



CLEAN AIR AND RIDE PERFORMANCE

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Safe Harbor

The foregoing presentation contains forward-looking statements that involve risks and uncertainties which could cause the company's plans, actions and results to differ materially from its current expectations. Such risks and uncertainties include, but are not limited to, the following: (i) general economic, business and market conditions; (ii) the company's ability to source and procure needed goods and services in accordance with customer demand and at competitive prices; (iii) changes in capital availability or costs, including increases in the company's costs of borrowing, the amount of the company's debt, the ability of the company to access capital markets at favorable rates, and the credit ratings of the company's debt; (iv) changes in consumer preferences and changes in automotive and commercial vehicle manufacturers' production rates and their actual and forecasted requirements for the company's products including, with respect to any delays in the adoption of the current mandated timelines for worldwide emissions regulations; (v) the overall highly competitive nature of the automobile and commercial vehicle parts industry, and any resultant inability to realize the sales represented by the company's awarded book of business which is based on anticipated pricing for the applicable program over its life; (vi) the loss of any of our large original equipment manufacturer ("OEM") customers, or the loss of market shares by these customers if we are unable to achieve increased sales to other OEMs; (vii) workforce factors such as strikes or labor interruptions; (viii) increases in the costs of raw materials, including the company's ability to successfully reduce the impact of any such cost increases; (ix) the negative impact of higher fuel prices on logistics costs and discretionary purchases of vehicles or aftermarket products; (x) the cyclical nature of the global vehicular industry, including the performance of the global aftermarket sector and longer product lives of automobile parts; (xi) the company's continued success in cost reduction and cash management programs and its ability to execute and realize anticipated benefits from these plans; (xii) product warranty costs; (xiii) the cost and outcome of legal proceedings, and the impact of changes in and compliance with laws and regulations, including environmental laws and regulations; (xiv) economic, exchange rate and political conditions in the countries where we operate or sell our products; (xv) the company's ability to develop and profitably commercialize new products and technologies; (xvi) changes by the Financial Accounting Standards Board or other accounting regulatory bodies to authoritative generally accepted accounting principles or policies; (xvii) changes in accounting estimates and assumptions, including changes based on additional information; (xviii) governmental actions, including the ability to receive regulatory approvals and the timing of such approvals, as well as the impact of changes to and compliance with laws and regulations pertaining to environmental concerns, pensions or other regulated activities; (xix) natural disasters, acts of war, riots or terrorism and the impact of these occurrences or acts on economic, financial, manufacturing and social conditions, including, without limitation, with respect to supply chains or customer demand, in the countries where the company operates; (xx) the timing and occurrence (or non-occurrence) of transactions and events which may be subject to circumstances beyond the control of the company. Additional information regarding these risk factors and uncertainties is detailed from time to time in the company's SEC filings, including but not limited to its report on Form 10-K.

Tenneco Global Operations

*Nearly 25,000 employees serving customers globally from
89 manufacturing facilities and 14 engineering and technical centers*



Strong balance across segments, platforms and geographies

Two Powerful Divisions – Clean Air and Ride Performance



STRATEGIC IMPERATIVES

CLEAN AIR

- Global regulatory expertise
- Foundation in core sciences
- Total systems integration
- Cost-effective global market solutions
 - Light vehicle
 - Commercial vehicle
 - Large engines
- China specific solutions
- Large platform lifecycle services



Healthier Lives

**PROFITABLE
GROWTH**

RIDE PERFORMANCE

- Product cost leadership
- Superior functionality
- Advanced technology
- Vehicle dynamics / integrated systems expertise
- NVH solutions provider
- Leading aftermarket brands



Superior Driving Experience

A COMMON FOUNDATION



Shared Values

- Accountability
- Health and Safety
- Innovation
- Integrity
- Passion and a Sense of Urgency
- Perseverance
- Results Oriented
- Teamwork
- Transparency
- Trust

Operational Excellence

- Safety and quality
- Tenneco Manufacturing System
- Global business processes / capabilities
- Optimized global footprint
- Strategic supplier partnerships

Financial Strength

- Earnings growth
- Cash flow
- EVA
- Balance sheet strength

Global Market Solutions for Light Vehicles

- **OE light vehicle business accounts for 72% of Tenneco's total revenues**
- **Well positioned for continuing growth:**
 - Global regulatory expertise
 - Unmatched global engineering and manufacturing footprint
 - Engineering applications capabilities
 - Strong customer base reflecting focus on quality, cost-competitiveness, technology and delivery
 - Diversified platform mix
 - Proven technologies



Ride Performance Product Pipeline

Technology Roadmap

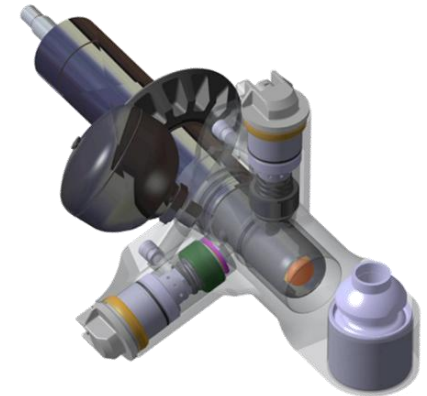
2010	2011	2012	2013	2014	2015	2016	2017
Plastic Spring Seat	Variable Tube Thickness	Thin Wall Lightweight Monotube	CVS Double Path Mount (Cab Shock)	FSD Valving System	Aluminum Dual Tube Automotive Damper	Semi-active Internal Valve	Active Suspension with Energy Recuperation
Kinetic® H2 CES† Combo	Velocity Progressive Seat Dampers	CES II External Valve	Motorbike Electronic Shock	35mm LCV Strut	DRiV™ Digital Valve	ACOCAR™ Full Active Suspension System	Intelligent Suspension System with Vision
Lightweight Aluminum Tube		Aluminum Dual Tube Seat Damper	Improved Monotube (Low Temperature)	New CVS 45mm Shock	DRiV™ Cab Shock	Low Cost Auto Leveling	Dual Range Damping System
		Kinetic® H2 CES with hydraulic leveling	Global Hydraulic Rebound Stop	RC2 (Bi-directional Frequency Selective Damping)	Dual Mode Internal Valve	Ultra Low Cost Damper for LCC	
			New Double Tube Base Valve	Integrated Height Valve for Cab Shocks			
			Global BOCS Valve	Dual Valve Semi-active Damper			
<i>In production or production ready</i>				<i>In development – production ready in 2014-2017</i>			

† CES is a registered trademark of Öhlins Racing AB CORPORATION SWEDEN. All other trademarks, service marks and logos used herein are the trademarks, service marks, or logos of their respective owners.

Continuously Variable Semi-Active Suspension (CVSA)

- **Continuously Variable Semi-Active Suspension (CVSA)**
 - Adjusts damping levels to road conditions and vehicle dynamics
 - Delivers optimal balance between handling and comfort
 - Internal or external valve options provide packaging flexibility
 - In production on 37 models, and 9 additional in development

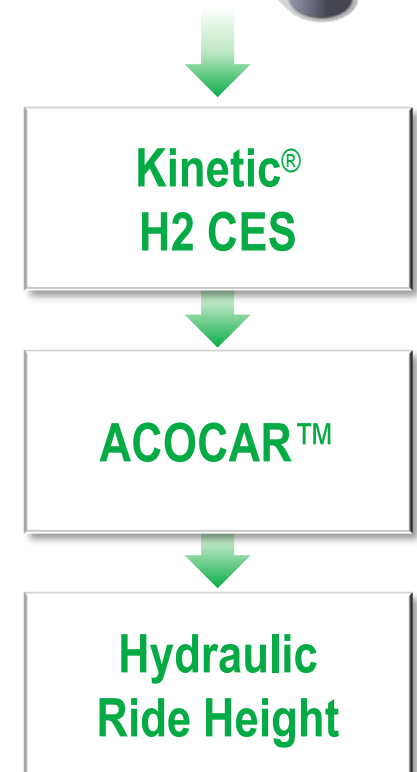
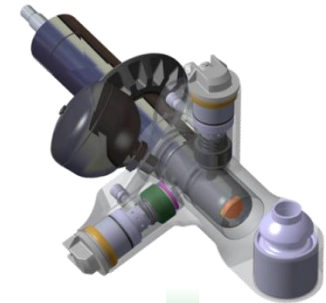
- **CVSA 2 – Lightweight semi-active damper with two electronic valves**
 - Each damper includes two CES valves for independent control of rebound and compression
 - Increased tunability and large damping range for higher comfort
 - Actuator concept combines with vehicle leveling systems, and easily scalable to fully active damping



Delivers Performance and Comfort Without Compromise

Scalable Architecture for Advanced Ride Performance Technology

- Based on Tenneco's CVSA 2 lightweight, semi-active dampers
- Allows easy scale-up from semi-active to advanced and fully active suspensions
- Common actuator components enable Kinetic[®] HD CES and ACOCAR[™] systems to be offered as options on vehicles with CVSA 2
- System can be extended with a variety of hydraulic ride height systems



Advanced Technologies

- **Combination of Kinetic® and CES**

- Creates an intelligent damping system with the advantages of a semi-active system
- Maintains the passive mode decoupling between the roll, articulation and single-wheel motions of the Kinetic® H2 system
- Adds independent corner control, neutral steering behavior to CES technology
- In production on the McLaren MP4-12C; in testing with other manufacturers.



- **ACOCAR™ – Fully-active damping**

- Provides ultimate comfort and excellent handling
- Actuators include two variable CES valves and hydraulic pumps
- Provides fully active body control for damping and spring forces
- Controls roll, pitch and heave, resulting in superior comfort, safety and handling
- Production ready for 2015; Currently testing with several OEMs



***Received awards for innovation and supplier of the year from
Vehicle Dynamics International in 2011 and 2012***

DRiV™ and RC2

- **DRiV™ – Economical digital valve targeting B/C segment**

- Internal valve with electronic valve driver and diagnostics integrated into damper
- Lower total system cost – no dedicated ECU required; improved packaging and reduced power consumption
- Configurable for OEM, specialty and aftermarket applications
- Shock and strut configurations



- **RC2 – Frequency Selective Damping**

- An economical and effective solution to balance comfort and handling
- Variable damping based on frequency; Wheel and body frequencies can be independently tuned
- Works on rebound (RC1) or rebound and compression (RC2)
- Can be used as an integrated part of the hydraulic valving system inside the damper
- No additional cables, sensors or other electronic devices are needed



Cost-effective technology for broad market applications

Regulatory-Driven Clean Air Product Pipeline



Technology Roadmap

2010	2011	2012	2013	2014	2015	2016	2017
Off-Road DOC & DPF Off-Road Emissions Module	Fuel Vaporizer Fabricated Diesel Manifold Electronic Exhaust Valve Gen3 Urea Dosing System Enhanced 32-bit ECU	3 Layer Fabricated Manifold Hydrocarbon Lean NOx Catalyst Low Backpressure Valve Muffler Exhaust Gas Heat Exchanger T.R.U.E.-Clean® Mini Multiwrap Converter	Euro VI CVS On-Road Aftertreatment System Stationary Engine Aftertreatment Common Rail Urea Dosing System Integrated Manifold & Turbocharger Tier 4 Locomotive Aftertreatment Natural Gas Aftertreatment System	Gasoline Particulate Filter SOLID SCR™ Retrofit Marine Aftertreatment System Air-Assisted Dosing System	Low Pressure EGR Valve SCR-Coated DPF Emissions Air Pump Hydrocarbon Trap Software-based Signature Sound System	Marine SCR System Marine DeSOx System CVS Fabricated Manifold In-Tank SCR Dosing Module Waste Heat Recovery Generator	Large Diameter SCR (24"-30") Rankine Cycle Waste Heat Recovery Low Temp deNOx Catalyst LEV III / Tier 3 Diesel Aftertreatment D-EGR Manifold Pre-Turbo Catalyst
<i>In production or production ready</i>				<i>In development – production ready in 2014-2017</i>			

Electric Acoustic Valves

- **Tenneco's adaptive exhaust valves offer precise sound design in tailpipe applications and boom attenuation when driving in cylinder deactivated mode**
- **Helps OEMs meet acoustic and emission targets while enabling a unique sound signature**
- **Smart valve actuator adjusts exhaust flow path based on signal from vehicle control unit**
- **Actuator continuously reports position of valve flap back to control unit**
- **Unique fail-safe mechanism opens valve in case of power loss**

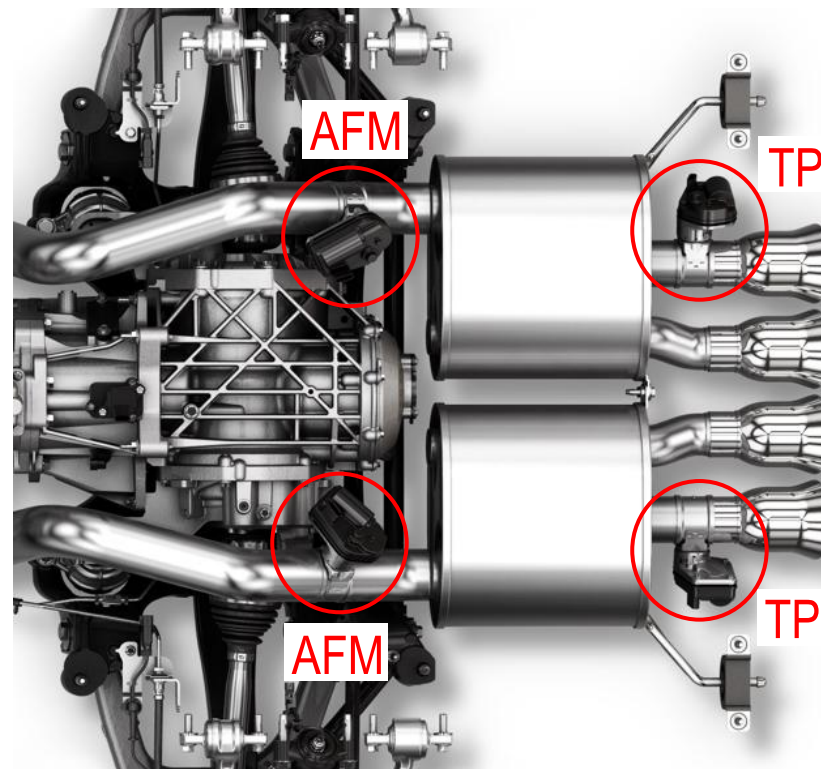


Electric Acoustic Valves in Production

- Tenneco launched production of electric valves for 2014 GM Corvette
- Active Fuel Management (AFM) valves deliver boom attenuation when driving in cylinder deactivated mode
- Optional tailpipe valves (TP) provide enhanced sound tuning

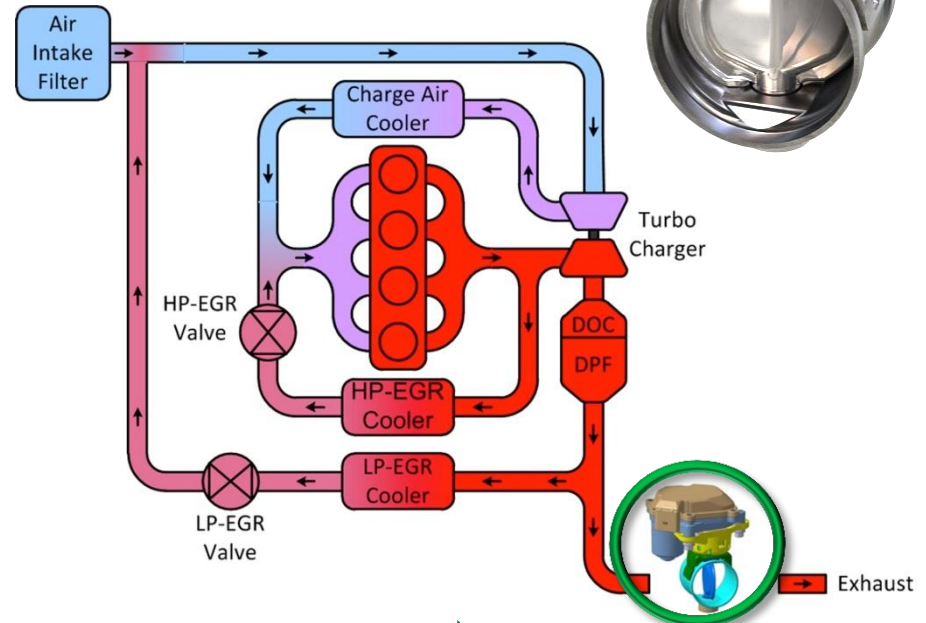


Pictures: <http://media.gm.com/media>, 2013-06-24



Electric Low Pressure EGR Valves

- Low pressure exhaust gas recirculation loops require varying pressure levels for effective NOx reduction
- Tenneco's fully variable low pressure EGR valve continuously adjusts the position of the exhaust flap to maintain optimal pressure
- Enables diesel engine EGR systems to achieve NOx reduction of up to 50 percent
- High positioning precision and OBD II compliance
- Suitable for exhaust gas temperatures of up to 750°C

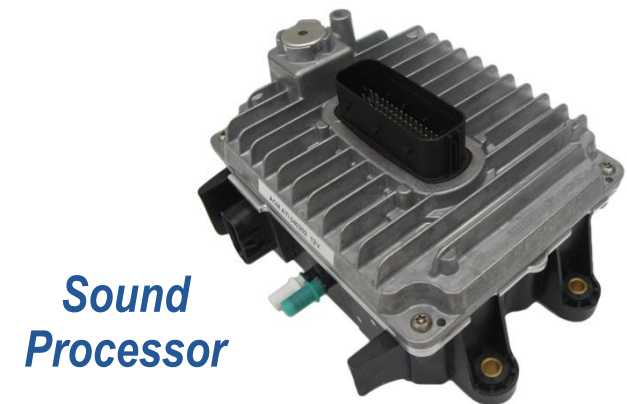
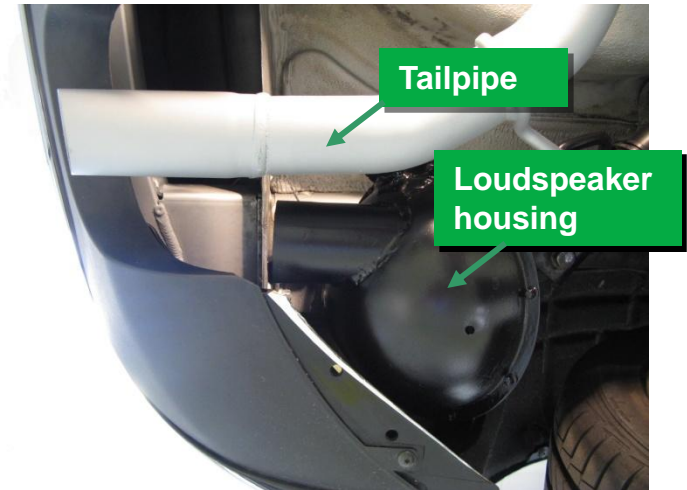


Electric Low Pressure EGR Valve

Tenneco Software-Based Signature Sound System

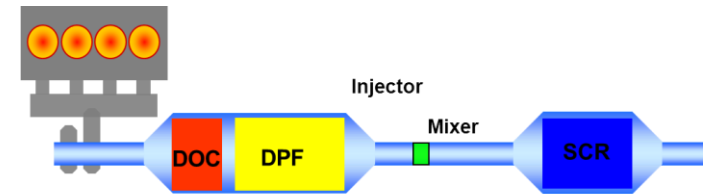


- Tenneco's software based signature sound system provides custom designed exhaust sounds
- Sounds are calculated in real time and added to the existing engine exhaust noise, emitted by loudspeaker mounted independently from the exhaust system
- Exhaust sounds can be significantly enhanced, sound signature can be completely changed
- System can be used for diesel, gasoline, EV and HEV cars

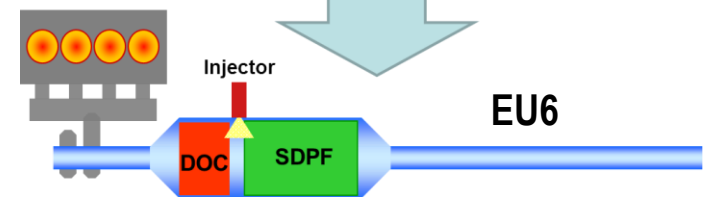


Compact SCR Mixing

- Close coupled SCR and SDPF are mainstream technologies for EU6
- Requires processing of injected DEF within extremely compact mixing zones
- Efficient droplet / gas mixing and homogeneous flow distribution to ensure best NOx conversion
- No deposit formation, no NOx or Ammonia slip
- Tenneco developing solutions for different applications

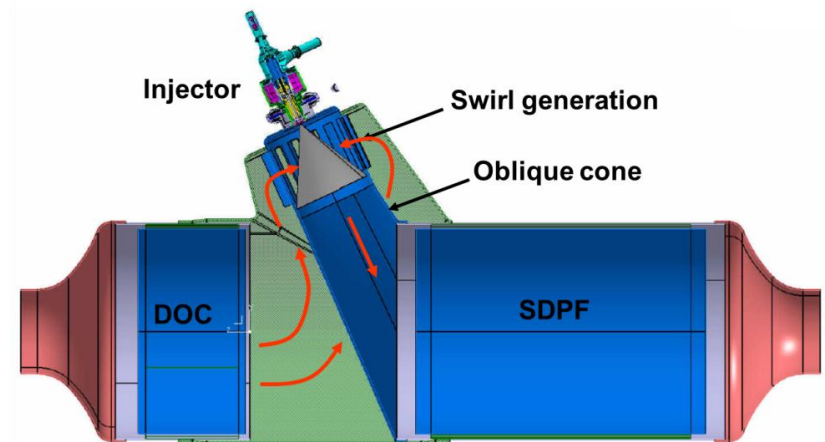


EU5



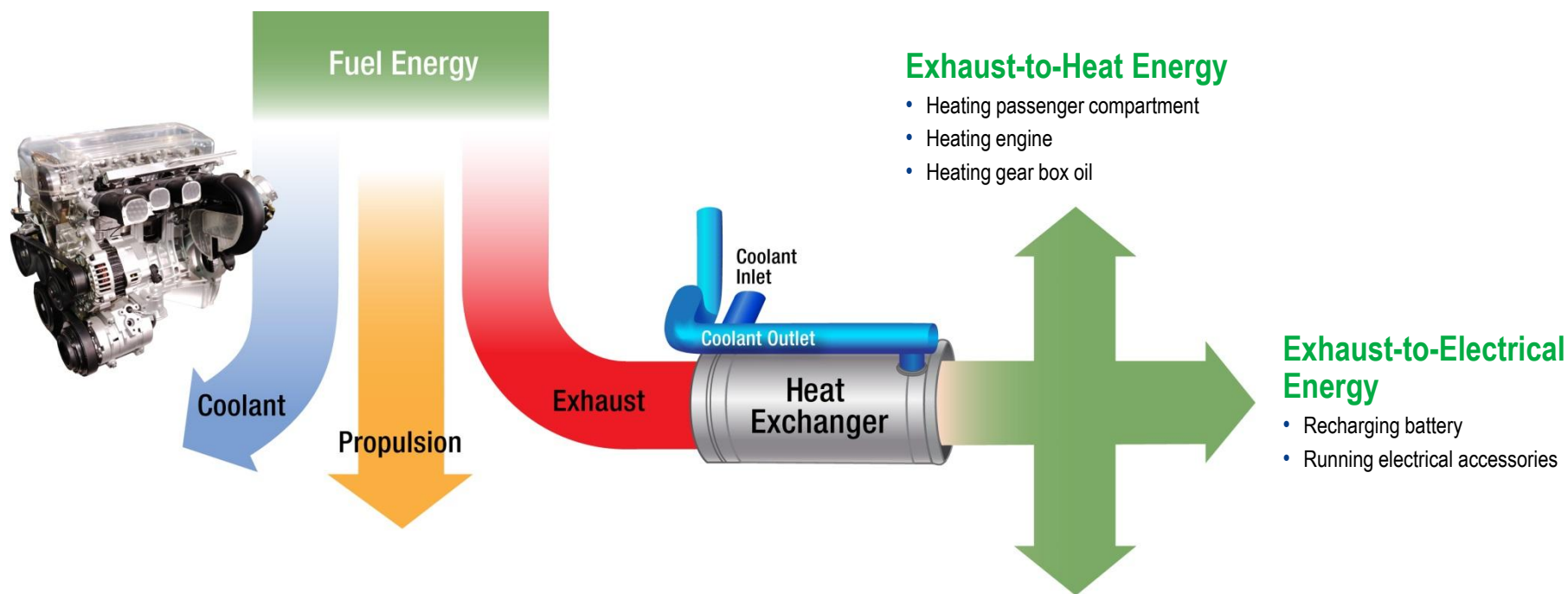
EU6

SDPF requires DEF injection between DOC and SDPF



Tenneco's Compact In-Line Mixer

Exhaust Heat Recovery Technologies



Exhaust-to-Heat Energy

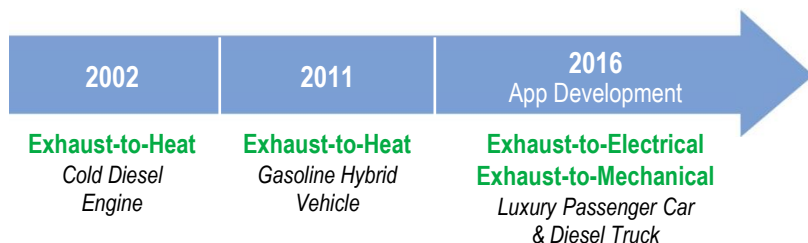
- Heating passenger compartment
- Heating engine
- Heating gear box oil

Exhaust-to-Electrical Energy

- Recharging battery
- Running electrical accessories

Exhaust-to-Mechanical Energy

- Running generator to produce electrical power
- Providing additional torque for vehicle propulsion



Exhaust-to-Electrical Energy

- **Thermoelectric generators increase the overall vehicle efficiency by recovering waste heat energy from exhaust gases**
- **Enables the direct conversion of exhaust heat into electrical energy**
- **Reduces overall fuel consumption and CO2 emissions**
- **Powers electrical accessories and recharges battery**
- **Downsizing of electric generator possible**





Q&A