



**A Revolutionary Fuel Additive with
Potential to Change the Fuel Industry**

FuelGems: More Efficient and Cleaner Fuel for the \$3.5 trillion market and a More Sustainable Planet.

Diesel and gasoline will power 80% of all vehicles by 2050. Fuel is not efficient and dangerous for the environment and human health. The world needs a solution today.

Revolutionary additive for instant and continuous increase in mileage for gasoline and diesel engines, emissions reduction and engine protection.

Innovative nanotechnology based additive to give users up to 1000% ROI.

There are major problems with gasoline and diesel



Deadly emissions

Contaminated air and toxic emissions from dirty fuel cause over 5 million people to die annually



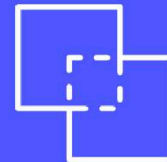
Fuel is expensive

Fuel is a huge expense that every company wants to minimize



Fuel became more corrosive

Up to 70% more corrosive to the engine



Refineries need to differentiate fuel

Fuel is currently a commodity that provides no extra value

Problem with gasoline, diesel and bio-fuel

Deadly emissions

Contaminated air and toxic emissions from dirty fuel cause over 5 million people to die annually

Fuel has become more corrosive

Up to 70% more corrosive to the engine

Refineries need to differentiate fuel

Fuel is currently a commodity that provides no extra value

Fuel is expensive

Fuel is a huge expense that everyone wants to minimise

Fuel additives are chemical heavy

Need to add to fuel in large quantities

Solution by FuelGems

○ FuelGems decreases emissions

Decreases unburnt hydrocarbons by 50%
Decreases carbon monoxide by up to 15%
Decreases CO2 by up to 8%
Decreases particulate pollution

○ FuelGems increases lubrication

Increases engine life
Increases fuel pump life

○ Highly affordable (2 cents extra per gallon)

Refineries can differentiate fuel and create new fuel class

○ Saves fuel

Up to 8% (users ROI up to 1000%)

○ Tiny amount needed

1-5 grams per 260 gallons (a whopping 800x less than competing additives)

Highlights



Ready for world-wide expansion:
**LICENSING & OUTSOURCING
GROWTH STRATEGIES**



Direct market opportunity: **\$40+
BILLION**



Fuel market:
\$3.5 TRILLION



Strong returns & environmental
impact: **ROI UP TO 1000%, EMISSION
REDUCTION UP TO 50%**



Key components of nanoparticle
UP TO 95% MORE AFFORDABLE



Traction: **\$25BN OIL&GAS COMPANY,
\$25BN FLEET OPERATOR, 90% OF
HEAVY DAILY DRIVERS WANT TO
USE THE ADDITIVE**

Highlights



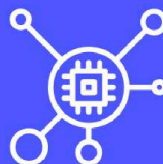
5 years in development and testing: **1 MILLION+ MILES DRIVEN WITH ADDITIVE**



Technology: **NEXT GENERATION NANOPARTICLE AND ITS PRODUCTION METHOD**



PATENTS by top-tier IP firm Knobbe & Martens.



Nanoparticle: **PROPRIETARY, CHEAP TO MANUFACTURE IN BULK AND ENVIROMENTALLY SAFE**



Nanoparticles can be sold and used in **SEVERAL MULTI-BILLION DOLLAR INDUSTRIES**



Testing: **COMPREHENSIVE AND INTRICATE TESTS DONE AT VARIOUS RESEARCH CENTERS**

FuelGems pilot & pre-pilot potential clients are in USA, Europe and Asia

USA

P.M. \$ 700 bn
P/g \$ 2.60

Europe

P.M. \$ 530 bn
P/g \$ 6.0

China & India

P.M. \$ 620 bn
P/g \$ 4.0

*P.M. — Petroleum market
P/g — Price per gallon

Source: BP plc, Bloomberg

Sales pipeline traction

Pilot stage



OMV

OIL&GAS **\$20bn+** revenue
interest from BOARD OF DIRECTORS



Ovostar Union

FARMING **\$100mln** revenue
interest from BOARD OF DIRECTORS

CONFIDENTIAL

MOU with the Company

FLEET OPERATOR **\$25bn+** revenue
interest from VENTURE & LOGISTICS DIVISIONS

Sales pipeline traction

Pre-pilot stage



BP

OIL&GAS \$300bn+ revenue
interest from CHIEF SCIENTIST



Marubeni

TRADING \$60bn+ Revenue
interest from CEO



PKN Orlen

OIL&GAS \$30bn+ revenue
interest from BOARD OF DIRECTORS



Suncor Energy

OIL&GAS \$30bn+ Revenue
interest from CEO

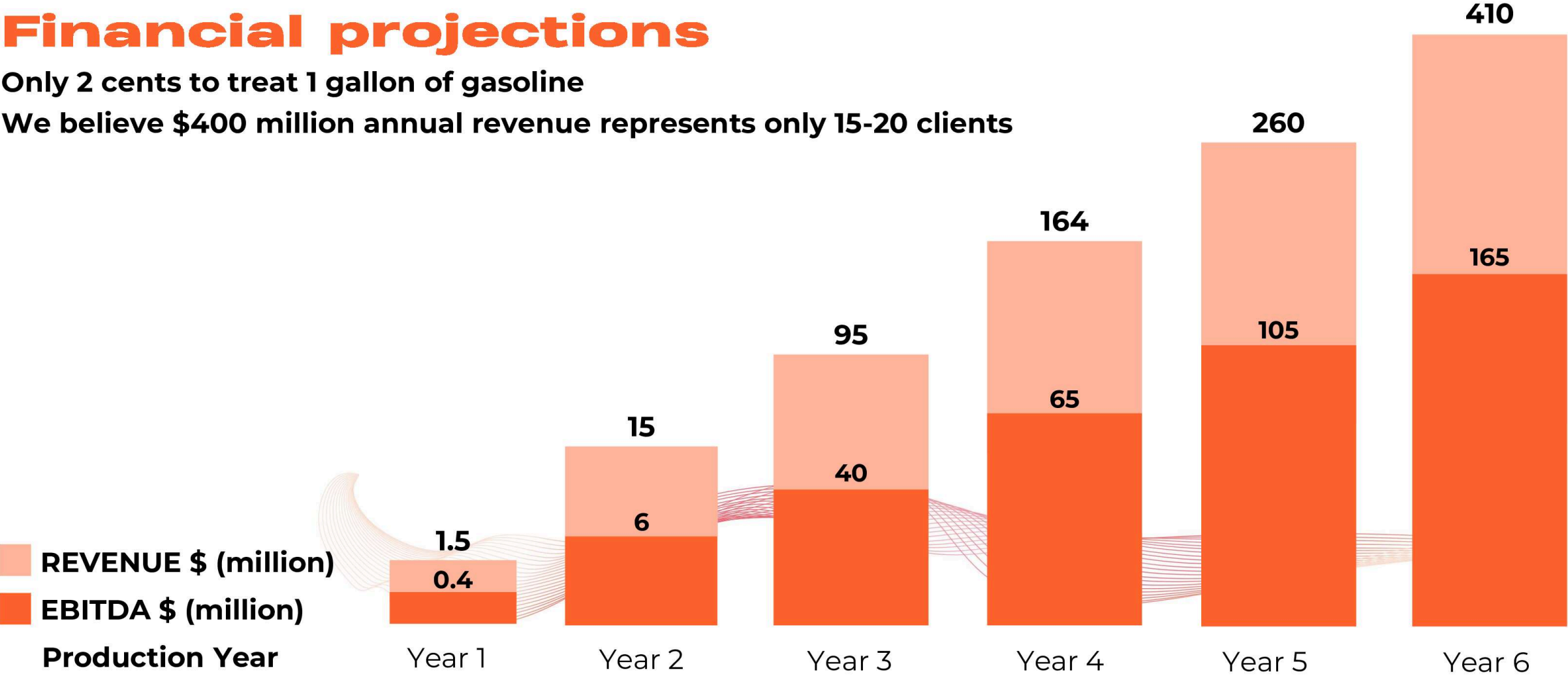


Severstal

STEEL \$6bn revenue
interest from INVESTMENTS DIVISION

Financial projections

Only 2 cents to treat 1 gallon of gasoline
We believe \$400 million annual revenue represents only 15-20 clients



EBITDA @ Year 6: \$165 (million)



*Theses are forward-looking projections which CANNOT be guaranteed.

Prospective clients and go to market strategy

FuelGems pilot projects are corporate fleets and refineries. Gas Station Operators and Auto Retailers are next.

Refineries

ExxonMobil



Gas Station Operators



Corporate fleets



HALLIBURTON



Chemicals for Fuel



Prospective clients and go to market strategy

FuelGems pilot projects are corporate fleets and refineries. Gas Station Operators and Auto Retailers are next.

Logistics



XPOLogistics



FedEx



Used Car Market



GO  **JEK**



 **DiDi**

Grab

VIA  **VAN**

Auto Retail



How FuelGems makes money

The cost of fuel additive is insignificant

2 cents treats 1 gallon of gasoline

\$12 million Revenue for FuelGems

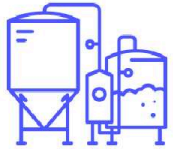
small gas station operator with 500 filling stations

\$27 million Revenue for FuelGems

one refinery

220,000 gas stations and 220 refineries in USA and Europe

FuelGems market potential is \$40 billion



Revenue from refineries and gas station operators

USA, Europe and Asia

**\$30
Billion**

$\$1.85 \text{ Trillion} \times 8\% \text{ Savings} \times 20\% \text{ of Savings}$



Revenue from fleets

Fleet fuel consumption
in top 20 countries

**\$10
Billion**

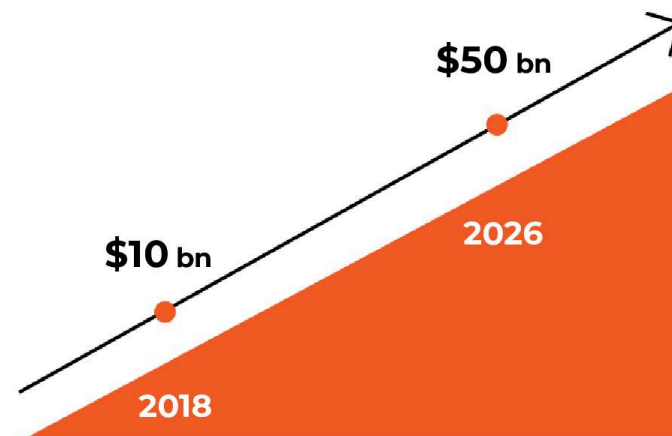
$\$500 \text{ Billion} \times 8\% \text{ Savings} \times 20\% \text{ of Savings}$

Fuel market is enormous while nanotechnology is one of the fastest growth technology sectors



- Nanoparticles will be used in products that represent over **\$2 trillion** in the global economy

🔴 Fuel market is **\$3.5 trillion**

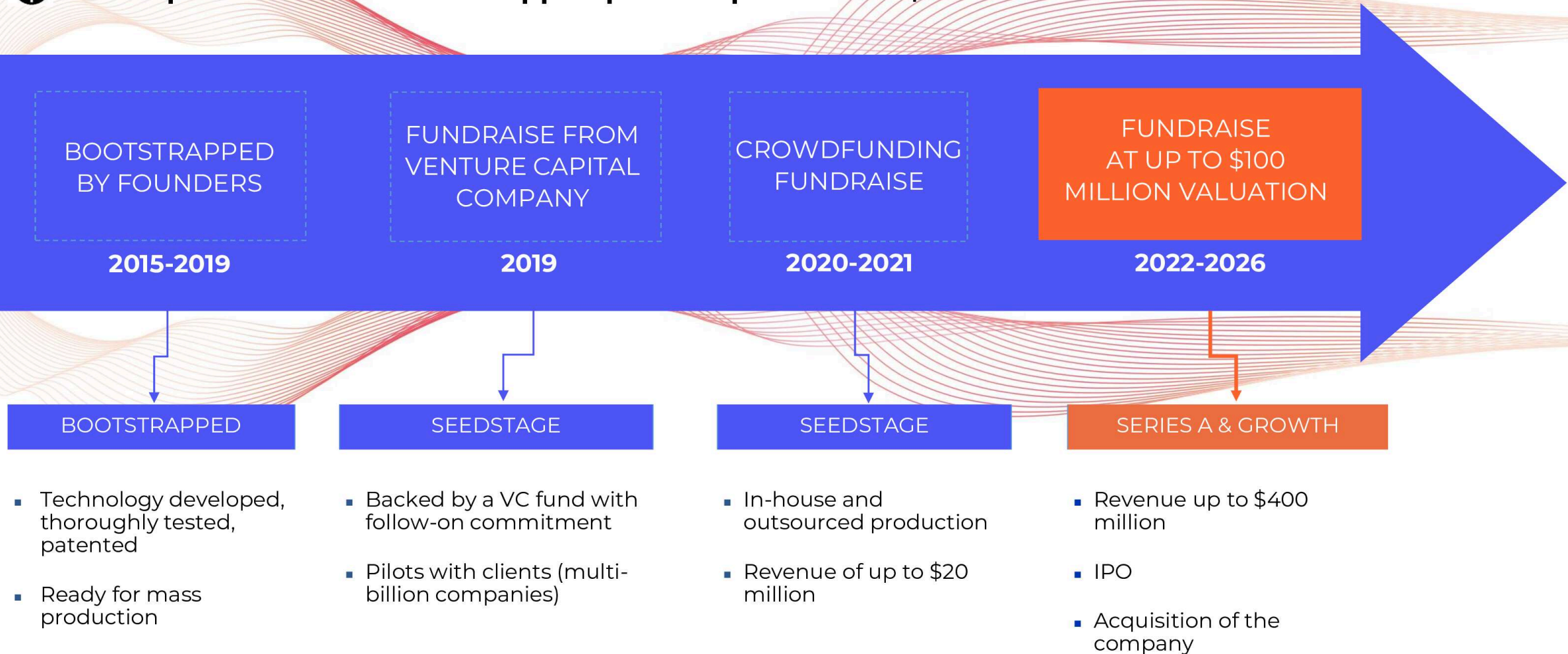


Nanoparticle market is red hot: **\$10 billion in 2018 to \$50 billion in 2026**: 15%+ CAGR Growth

Nanoparticles are amazing because they greatly enhance materials. Our nanoparticles improve gasoline and diesel.

Development timeline

💰 Development costs of bootstrapped phase equivalent to \$2 million



*Theses are forward-looking projections which CANNOT be guaranteed

Industry exits and financings




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

	acquired	 HOUGHTON	\$1 bn
	acquired	 HUNTSMAN	\$415 million
	acquired	 athlon Solutions	\$100+ million
	acquired	 North American Fuel Additives Business	

Active buyers are multi-billion dollar corporations



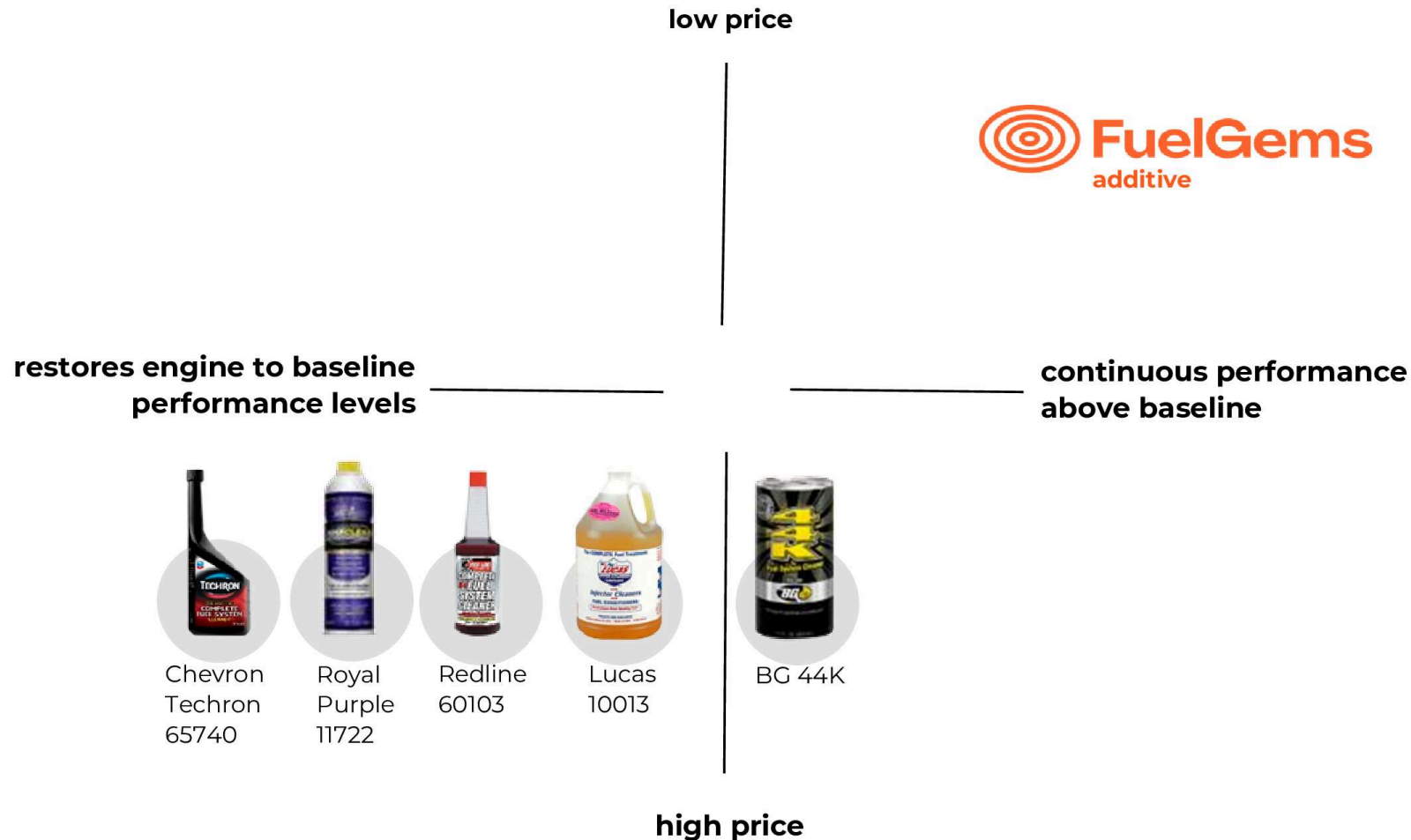
Nanotechnology for energy conservation: selected financings

	Nanomech: nanotechnology, energy and lubrication	raised \$40 million	Active growth
	Nano-C: nanotechnology, renewable energy, electronics	raised \$17 million	Active growth
	Nanotech Industrial Solutions: oil additives	raised \$97 million	Active growth

Source: Capital IQ, Crunchbase



Current fuel additives are expensive and lack performance

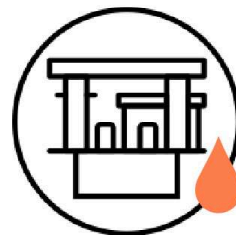


For customers
FuelGems is an easy
solution with high
performance and low
price.

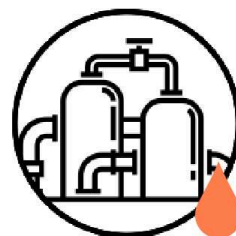
FuelGems can price its
additive up to 20 times
cheaper than
competitors and win a
large market share
very quickly.

How it works

A tiny amount:
1-5 grams of nanoparticle
"FuelGems" is needed **per 1**
ton (260 gallons) of fuel



Easy for gas stations:
just add to large fuel
storage tank

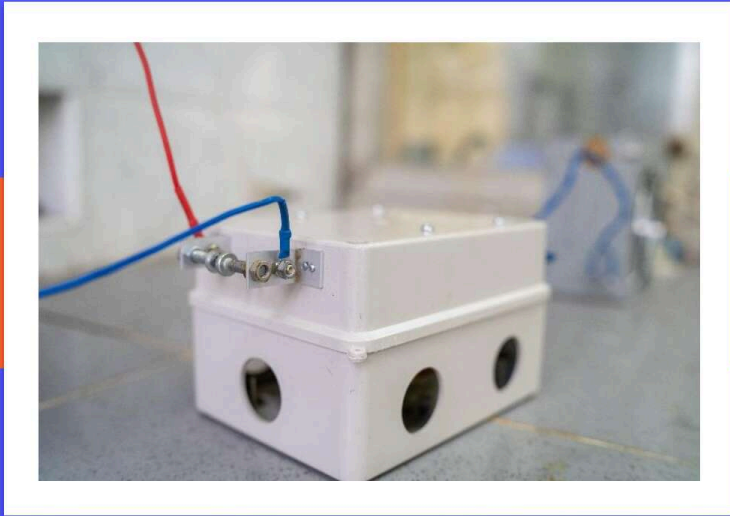


Easy for refineries:
just add during the
refining process

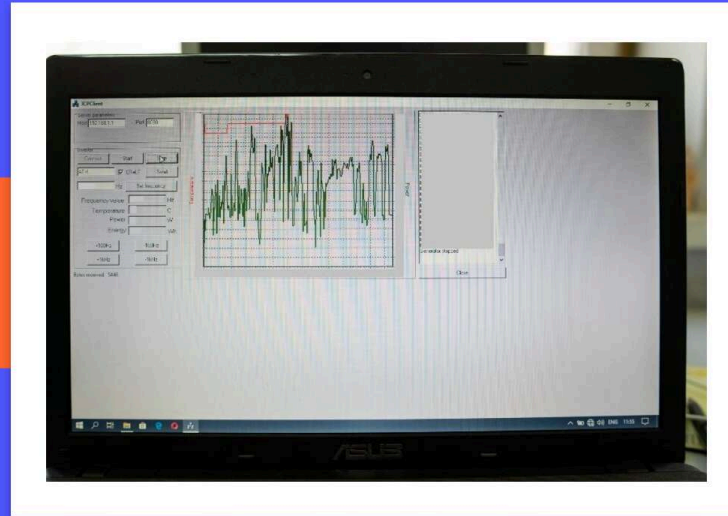


Easy for drivers: just
add to fuel tank
when filling up

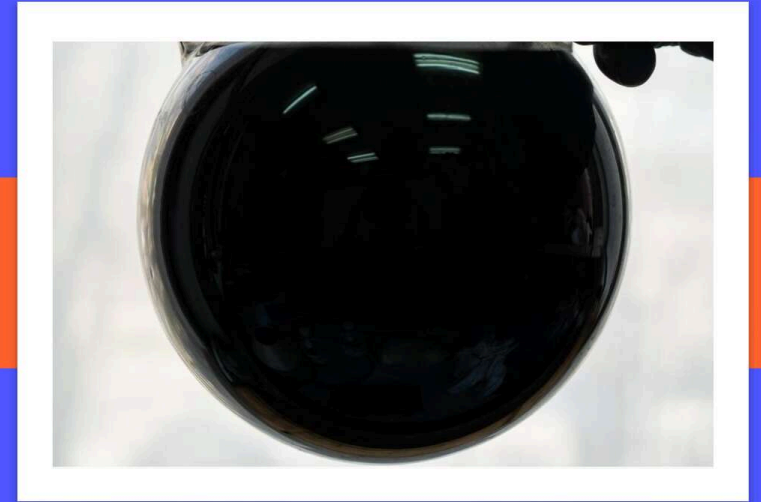
How it works



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



Reactor is controlled by a software program

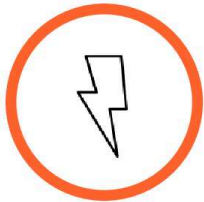


One small unit produces nanoparticles to treat 20 tons of fuel per day

- ✓ **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**

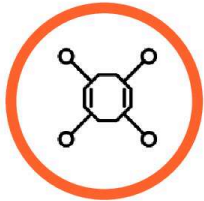
Proprietary and patented know-how

Unique and proprietary production method, unique nanoparticle and its stabilization



Production method

Unique knowhow in electricity usage to form and apply plasma



Chemical compounds

Synthesis of unique spherical carbon nano-sized clusters



Stabilization

Nanoparticle is stabilized to disperse easily in fuel and avoid agglomeration for long life of nanoparticle in fuel

Knobbe **Martens**

INTELLECTUAL PROPERTY LAW

Top-tier IP law firm, Knobbe Martens
filed the patents

Technical validation

Extensive university testing

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

- Tribology and friction testing: measurement of friction
- Tribology and friction testing: liquid phase electron microscopy
- Tribology and friction testing: differential-phase laser scanning profilometer
- Tribology and friction testing: fuel pump, testing surfaces of various fuels

Internal combustion engine testing

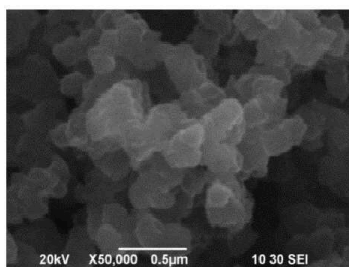
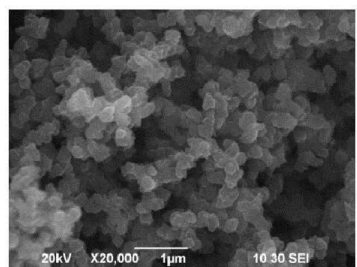
- Internal combustion gasoline engine bench test
- Internal combustion diesel engine bench test
- Internal combustion engine gas analyzer tests
- Real-life testing over 1,000,000 miles driven in real cars

Comprehensive testing to fully examine the nanoparticles, their mechanism of action and effects: anti-friction and anti-oxidation

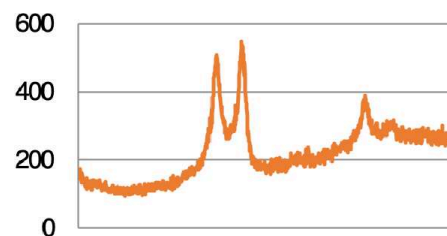
Technical validation

Nanotechnology analysis

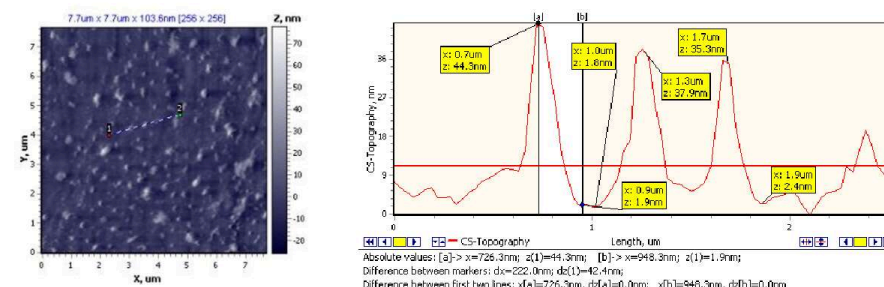
Scanning Electron Microscope



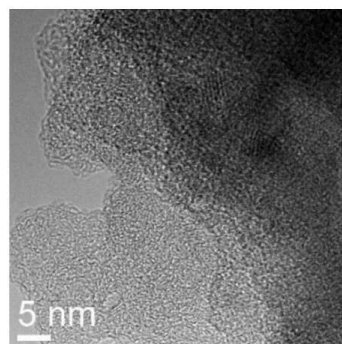
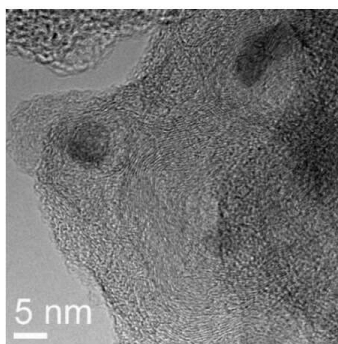
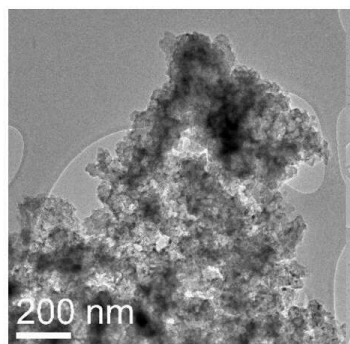
RAMAN Spectroscopy



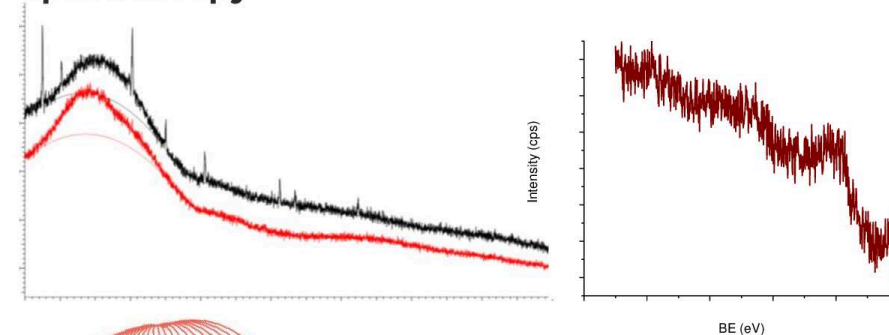
Atomic Force Microscopy: the nanoparticles are separated and packaged, ready to be added to fuel



Transmission Electron Microscope and High Resolution Transmission Electron Microscopy: Nanoparticles sized 5-80 nm



X-Ray Diffraction Analysis and X-ray Photoelectron Spectroscopy



Technical validation

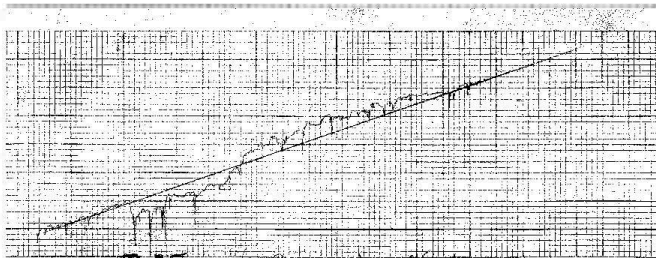
Testing at research centers and in real life

Fuel no additive

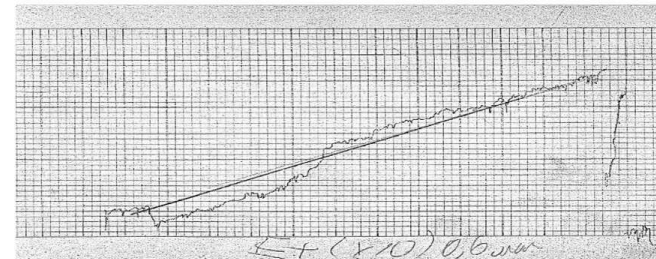
Fuel pump
shaft



Wear
profilogram



Fuel with FuelGems

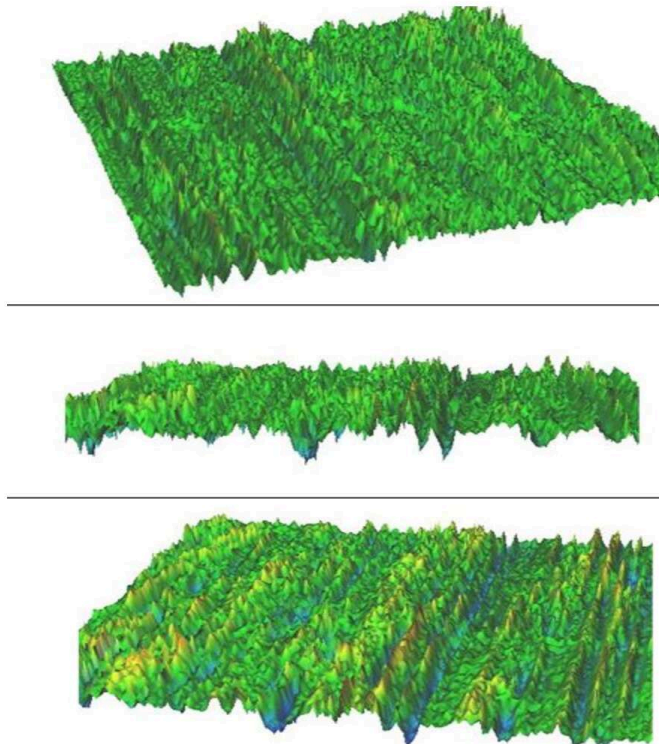


Technical validation

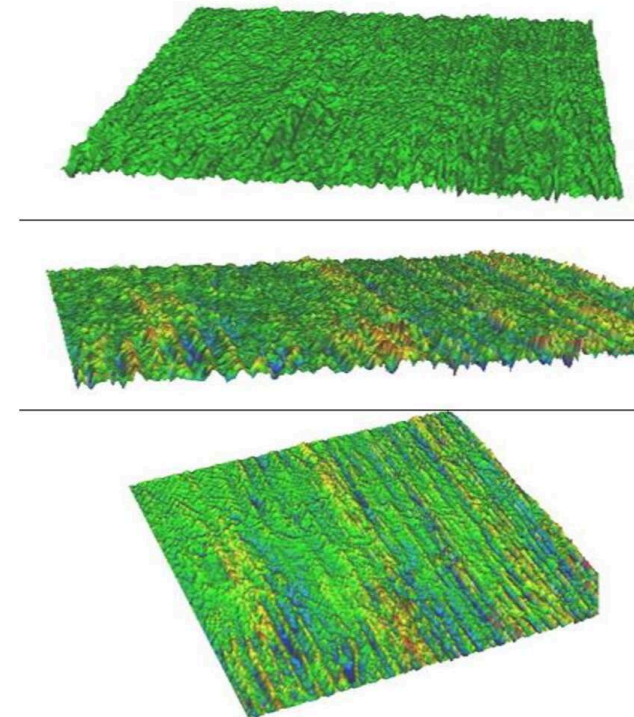
Testing at research centers and in real life

Liquid
phase
electron
microspore

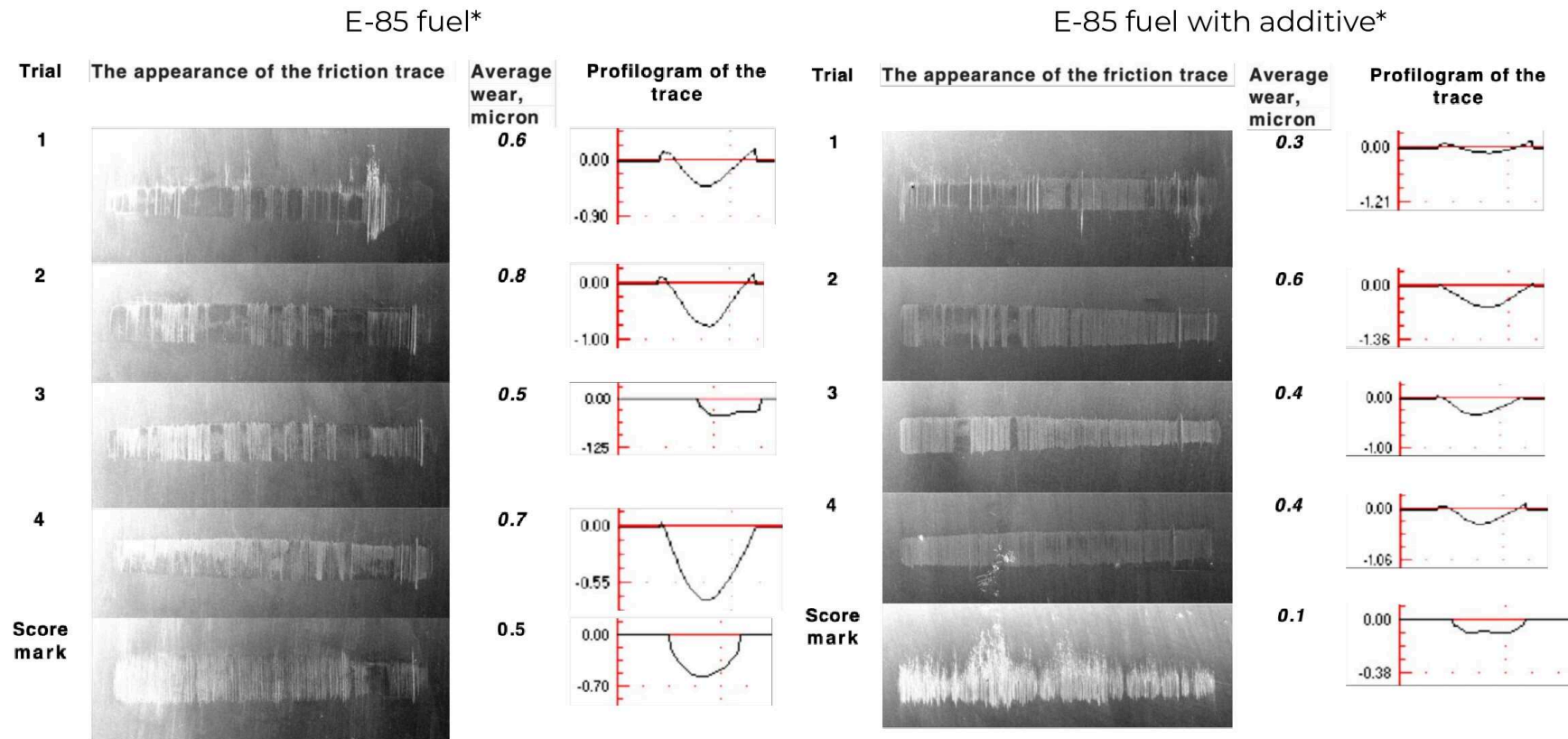
Surface friction of regular
fuel – rough surface



Surface friction of fuel with
FuelGems – smooth surface



Surface scan of friction of fuel with additive



*8 kg axial load, the rotation speed of the contra-sample 300 rpm.

Nanoparticles reduce friction wear by up to 80%

Technical validation

Engine cell testing at Coventry University



○ Jaguar Land Rover (JLR) engine used for testing

○ Dosing: 3 to 5 grams per 1 ton of fuel

Reduction of Unburnt Hydrocarbons: 50%

Reduction of Carbon Monoxide: 14%

○ There were no adverse effects to the engine

Research institute snapshot testing using diesel engine (reduction of fuel use/increase in mileage)

Fuel no additive	0
Fuel with FuelGems	8%

Research institute snapshot testing using gasoline engine (reduction of fuel use/increase in mileage)

Fuel no additive	0
Fuel with FuelGems	7.5%

Real life testing

Cars drove over **1 million miles** with the **additive**

Our nanoparticles can be used in multiple large markets

We believe FuelGems can sell its nanoparticles 90% cheaper than competition

\$3.5 trillion

petroleum fuel **increases mileage by reducing consumption of gasoline and diesel**

\$24 billion (2023)

capacitors **improves performance**

\$50 billion (2023)

industrial catalyst **increases production of styrene**

\$140 billion (2026)

lithium ion batteries **improves performance**

\$165 billion (2021)

lubricants **improves lubricating effect**

Team



Kirill Gichunts

CEO

Microsoft
EastOne (venture capital)
Semi-finalist Cleantech
Open
KBC Securities
Raiffeisen/Lazard
Deloitte
Hilspen Capital
Management
Global Asset Capital

UC Berkeley



Jacek Jasinski, PhD

Nanotech Scientist

Conn Center for
Renewable Energy
UC Merced
Lawrence Berkeley
National Laboratory

**UC Berkeley, Warsaw
University**



Dmitry Vinnichenko, PhD

Scientist

National Academy of
Sciences of Ukraine

**National University of
Shipbuilding**



Tim Rose, PhD

Automotive Scientist

Cranfield
University British
Gas

Cranfield University

Team



Irina Nazarova, PhD

Scientist

National University of
Shipbuilding

Kyiv Polytechnic Institute



**Yaroslav Bereznitskiy,
PhD candidate**

Chemical Engineer

National Academy of
Sciences of Ukraine

**National Aviation
University**



**Roman Tarasov,
PhD candidate**

Chemical Engineer

National Academy of
Sciences of Ukraine

**National University of
Food Technologies**

Successful venture track record and startup exits

Kirill Gichunts has successful venture experience and startup exits

eastone

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 million USD**

Active growth



PromoRepublic, growth stage,
raised 4.3+ million USD

Active growth



Poptop, Series A stage, **raised 1 million USD**

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**

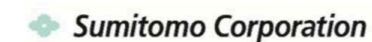


Semifinalist of **Cleantech Open**

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



ALSTOM



Use of funds and next steps



Done

- ✓ Designed a unique nanoparticle
- ✓ Secured patent
- ✓ Designed cost-effective technology to manufacture the nanoparticles
- ✓ Treated and stabilized the nanoparticle to effectively dissolve and disperse in fuel
- ✓ Modeled mass production of nanoparticles
- ✓ Verified the technology via numerous tests at multiple universities
- ✓ Built core management and scientific team
- ✓ Built business model and proved high customer demand
- ✓ Pilot projects with multi-billion corporations around the world



Next Steps

- Set-up mass production of the additive
- Grow revenue
- Secure further patents
- Build sales and marketing to increase revenue growth

Disclaimer

The information contained herein regarding FuelGems, Inc. (“FuelGems”) has been prepared solely for illustration and discussion purposes and should not be considered as an offer to buy or sell any stock (the “Stock”) of FuelGems. Any offer of Stock will be made only to Accredited Investors as defined under the US Securities Act of 1933.

Any decision to invest in Stock should be made only after conducting such investigations as you deem necessary and consulting your own investment, legal, accounting and tax advisors in order to make an independent determination of the suitability and consequences of such an investment. FuelGems is not acting as your advisor or agent.

An investment in the Stock is speculative and may involve substantial investment and other risks. Such risks may include, without limitation, risk of adverse or unanticipated market developments, risk of market competition, risk with respect to the execution of FuelGems’s business objectives, and risk of illiquidity. The performance results of an investment in the Stock can be volatile. No representation is made that the Stock will achieve certain performance goals or that any investment in the Stock will make any profit or will not sustain losses. Past performance is no indication of future results. There may be no secondary market for the Stock and it may be subject to substantial transfer restrictions.

The information and opinions expressed herein are as of the date appearing in this material only, are not complete, are subject to change without prior notice, and do not contain material information regarding the Stock, including important risk disclosures. While certain data contained herein has been prepared from information that FuelGems believes to be reliable (including data supplied by third parties), it does not warrant the accuracy or completeness of such information.

This document contains certain forward looking statements and projections. Such statements and projections are subject to a number of assumptions, risks and uncertainties which may cause actual results, performance or achievements to be materially different from future results, performance or achievements expressed or implied by these forward-looking statements and projections. Prospective investors are cautioned not to invest based on these forward-looking statements and projections.




Contact

Kirill Gichunts

team@fuelgems.com

301 Congress Ave #2200, Austin, TX 78701

A series of thin, curved orange lines that originate from the bottom left and sweep upwards and to the right, creating a sense of motion and flow. They are contained within the white area of the slide.