

# EGM BOUNDING TECHNOLOGY BOUNDS WATER INTO DIESEL FUEL INCREASING THE AMOUNT OF OUTPUT DIESEL BY 20% TO 60% (AVG. 40%) WHILE INCREASING THE QUALITY AND ENVIRONMENTAL CHARACTERISTICS

By working with nature and not against we managed to crack diesel and water molecules and rebound them together

Increase quantity from 20% to 60% more (Avrg. 40%) while maintaining all Diesel Stds and specifications – the range depends on the characteristics of input water and diesel

Very low energy input is required (less than 20W per add. litre) thus the operational cost for generating additional diesel litres is within the single cents

Improved quality properties in comparison to diesel input (eg Cetane number, flashpoint increase, density, ash content, water content)

Pollution decreased by more than 50% Significant CO2 Reduction



Globally there is a challenge with the emission of greenhouse gases, such as

CO2; despite a plethora of efforts as well as media attention such emissions





# EGM HOLDING INTERNATIONAL GMBH HAS DEVELOPED AN ALTERNATIVE THAT WORKS...

#### What is it?

- A patented innovative method of Fuel/Bounding System is the world's first and only procedure that produces:
  - no pollutants;
  - only low intrinsic energy expenditure;
  - C02 neutral liquid fuel
- The result is for every 1 litre of diesel and 1 litre of water that passes through this process roughly between 1.1 to 1.6 liters of clean quality diesel is produced – Average 1.4.
- This diesel has proven to significantly improve environmental parameters such as:
  - · decreased sulfur & phosphorus values;
  - · lower overall pollution & ash values;
  - Increase in cetane values.

#### How?

- For the first time water and diesel has been connected permanently producing high quality standards that has nothing in common with usual emulsion compounds or classical chemical compounds.
- An unconventional process is utilized to physically process the controlled cavitation (Kotousov – micro cavitation) in a sort of "blueprint" or cloning of the original hydrocarbon's / diesel, and it occurs without causing any destructive effect.
- The foundations and theories for the apparent taking place here novel Kernum conversion principle are rudimentary present, but not textbook knowledge.



Through our revolutionary technological breakthrough using "Ultrasonic Vortex Cavitations" under the basics of Gravitational Quantum Dynamics we rearrange the molecules of Fuel and water through cracking and permanent stable re-bounding into a higher quality fuel

- The constant progress and technology evolution is constantly redefining and correcting our old scientifically conceptions
- One old assumption was that water has "0" energy water is O<sub>2</sub> and H<sub>2</sub> and thus has a higher energy density than oil if restructured properly
- After many years of research in the area of CO<sub>2</sub> cracking with the purpose of solving CO<sub>2</sub> pollution we managed to develop eco friendly fuel (diesel, jet fuel, etc) through cracking water and oil and then rebounding them into a new structure
  - Fully compliant with all international std
  - With even better energy characteristics and lower emissions
  - Fulfilling the future ecological requirements thus surpassing the current Euro5 norm and future 2020 envisaged requirements
- By using 1 Litre Diesel (or Jet Fuel, bio Fuel) and 1 Litre water we
  can produce between 1.2 to 1.6 Litres (aveg. 1.4) of NEW ECO
  Diesel (or Jet Fuel) with the before mentioned characteristics
- Very compact technology in an area of 100 Sq. we can currently produce 800K Barrels (128 Mill litres) per day





### THE INITIAL TEST RUNS AT CERT HAVE DEMONSTRATED THAT THE DIESEL GENERATED HAS INCREASED SIGNIFICANTLY IN VOLUME WITH MUCH BETTER QUALITY

Intertek certified Test results with low quality diesel as input: GENERAL TREND TOWARDS A BETTER DIESEL

- Cetane level increase from 52.6 to 56.2 (without additives)
- Flashpoint increased from 60 to 69
- Sulphur reduced from 265 to 139
- Increased energy content per liter of about 10%

EGM & CERT/ADMC are defining together a collaboration framework for further research and improvements

- Define common application with UAE institutions
- Advanced testing and research on this new science aspects

### BENEFITS OF EGM DIESEL AT A GLANCE...



- Environment friendly;
- CO2 neutral fuel production;
- High quality diesel and jet fuel production;
- The technology can be used worldwide without any limitation
- Improved quality properties in comparison to diesel input (eg Cetane number, flashpoint, density, ash content, water content, pollution);
- Lower levels of pollutants (sulfur, phosphorous, PAHs, ash content);
- Enhanced utility and driving characteristics such as decreased exhaust emissions, particle number and soot.

Oil Refineries in the Middle east region would need to invest many billions just to upgrade their production for EURO5 norm — with this technology they can achieve even higher ecological normativity without this huge investment.



# OUR COMMERCIAL WAY FORWARD IS A CO-OPERATIONAL APPROACH WITH THE EXISTING PLAYERS IN EACH COUNTRY...

**Approach**: to cooperate with major players, Oil Majors and OEM Parties

Business Case: Extremely profitable with Limited Capex requirements recuperable within first months of operation — almost negligible operational cost

**Objective**: Cleaner & Healthier world

**Mission**: to improve the environment for future generations

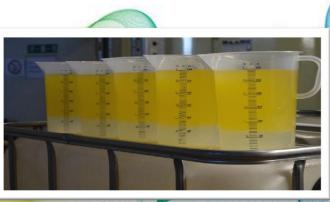






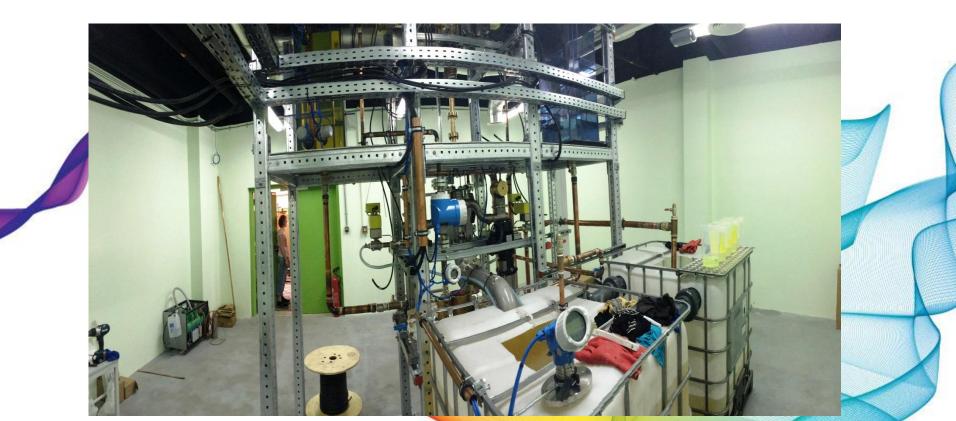
### **Unit Installation**







### Unit Installation – Settlement Tanks





### Unit Installation - Control Panel





### **External Tank Installation**



