

# ZeroE

## Product Overview

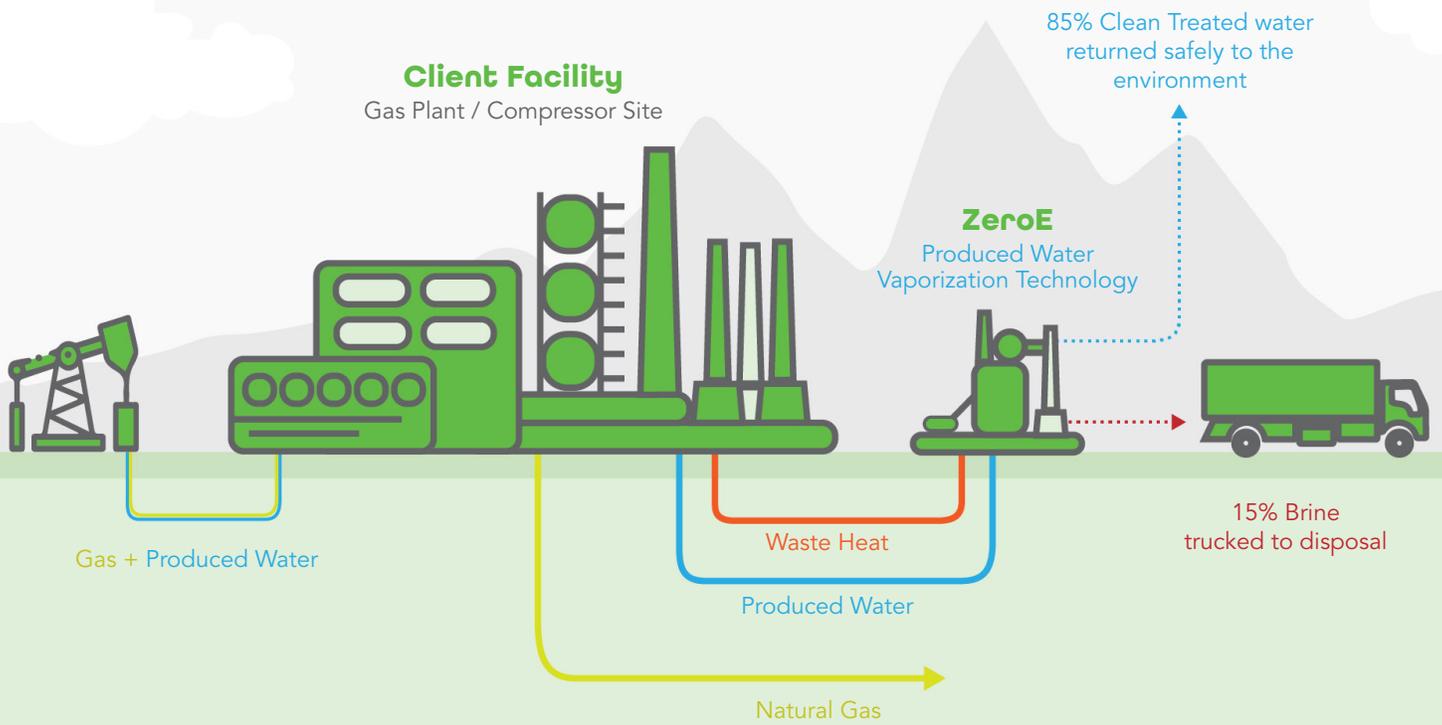


Patent Numbers: Canadian 2,751,895, US Applications 13/420,314 and 62/202,663;  
US Provisional Application and 62/445,004. Additional Patents Pending.

# ZeroE

ZeroE™ is a patented water treatment and reduction technology that harnesses waste heat through a patented process, treating and vaporizing produced wastewater at its point of creation, returning 85% of the water safely back to the environment.

## ZeroE Process Flow





## Environmental Benefits

# 350



TRUCKS  
PER YEAR

Eliminates over 350 Trucks per year off local roadways (Per System)

- ✓ Creating **Safer roadways** for the local community
- ✓ Reducing our clients **Carbon footprint** by over 200 tons a year



# 10 MILLION LITRES WATER RECYCLED

Treats and recycles over 10,000,000  
Liters of water to the natural hydro-logic  
cycle each year (Per System)

# 200



TONS CO<sub>2</sub>  
SAVED

**Technology Improvement #1:** Ability to  
re-condense steam for use on new projects

- ✓ This saves up to 200 tons of CO<sub>2</sub> per year  
with water being vaporized at point of  
creation on location instead of trucking to  
injection facilities
- ✓ **Reduce** requirement for **fresh water** usage

### Additional Environmental Benefits:

- Improves on-site safety by significantly reducing external personnel on-site and truck traffic
- Reduced off-site CO<sub>2</sub> emissions (Injection well facility)
- Reduces BTEX emissions - captured through the Vapor recovery units
- Facility exhaust scrubbing inherent to the system - further reducing emissions
- Waste Heat capture and reuse - powering innovation through reuse
- Reduced GHG footprint
- Advances Alberta Energy producers with being more environmentally friendly



## Financial Benefits



### Lower costs

Cuts OPEX for the producer  
by \$300K/YR per system



Carbon credit benefits \*



Reduced operating  
expenses



# ZERO CAPITAL COST

Zero Capital Costs for the Client

## Operational Benefits

- ✓ Can concentrate your produced water to up to 25% salinity
- ✓ Can vaporize up to 95% of produced water on site
- ✓ Utilizes waste heat as primary energy source
- ✓ Reduce site traffic
- ✓ Create more run time by eliminating produced water storage and trucking solutions

## Next Steps

1. Client chooses site/facility for determination
2. Water chemistry is provided to Cleantek
3. Cleantek provides a proposal with a cost per m<sup>3</sup> for vaporization
4. Cleantek/Client sign use agreement (Zero capital cost to the client\*)
5. Within 3 months, Cleantek provides ZeroE™ System. Client experiences the financial benefits from day one of installation through to the end of the contract.

*\*Actual results may vary per installation*

