# Tier 4 Solutions

For the largest reduction in harmful emissions and the greatest improvement in air quality.





Industry-leading technology Tier 4 Emissions Solutions for Diesel Engines

"Exceed your local EPA requirements and future proof your operations with the best available technology that meets your General Environmental Duty (GED)."

Dean Marchiandi, Managing Director, ECI Industries

US EPA Tier 4 regulations are some of the most stringent in the world and are being adopted across Australia. ECI technologies are designed to meet these strict regulations - and reduce your global warming footprint.



A Tier 4 solution provides the greatest reduction in harmful emissions for applications in: Power Generation, Utility, Data Centres, Mining, Standby Power, Off Highway Engines, and environmentally sensitive sites and workplaces. ECI offers Tier 4 retrofit programs for existing applications or integrates into pre-packaged solutions for new critical infrastructure.

ECI Tier 4 system uses a combination of the best available technology for any off-highway diesel or gas engine. Your diesel-powered assets can now be part of the renewable energy mix, backing up wind, solar, pumped hydro and hydrogen with diesel and gas power.

Continuous Emissions Monitoring System (CEMS) with real time monitoring, data logging and SCADA,

ensures you meet clean energy regulations.

ECI offers additional technical support with remote commissioning options, real time diagnostics and preventative maintenance programs.

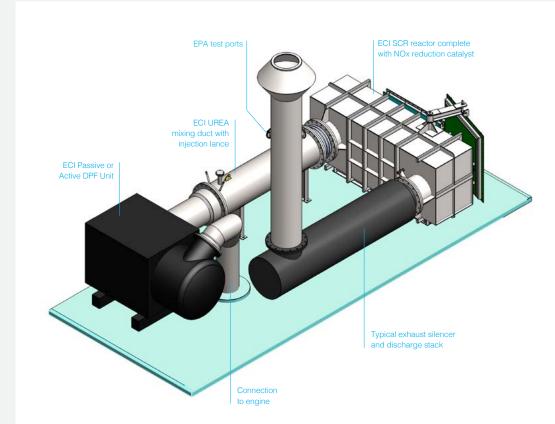
Stay compliant and exceed current environmental health and safety air quality requirements, future proof your assets, reduce your global warming footprint, and provide cleaner and safer diesel/gas engine emissions – be a leading force in the industry.

Deploy the most effective way to reduce emissions, exceed today's regulations and meet the regulatory standards of the future.



# ECI's Tier 4 Package

Our testing, research, development and cutting edge design delivers the maximum reduction in harmful pollutants entering the atmosphere.





# Continuous Emissions Monitoring System

CEMS with real time monitoring, data logging and SCADA.

Meet clean energy regulator requirements. ECI offers additional unrivalled technical support with remote commissioning capability, real time diagnostics, and preventative maintenance programs.

### **Features**

- ✓ Programable closed loop SCR system
- ✓ Minimal ammonia slip below 10mg/M³
- → Active DPF regenerative options
- Specialised precious metal Oxidation Catalyst
- → Redundancy calculated options
- ✓ One-man serviceable design
- ✓ Compact and flexible design
- ✓ All-in-one control system

## **Remote Monitoring Option**

Provides preventative maintenance and engine health visibility to keep you operating at optimal levels and reduce your operating costs.

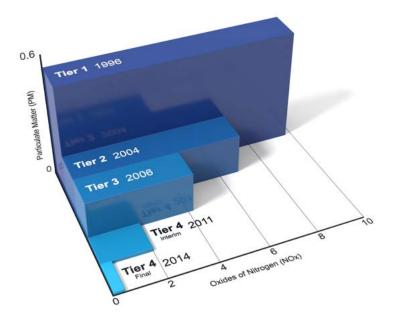
# Meeting Tier 4 requirements for today and tomorrow

A Tier 4 solution reduces harmful diesel and gas emissions, which are harmful to people and contribute to global warming.

There are many things to consider when designing a compliant solution for mobile and stationary applications: building and equipment design, location, application, fuel availability and sulphur content, age and type of engine, local regulatory bodies, and fixed or variable speed load profile.

### Why Tier 4 regulation?

The Tier 4 emission standards, which were phased in from 2008 through 2015 in the USA, introduce substantial reductions of NOx and PM, as well as more stringent HC limits. CO emission limits remain unchanged from the Tier 2-3 stage. A Tier 4 solution reduces emissions from your equipment; protecting your people and your work environment and reducing harmful gases that contribute to global warming.



### **Benefits of ECI's Tier 4 Solution**

Reduction in Global Warming Potential (GWP), continuously monitored by CEMs.

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1 NOx = 264 GWP

1 CO = 1 GWP

1 HFC ≤ 27,000 GWP

Reduction in your carbon footprint.

Reduction in costs.

Reduction in Diesel Particulate Matter (DPM).

### Can you afford not to?

- Redundant serviceable block component options that exceed Tier 4 requirements and extend service life
- Remote monitoring through Continuous Emissions Monitoring System (CEMS)
- → Remote or onsite commissioning
- Third party monitoring and data logging
- Integration into BMS network outputs and cloud services
- Compact footprint for smaller areas
- Flexible bespoke design options to meet your requirements
- Redundancy options designed into the system to meet future growth capability
- ✓ Accessible doors making servicing easier



Australian designed, manufactured and tested, ECI Tier 4 Systems combine Diesel Oxidation Catalyst (DOC), Diesel Particulate Filter (DPF) and Selective Catalytic Reduction (SCR).



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