



# OPTIMIZE YOUR GENERATORS

The Triogen e-box cuts fuel consumption by 5-10%

## 1. The Idea



Turning heat from diesel engine exhaust emissions into usable electricity.

## 2. Empower existing performance



Make your energy set-up more profitable with just a simple add-on to your generator.

## 3. An eco-friendly solution



Gain more energy without added carbon emissions.



## BRINGING AWARD WINNING INNOVATION TO REMOTE POWER GENERATION

Triogen is passionate to develop and deploy innovative waste-heat recovery technology to address the energy and environmental challenges of our planet, while saving its customers money.

The company has been a leading ORC (Organic Rankine Cycle) innovator and supplier since 2001 and successfully incorporated this world-class technology.



## POWER FROM HEAT

Diesel gensets convert only 40% of the energy input to electricity. Triogen's ORC transforms the otherwise unused exhaust gas heat into usable green electricity. The power is fed into the grid and reduces the load for the diesel gensets and reduces the fuel consumption.



## THE TRIOGEN E-BOX

Easy to install. Easy to use. Easy to maintain.

Reliable

Low investment

Low operating costs

97 % Uptime.  
Build on proven components.

Flexible plans.  
Buyback guarantee.

Low demand on repair and maintenance.



## MADE FOR OFF-GRID POWER GENERATION

The e-box is a perfect fit for industries reliant on diesel powered generators. Triogen products run without supervision (certified by Lloyds Register) and are monitored online. Especially in remote areas the investment of an e-box will provide almost instant payback.



Save 300,000 liters of fuel per year



Get a simple payback in just under two years

# FUEL SAVING IN A BOX

## Sustainability made simple



Download our  
White Paper ON SOLAR,  
BATTERY AND TRIOGEN  
E-BOX TECHNOLOGY



Purchase and Rental /  
Lease Options



With a capacity of 170kW,  
a single e-box saves  
300,000 liters of fuel  
per year



**Without interruption**  
No interference with  
genset performance or  
mining production



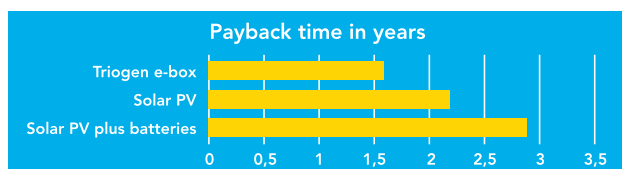
**Runs without supervision**  
- remotely controlled  
- Certified by Lloyd's Register  
- 97% reliability



**Shipped to your mine**  
The e-box will be shipped  
in two 20ft containers

### + FUEL SAVINGS - PLUG AND PLAY

Fast payback times and easy installation make the Triogen e-box an interesting complement to solar PV.



Source: COMPARING DIFFERENT FUEL SAVING SOLUTIONS:  
A WHITE PAPER ON SOLAR, BATTERY AND TRIOGEN E-BOX TECHNOLOGY

### + REDUCE ANNUAL FUEL CONSUMPTION BY 300,000 LITERS

When combined with a ~2MW generator capacity, a single e-box saves 5-10% fuel. This is 300,000 liters (or 6 fuel trucks) per year less. A substantial saving in fuel, reduction in risk and improvement in environmental performance.

### + ENERGY EFFICIENCY GOALS

In addition to reducing the energy bill, waste heat recovery does not need any additional natural resources and lowers the entire operation's GHG, a valued contribution towards aligning the activities with the UN Sustainable Development Goals regarding energy efficiency.

"Newmont along with one other mining company and several stakeholders selected Triogen as the winner of the 2017 Colorado Mining Cleantech Challenge. The honor signifies Triogen's high potential to reduce carbon emissions and save money by recycling waste heat to produce power."

Michael, E. Aire, P.E., M.Eng. - Director, Energy & Environment - Newmont Mining Corporation

"As the winner of the Mining CleanTech Challenge, Triogen's e-box definitely shows to be a reliant technology to an innovative way of fuel saving for the industry."

Exequiel Rolón Michel, Sustainability Manager – Fresnillo plc

## PRODUCT FACTS



**Award winning technology**  
Winner of the Mining  
Cleantech Challenge

Operating hours

**>1 million**

Projects live

**>50**

Stress tested under intense  
humidity and ambient heat of

**50°C**

**Request a proposal or schedule a meeting at**

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