

REDUCE
EMISSIONS



MAXIMIZE
DATA



OPTIMIZE
EFFICIENCY



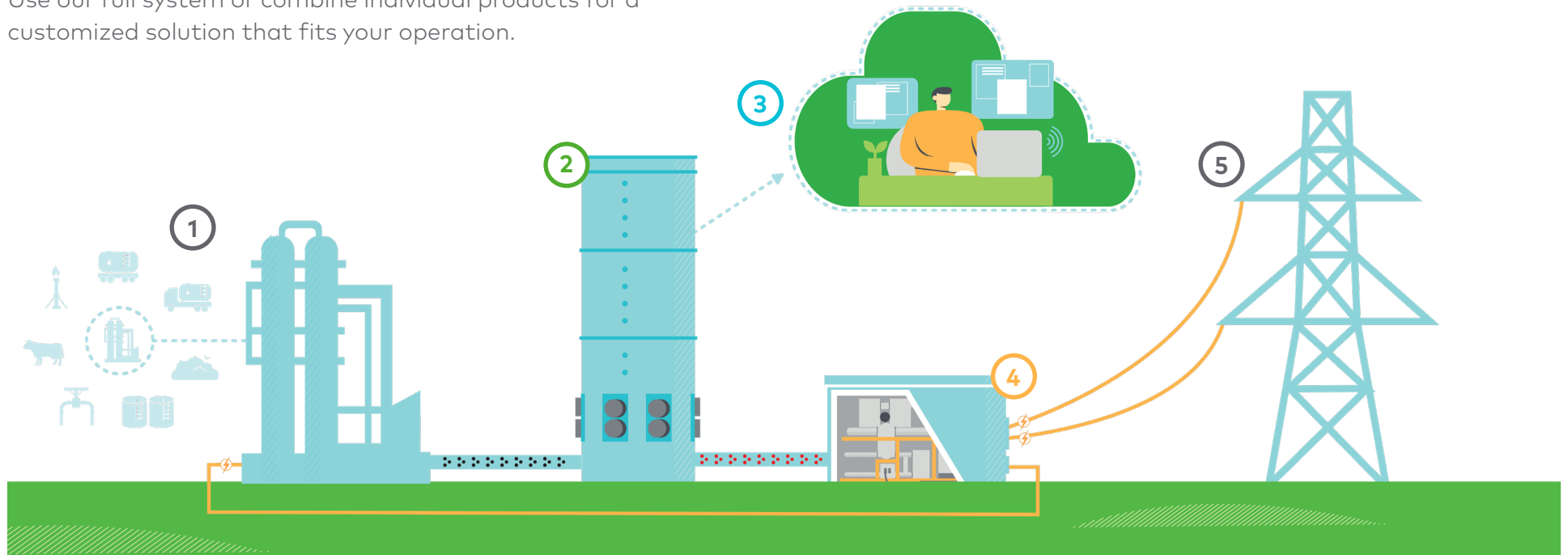
The Future Looks Clean

Product Information Package

Questor

Questor's Clean Technology Solutions

Use our full system or combine individual products for a customized solution that fits your operation.



How it works:

① Collect waste gas

Waste gas is collected through Questor's patented natural draw design. Our design has no fans, blowers, or moving parts and is capable of accepting multiple gas streams.

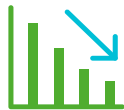


ALL TYPES OF WASTE GAS

Our system can process any type of waste gas from a variety of industries.

② Q - Series

Incineration is optimized based on waste gas composition and flow rate to achieve a combustion efficiency of greater than 99.99%.



REDUCE EMISSIONS

Virtually eliminates waste gas pollution, lowering emissions and satisfying current and future environmental standards.

③ Q - Insights

Q - Insights is the first highly affordable, cloud-based product to provide continuous and real-time emissions data monitoring and analysis.



MAXIMIZE DATA

Continuously monitor operational data to optimize emissions, ensure regulator and social compliance, and maintain a constant state of audit readiness.

④ Q - Power

Our power generators are designed to efficiently transform otherwise wasted high and low-temperature heat into valuable electricity power.



IMPROVE ENERGY EFFICIENCY

Complete site efficiency while lowering operating costs and emissions.

⑤ Sell power or use on-site

Generated electricity power is now available to use on-site or can be sold back to the power grid.



OPERATIONAL SAVINGS

Maximize your operational savings and monetize waste gas energy.



Q – Series

Our **Q – Series** are quiet, have a small ecological footprint and eliminate 99.99% of harmful pollutants. This helps to ensure landowner acceptance and generate community trust.

The **Q – Series** collects waste gas through its patented natural draw design. This design has no fans, blowers, or moving parts and is capable of accepting multiple gas streams to ensure lower maintenance and higher efficiency. Actual waste gas combustion occurs in stacks—also referred to as incinerators, thermal oxidizers, and combustors—without emitting any smoke, odor, or visible flames. Hot exit gases from the stacks are clean and readily available to utilize in other process improvements, such as utility heat, power generation, and wastewater purification. Questor ensures ongoing success by providing field services to maintain **Q – Series** stacks. Our engineering team supports clients at the design stage and with third-party engineering.

Product Lines: Custom Units, 50, 100, 250, 100, 250, 1000, 3000 and 5000

INDUSTRIES WE SERVE:

We process all types of waste gas including agriculture, petroleum, rail car loading, mining, water, heat to power, landfill biogas, syngas, waste engine exhaust, geothermal and solar, cement plant waste heat and more.



Q – Insights

Q – Insights is the first highly affordable, cloud-based product to provide continuous and real-time emissions data monitoring and analysis. It works with any waste gas emitting system—regardless of size or location.

Q – Insights provides monitoring and emissions tracking continuously and in real-time for distributed waste gas systems of various types. This helps small and mid-sized waste gas producers more effectively monetize pollution reduction activities through carbon offsets and trading, as well as reducing equipment issues and maintenance costs. This reliable platform also improves waste gas emissions monitoring, data collection and reporting, while supporting increased emissions transparency for producers and regulatory bodies, and enhancing social compliance.

Product Lines: Gas Emissions Methane Monitoring and Analysis (GEMMA)



Q – Power

Our systems are designed to efficiently transform otherwise wasted high and low-temperature heat into valuable electricity power which can be used on-site or transferred to a power grid.

All Organic Rankine Cycle (ORC) systems utilize an axial turbine expander coupled to a synchronous generator via a gearbox and have an evaporator, condenser, economizer-heat exchanger, centrifugal refrigerant pump, and Programmable Logic Controller (PLC). Questor field support technicians are available on-site, wherever our power generators are installed. The result is improved overall system efficiency, valuable energy savings, and low maintenance tailored solutions, customized to every customer’s unique needs.

Product Lines: 77kW, 200 kW, 561 kW and 1.5 MW



FAQ's

What does the unit need to be placed on?

Questor units can be placed on a concrete foundation or directly on the ground. All of our units are provided under the assumption that they will be free-standing and don't need supports to cover wind loads. Based on height requirements, units that are more custom-designed to be over certain heights will need to be guyed.

Can I rent or buy?

Both! Questor has a rental fleet throughout North America for use and can provide a fully custom solution for purchase based on individual needs as well.

What does Questor supply and what does the customer provide?

Questor provides a unit, delivery, install, commissioning, and manifolds ready to accept piping at predetermined sizes. Our units have solar panels added and can go 7 days without a power source. As a rule of thumb, we use 24v DC.

Does it need a blower/fan?

No! Questor units utilize a natural draft design so we don't have a need for a blower or any other ancillary pieces. Utilizing the natural draft system enables us to eliminate all moving pieces therefore reducing the opportunity for mechanical failure.

Can you handle multiple flows to the same unit?

Yes! Questor designs units to handle both high and low pressure in the same unit, our designs can also be customized to take in multiple streams.

What efficiency are the TO units?

Questor provides units with >99.99% Destruction rate efficiency (DRE). By gathering a front end understanding of our customer's needs, we are able to size units accordingly to ensure >99.99% DRE.

Do I need to man the unit?

No! Questor has a solution that enables you to turn it on and walk away. Through our Q – Insights we are able to remotely monitor the unit to ensure all set parameters are being met. This helps customers get back to the things that matter the most.

How does the Thermal Oxidizer reduce emissions from flaring?

Currently over 14,000,000,000 standard cubic feet of gas is flared and vented daily across the world (*Source: World Bank*). Additionally, 85% of the sources are under 3MMscf/d. Our technology is ideal for emission reduction as we take what would normally be flared and cleanly combust to a >99.99% DRE. This removes methane and other harmful pollutants including black carbon particulates.

How do you maximize the clean waste heat emitted?

Not only does our technology reduce emissions, it can also convert any heat source and create clean power for use on-site or to be provided back to the grid. For example, we worked on a project in Mexico that cleanly combusted the vented gas at 13 sites, 3 of which convert heat to 200kW of power per site. This eliminated the expensive and eco-unfriendly diesel power generators. Using the GWP over 100 years, these sites will generate emission reductions of 450,000 t CO₂ eq./year.

Can it optimize energy generation?

Yes! We are able to optimize energy generation for production facilities (e.g. renewable energy sources, waste heat recovery, electricity supply from onshore, etc.) and convert low-grade waste heat into usable power through our Organic Rankine Cycle technology (ORC). The low-grade waste heat used to generate power can be sourced not only from flared and vented gas but also from renewable gases such as landfill gas,

agriculture biodigesters, wastewater treatment gases, and more. Of particular advantage to our customers in this area is our ability to eliminate the costly treatment of cleaning and extracting the methane from the gas and the complete destruction of the other pollutants in the stream— like H₂S for example. This results in significant cost reductions in engine maintenance and an improvement in reliability and total site emissions. Our systems are designed to handle poor quality gases so we can cleanly combust these renewable gases at >99.99% efficiency and then generate renewable power. This significantly reduces the costs associated with the goal of utilization of renewable gases.

Can it detect leakages?

Not yet. We are currently developing a system using drones to determine the emissions before and after the deployment of our technology. This will allow us to verify zero-emission-sites through continuous 24/7 monitoring to prove the emission reductions and detect leakages. We will be able to monitor this system at our emission excellence center in Calgary.

How does your technology make my operations more efficient?

Our technology helps to reduce energy demand through such measures as more efficient equipment like compressors or pumps. It also increases efficiency by reducing fuel gas usage by eliminating the low-pressure flare and the sweep gas used to move streams to the low-pressure flare.



Learn more about our revolutionary systems and how we can help you turn your waste heat into operational savings

Contact us today at [+1-844-477-8669](tel:+1-844-477-8669) or send us an email at contact@questortech.com

