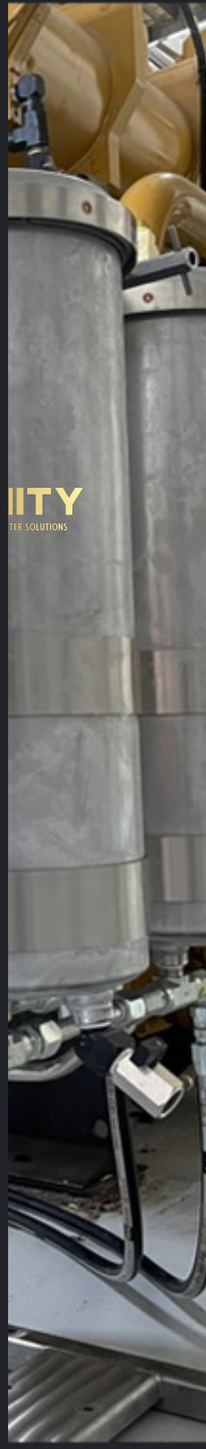
TRINITY

OIL, FUEL, AND WATER SOLUTIONS

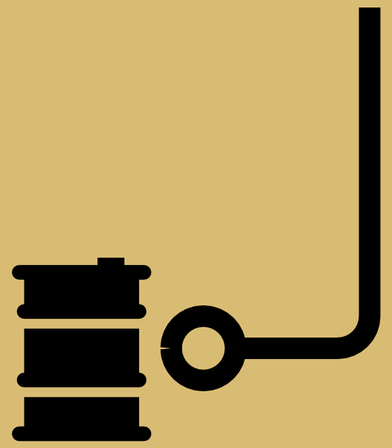
Responsible Fossil Fuel Use

Trinity Refining and Safety Systems



FOSSIL FUELS

By 2050 fossil fuels will continue to supply 70% of global energy needs*



Global energy demand will increase by 1.8% per year.

Natural gas consumption will rise on average 50% by 2050*

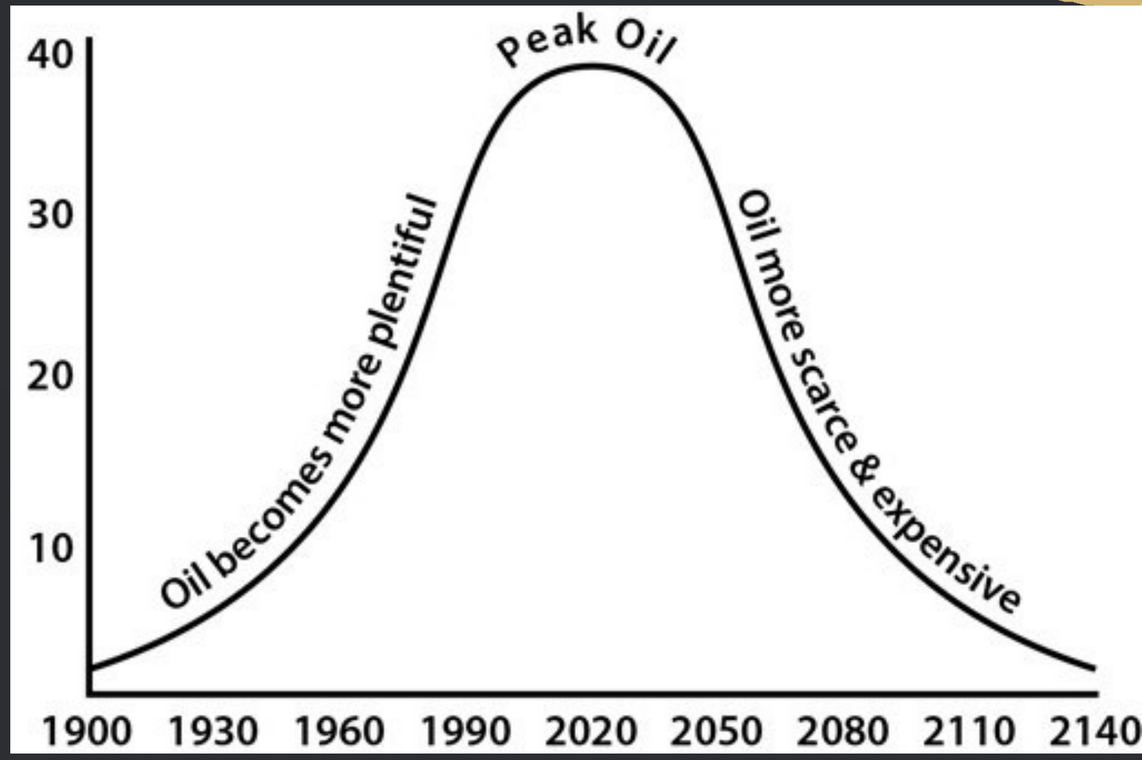
* United States Energy Information Association (USEIA)

PEAK OIL

“Peak oil is a hypothetical point when global oil production maximizes and enters an irreversible decline.”

WHAT’S PUSHING IT?

- **Global energy demand will increase by 47% by 2050***
- **Demand outpaces reserves**
- **Prohibitive drilling and production costs**
- **Geopolitical (energy policy, war, trade, instability)**
- **An aggressive push for alternative energy sources**
- **Environmental (CO2, pollutants, permits, etc.)**
- **Oil prices**



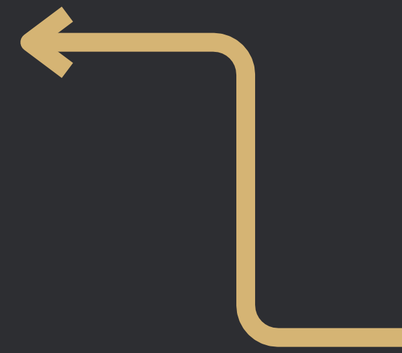
* United States Energy Information Association (USEIA)

HOW DO WE SOLVE IT?

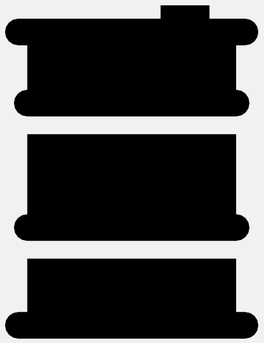
- Investments (technology and infrastructure)
- Innovations (hydrogen, nuclear, GEO Thermal)
- More efficient and reliable alternative energy solutions
- Pragmatic energy policies
- Natural gas transition

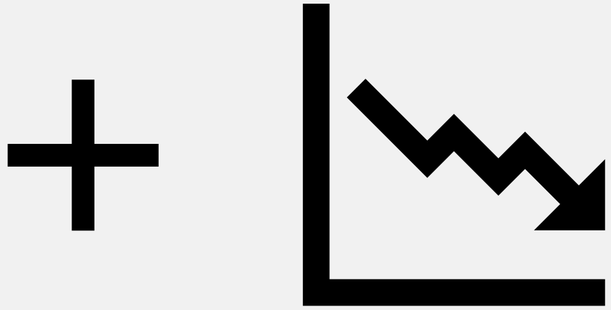
AND/OR

RESPONSIBLE FOSSIL FUELS



RESPONSIBLE FOSSIL FUEL USE





- DECREASE OIL CONSUMPTION
- REDUCE OIL DISPOSAL
- EFFICIENT FUEL USE
- SAVE MILLIONS OF GALLONS OF OIL AND FUEL
- REDUCE CO_2

REFINED OIL FILTERING

Bypass method
Depth-media Element
1-micron filtering
Dramatically extends oil service intervals

FUEL CONDITIONING

Better combustion efficiency
Fewer particulates in the oil
Improve hours or mileage
Fewer emissions

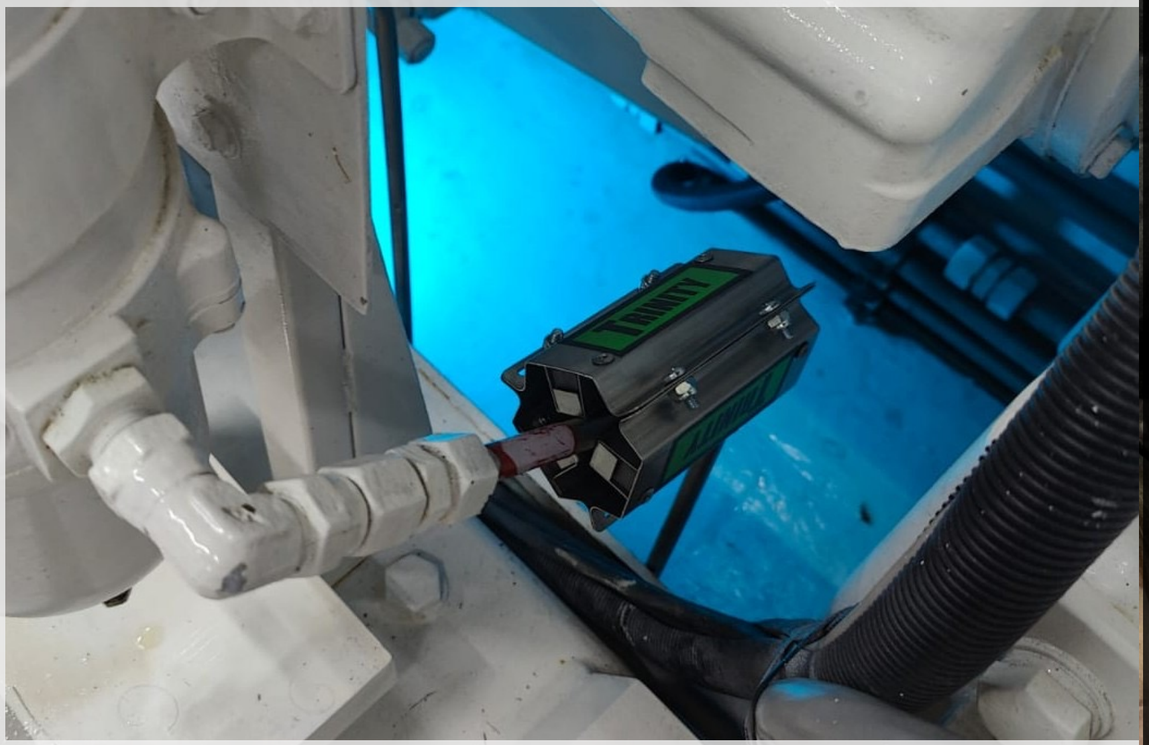
TRINITY RSS

“A hydrocarbon bridge to alternative energy solutions”

TRINITY RSS CAPABILITIES STATEMENT

Trinity Refining & Safety Systems is a second-generation patented oil & fuel filtering and conditioning technology. The unique line of products dramatically extends the life of oil and equipment while improving combustion efficiency and reducing customer costs across all lubricant & fuel-related industries, creating an improved greener solution.

PRODUCTS AND APPLICATIONS



THREE PRODUCT LINES

- Oil
- Fuel
- Water

TWO APPLICATIONS

- Oil & Fuel Filtering
- Fuel & Water Conditioning

MULTIPLE COMBINATIONS

- Filtering
- Conditioning
- Conditioning plus Filtering (Unique in Industry)





INDUSTRIES

- OIL & GAS
- HEAVY MACHINERY
- MARINE
- AVIATION (Fuel)
- MINING
- TRUCKING
- RENEWABLE ENERGY

DIVERSE VALUE

“A hydrocarbon bridge to alternative energy solutions.”

PERFORMANCE

Extends oil life
Extends equipment life
Improve combustion efficiency
Improves operations

COST

Payout in months
ROI within a year
Increase operational efficiencies
Reduce maintenance and downtime
Increase equipment life

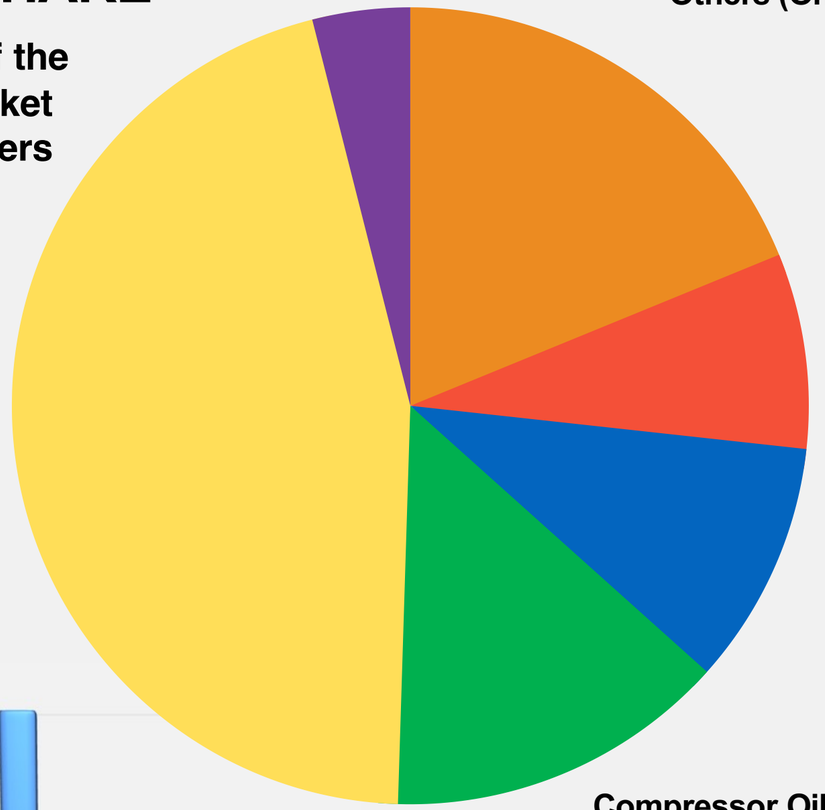
GREEN

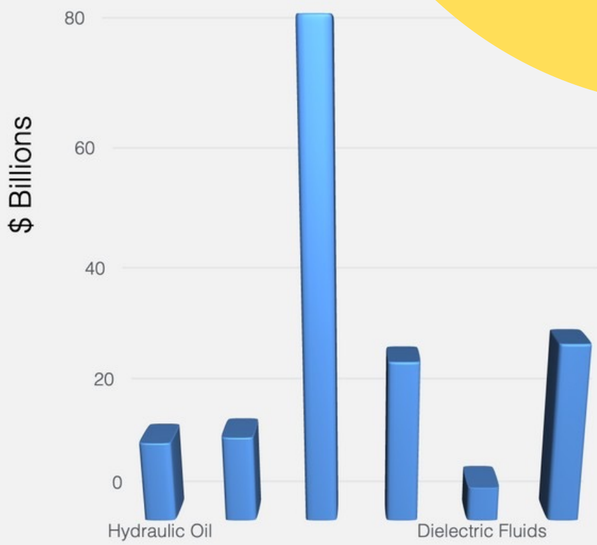
Save millions of gallons of oil and fuel
Lessen oil disposal
Significantly reduce CO2
Fewer emissions

MAKING GREEN GREENER TRINITY™

MARKET SHARE

Less than 2% of the Lubrication market uses bypass filters





GLOBAL LUBRICANTS MARKET

The Global Lubricants Market was Valued at USD 131.48 billion in 2021 and is Expected to Reach USD 176.26 billion by the End of 2030 with a Compound Annual Growth Rate (CAGR) of 3.38% during the Forecast Period (2022–2030).

CAGR 2022-2030
3.38%

2021 USD
131.48 BILLION

2030 USD
176.26 BILLION

MARKET SHARE, BY REGION 2021

NORTH AMERICA
28.06%

EUROPE
22.17%

ASIA-PACIFIC
37.50%

LATIN AMERICA
4.68%

MIDDLE EAST & AFRICA
7.59%

DRIVERS

- Expansion in the refinery capacities
- Increasing demand for high-speed engines fuelling the lubricants demand

OPPORTUNITY

- Growth in re-refining of lubricants

KEY PLAYERS

idemitsu · Shell · FUCHS · Chevron · Valvoline

WHY TRINITY?

INNOVATION

Combining the use of magnetics on conditioning fuel and oil filtering

TECHNOLOGY

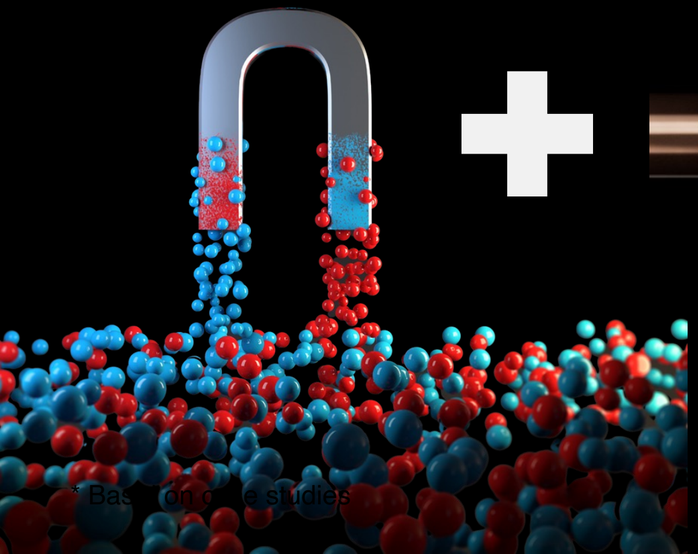
A magnetically charged polarity source (CPS) fuel conditioner combined with a state-of-the-art CPS-integrated 1-micron filtering element.

ADVANTAGE

Superior Method:

Continuous oil cleaning (24/7/365)
Non-interference application
Low maintenance

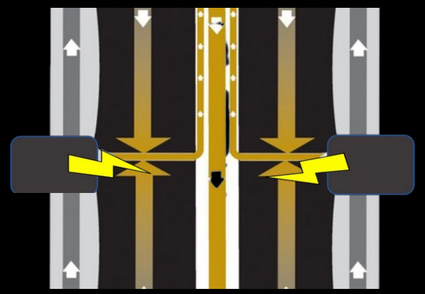
MAGNETICS



CONDITIONING

Magnetic fuel conditioner restructures hydrocarbon molecules for improved combustion.

FINE FILTERING



Magnetics improves 1-Micron depth-media filter capacity by 15-30%

Superior Performance

Cleans and maintains oil better than new

Increases combustion efficiency

Extends oil life

Extends equipment life

Reduces operational costs

Reduced oil disposal

* Based on case studies

CASE STUDIES

MARINE CASE STUDIES

Yachts/Boats

Change oil, on average, 100 hours or 1000 nautical miles or every season.

Trinity System Results

Yacht
5000 nautical miles without an oil change

Sport Fishing Boat
Two fishing seasons without an oil change

“Engine looked like new!”

Yacht maintenance crew after an overhaul

CLASS 6 VEHICLE CASE STUDY

PERFORMANCE VALUE*

- Lower operational costs by 22%
- Extended oil service intervals 3X to 4X
- Reduce disposal by 67%
- Increase combustion efficiency by 5%**
- Extend equipment life and overhauls by 2X*
- Improved mileage by 28%**

COST VALUE*

Oil

Save $4300 per truck per yr.
Save $65,000 per 15-vehicle fleet***

+

Fuel

Save $9000 per truck per yr.
Save $135,000 for a 15-vehicle fleet.

=

Total Savings $200,000/Year

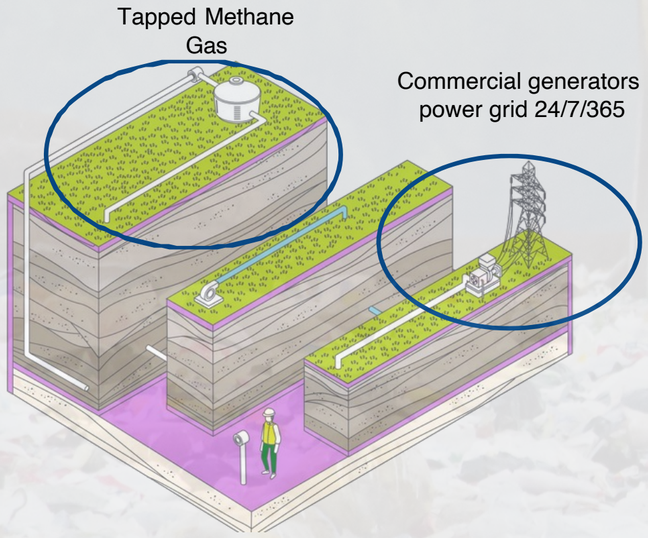
Transmission

TBD due to extended drain intervals and timeline

* Based on in-progress case studies with ten class 6 vehicles, F450/550 and International MV670 Cummins with an average of 10,000 monthly mileage. The test is six weeks in progress. Combustion efficiency based on European standards. Tripling the oil life from 7500 to 25,000 miles (early results). Per ECOM J2KN Emissions testing data. Extended engine life based on Noria Corp Equipment life extension tables.
** ECOM J2KN Emissions tester. Combustion efficiency is “how well the fuel being burned is utilized in combustion. Mileage based on OD2B sensors
*** Assuming downtime of $107/hr, labor, and materials.

LANDFILL GAS TO ENERGY CASE STUDY

Landfill-to-Gas Energy



The Problem

High siloxanes, chlorides, and sulfides aggressively contaminate the oil in landfill gas. Generator engines limit filtering to full-flow filters which only capture contaminants down to 10-20 microns in size. Wear particles are 4-10 microns creating a significant filtering gap producing unnecessary engine wear and shortening oil change intervals. Reduces equipment life and increases operational costs.

The Solution*

Fuel Conditioning

+

Refined Oil Filtering (Down to 1 micron)

Reduced oil contamination 99%*
Extended oil life up to 3 to 4 times
Reduced oil disposal by 48%*
Projected extended engine life 3 times**
Improved combustion efficiency by 3%*
Saved 8800 gallons of oil per year
Saved 4000 metric tons of CO2

* Based on Five landfill sites and eight Caterpillar 3516/3520 Power Generation Engines
** Noria Corp™ Engine Life Extension Table

CONCLUSION

Solving peak oil and responsibly moving toward alternative energy solutions is achievable through efficient use of fossil fuels

TRINITY CAN PROVIDE THAT SOLUTION

TRINITY

OIL, FUEL, AND WATER SOLUTIONS

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