

# P-3 Strategies for Integrated Emission Control

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**Improve fuel combustion**  
**Increase thermal efficiency**

- **Higher available work with catalytic combustion**
- **Lower carbon footprint**

- **Reduce engine emission**
- **Enhance performance of emission control systems**

**PM + NOx control**  
**Thermal management**

Platinum Plus Fuel-Borne Catalyst, Increase Total Efficiency,  
Low Pt DPF Continuous Regeneration, Integrated SCR/NOx reduction

# Building Emissions Performance

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- Significantly **reduced levels of PM, HC, CO, NO<sub>2</sub> / NO<sub>x</sub> & CO<sub>2</sub>**
- **Long-term durability of filter systems** - replenishing catalytic activity
- **Lower lifetime use of precious metals** in control devices (- 75%)
- **Continuous / passive regeneration of DPF** across a wider temperature range in difficult drive cycles; reduce thermal stress and fuel penalty
- Passive regeneration - **widens range of DPF applications & improves fuel utilization** (diesel and renewable fuels)
- Controlled lower burn temperature **reduces the chance for hazardous run-away regeneration**

