in history. Our breakthrough additive will dramatically increase the cleanness and efficiency of fuel at a level that can't be matched. This is because our active ingredient is added in proportion of 1-5 grams to 260 gallons of fuel (up to 800x less than some competition). Our one-of-a-kind combination of incredible effectiveness and incredible affordability puts our additive in a class of its own. The minuscule amount of additive needed to outperform every other existing additive allows us to price 3x to 20x+ less than additives on the market and move into wholesale to rapidly capture a very large market share very quickly.

How will you make money? ⌄

FuelGems will license the technology, outsource the production to a chemical company and/or produce in house.

FuelGems will sell to refineries, gas stations operators and fleets. Due to our very low price of 2 cents to treat 1 gallon of gasoline, we expect the savings and ROI for each and every customer will be significant, making the decision to switch to FuelGems a very easy one.

We estimated that a small gas station operator with 500 filling stations alone will generate $12 million in annual revenue. Our estimates show one refinery will generate $27 million in annual revenue. There are over 220,000 gas stations and 220 refineries in USA and Europe alone.

Our estimates show that only 30 refineries as clients will generate over $800 million in annual revenue for FuelGems.

What are the biggest risks? If you fail, what would be the reason? What has to go right for you to succeed?

We have 7 clients that are multi-billion and multi-million dollar companies in a pilot and pre-pilot stage. Because of our established production process and low cost of materials, our biggest risk is that we will may not be able to scale fast enough to meet demand. Additional funding will help us secure the additional resources, equipment and people to do this.

What is your client traction and revenue?

We are in a pilot and pre-pilot phase with multi-billion dollar companies such as BP, Suncor Energy, PKN ORLEN. While the R and D was mostly funded by the founders we need funding to expand production to meet the current demand. Once we expand production capacity FuelGems will have the capacity generate $50 million in the next two years.

Will you have another fundraise?

We would like to increase shareholder value and minimize dilution. If we raise additional capital after this offering we expect that our valuation will be significantly higher due to the milestones we hope to achieve between now and the future financing. We believe our next round will be at valuation of around $30-$50 million. Our preferred strategy to grow production capacity is to utilize:

1. Revenue
2. Customer prepayments to grow capacity
3. Secure bank debt using customer contracts

This approach will minimize investor dilution without sacrificing company growth and increasing valuation.

Is your technology ready and what is your production capacity?

Our technology is ready to be mass produced or licensed. We've developed and perfected a proprietary production method (our very own plasma generator) in order to produce our nanoparticles at a very low cost. We've also spent the last 5 years designing and testing the right nanoparticle for maximum effect on fuel.

Our current production capacity allows us to treat 75,000 gallons of fuel per month. This is achieved using the generator shown in the video. We look forward to expand our capacity greatly with additional funding.

What tests have you done that you know your technology works?

We've completed over 30 in-depth tests (listed below) with a high degree of complexity in the areas of nanotechnology, anti-friction properties and engine bench tests. Our friends and colleagues have driven over 1 million miles with our additive and are extremely happy with the fuel savings. Here are some of the tests we've completed:

Nanotechnology, atomic, molecular and chemical testing

-Atomic force microscopy
-Transmission electron microscopy
-Scanning electron microscopy
-Raman spectroscopy
-Infrared spectroscopy
-Oxidation testing
-X-ray fluorescence spectroscopy
-Qualitative chemical analysis
-Energy-dispersive X-ray spectroscopy

Tribology and friction

-Liquid phase electron microscopy
-Differential-phase laser scanning profilometer
-Fuel pump, testing surfaces of various fuels
-4-Ball wear test

Internal combustion engine testing

-Internal combustion gasoline engine bench test
-Internal combustion diesel engine bench test
-Internal combustion engine gas analyzer tests
-Real-life testing over 1,000,000 miles driven in real cars

Do you have VC investors? ⌄

FuelGems is backed by an early stage venture capital fund and accelerator Sputnik ATX. A partner at Sputnik ATX, Dr. Oksana Malysheva is also a scientist. She received her PhD in physics from University of Pennsylvania and understand the technology well.

FuelGems founder Kirill Gichunts financed the company. Kirill worked as a managing partner at a venture capital accelerator fund, part of an investment holding with $3bn in assets, where he made over 15 investments into startups, helped grow the companies and achieved exits and successful growth stories.

Is your additive registered with the EPA? ⌄

EPA allows registration and usage of fuel additives which are made from Carbon, Hydrogen, Nitrogen, Oxygen and Sulfur. Our nanoparticles are mostly made from carbon, thus we believe we will gain EPA registration. Moreover, the additive is environmentally safe.

Where will your company be in 10 years? ⌄

Our goal is to expand rapidly and grow our business into a billion-dollar company by executing our strategy. The more additive we sell the cleaner our air will be. We plan to do a IPO or become acquired within the next 10 years.

Why does your technology work? ⌄

We believe our technology highly advanced and is the result of some of the brightest minds in various fields and years of extensive research and development. The result is cutting-edge production method which uses a proprietary way to form and apply plasma. Specifically, we've developed unique spherical carbon nano-sized clusters and designed a way to stabilize these nanoparticles so that it easily disperses in fuel and avoids agglomeration. This method avoids the problems existing fuel additives face and place our solution in a class of its own.

How did FuelGems develop its technology? ⌄

Our team of world-class scientists developed the technology over 5 years. We've invested hundreds of thousands of dollars in R&D budget in order to create a new class of fuel additive that we believe is unlike anything the world has ever seen before.

How did the recession and Covid19 impact your company? ⌄

The recession has had some positive impacts FuelGems since companies and people are now much more concerned about reducing expenses – and for fuel our additive is one of the best ways to do so while simultaneously increasing performance. A retail operator with $25 billion in annual revenue and thousands of trucks has contacted us and is interested to use our additive to significantly save on fuel. We believe other companies, big and small, will seek savings on fuel expense.

We understand that the impact of corona virus on the fuel industry generally has resulted in lower demand for fuel. The impact of Covid-19 on our operations, however,

The fuel market is enormous at about $3.5 trillion. While there was a decrease in fuel use for individual drivers and air travel, the demand for fuel remained steady for freight use (delivering freight via trucks, trains and ships). One lengthy ship voyage can use up millions of dollars in fuel, and the use of our additive can cut this number down significantly.

Also, countries and islands use diesel to produce electricity (which our additive greatly cleans and improves). Hawaii generates 80% of electricity from diesel, Jamaica 90%, Saudi Arabia 55%, Israel 21%, Mexico 19%, Japan 20%. Electricity production will remain steady.

How do you protect your intellectual property? ⌄

FuelGems technology works as it is powered by the team’s large number of marvelous discoveries. In order to protect these we’ve retained a world-renowned IP law firm, Knobbe Martens, and have filed a provisional patent in 2019 and a full PCT patent in 2020 which gives us world-wide protection. Our top priority is safeguarding this incredible technology for the benefit of our companies and our investors.

What is your additive made of?

The key ingredients of our fuel additive are specially designed carbon nanoparticles. They are environmentally safe. The nanoparticles are added to gasoline or another solvent which is then added to fuel which is to be used. The proportion of nanoparticles to ”final user fuel” is 1-5 grams per 260 gallons.

How can your additive be used?

Our additive is extremely accessible and can be used very easily. Individual drivers can add the additive to fuel tanks when filling up. Gas stations operators can add the additive to underground fuel storage tanks when refilling them. Refineries can add the additive to fuel during the refining process.

Is your technology and additive difficult to produce?

Not at all – and this is thanks to the significant amount of time we’ve spend perfecting our production process. The end result is that we can easily produce our additive in large quantities despite our highly proprietary technology. The equipment used in the production process is standard laboratory materials and equipment. The plasma generator used to produce the nanoparticles are built using inexpensive common materials.