



# SECOND QUARTER 2016

Earnings Conference Call  
July 29, 2016

# Agenda

- **Highlights and Strategic Overview** **Gregg Sherrill**  
*Chairman & CEO*

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- **Segment Results** **Brian Kessler**  
*Chief Operating Officer*

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- **Financial Overview** **Ken Trammell**  
*Chief Financial Officer*

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- **Outlook** **Gregg Sherrill**

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- **Questions and Answers**

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**Safe Harbor Statement / Non-GAAP Results:**

Please see the safe harbor statement and the tables that reconcile GAAP results with non-GAAP results at the end of this presentation and in Tenneco's financial results press release, which is incorporated herein by reference.

# Second Quarter Overview

\$ Millions, except as noted	2Q'16	2Q'15	B/(W)	% Change
<b>Total Revenue</b>	2,212	2,130	82	4%
<b>Value-add Revenue <sup>Δ</sup></b>	1,693	1,635	58	4%
<b>EBIT</b>	177	155	22	14%
<b>EBIT (% of VA Revenue)</b>	10.5%	9.5%	1.0%	11%
<b>Adjusted EBIT <sup>†</sup></b>	182	162	20	12%
<b>Adjusted EBIT <sup>†</sup> (% of VA Revenue)</b>	10.8%	9.9%	0.9%	9%
<b>Adjusted EBITDA <sup>*†</sup></b>	234	213	21	10%
<b>Net Income</b>	86	78	8	10%
<b>EPS (\$)</b>	1.49	1.26	0.23	18%
<b>Adjusted Net Income <sup>†</sup></b>	102	86	16	19%
<b>Adjusted EPS (\$) <sup>†</sup></b>	1.78	1.39	0.39	28%
<b>Cash Flow From Operations</b>	129	132	(3)	(2)%
<b>Net Debt / Adjusted LTM EBITDA<sup>*†</sup></b>	1.3x	1.3x	-	-

\* Including noncontrolling interests.

† Adjusted for restructuring activities, refinancing costs and tax adjustments.

Δ Value-add Revenue is total revenue less substrate sales.

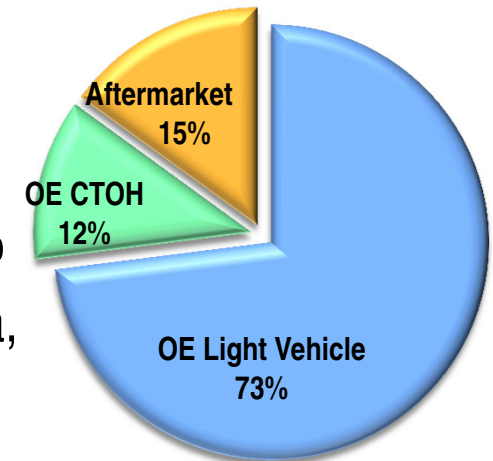
# Quarter Highlights

- **We delivered a record second quarter**
  - Revenue growth continued to outpace aggregate production growth
  - Record-high GAAP and Adjusted EBIT
  - Continued margin expansion
  - Record-high GAAP and Adjusted diluted earnings per share
    - up 18% and 28%, respectively
- **Consistently building on a strong track record of solid execution, profitable growth and value creation**
  - Driven by our four structural growth drivers
    - Strength of our position on light vehicle platforms globally
    - Increasing regulation of criteria pollutant emissions driving content growth
    - Increasing demand for electronic suspension systems
    - Increasing demand for aftermarket products, especially in growing markets

# Revenue

- **Total revenue \$2.212B, up 4%**
- **In constant currency, total revenue up 6% to \$2.267B; aggregate industry production up 3%**
  - OE light vehicle up 9%, led by Europe, China and India, significantly exceeding global LV production of 3%
  - OE commercial truck & off-highway up 1%; Clean Air revenue up 9% (VA up 13%) and Ride Performance revenue down roughly in line with weak industry production and reduced by the sale of the Marzocchi specialty business
  - Aftermarket even with a strong 2Q last year
- **In constant currency, value-add revenue up 6%**
  - Clean Air up 10%; Ride Performance up 2%

2Q 2016 Total Revenue



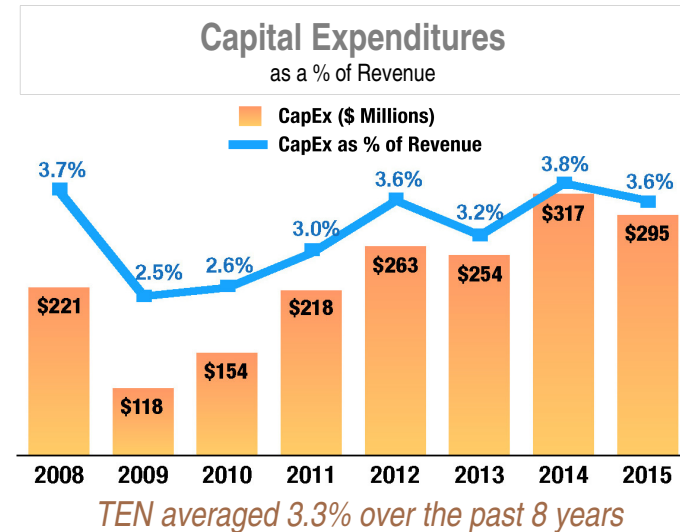
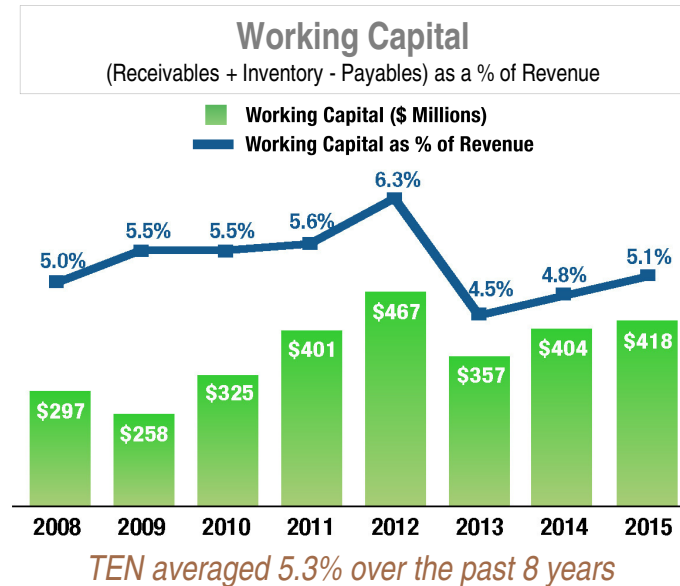
# EBIT

- **Adjusted EBIT grew 12% to \$182M, including negative currency impact of \$11M**
  - Light vehicle revenue growth outpacing industry production in both product lines
  - Commercial truck and off-highway clean air content growth significantly outpacing industry production
  - Operational cost improvements
- **VA adjusted EBIT margin increased 90 bps to 10.8%**
  - Another consecutive quarter of improved margins
- **Converting earnings growth into cash generation**

# Capital Allocation Priorities to Drive Shareholder Value



1. Fund organic growth
2. Restructuring activities to improve cost competitiveness
3. Balance sheet strength consistent with target leverage ratio of 1x
4. Strategic opportunities
  - Core sciences foundation, technology, customer, geographic and aftermarket growth opportunities
5. Capital returns to shareholders
  - Share repurchases out of free cash flow after all other investing & strategic needs are satisfied
  - Total repurchases authorized of \$550 million; \$270 million completed through June 30, 2016
  - Repurchased 5.4 million shares since beginning of 2015 or 9% of shares outstanding



# Industry Production – YoY% Change

Major Regions	2Q'16	3Q'16	FY'16
North America	2%	3%	3%
Europe	8%	0%	3%
South America	-15%	-3%	-13%
India	5%	5%	7%
China	5%	16%	7%
Aggregate Industry Production	3%	5%	3%

Source: IHS Automotive July 2016 global light vehicle production forecast, Power Systems Research (PSR) July 2016 global commercial truck & bus forecast, PSR off-highway engine production in U.S. and Europe and Tenneco estimates.



# Results by Product Line

\$ Millions

	Clean Air				Ride Performance			
	2Q 2016				2Q 2016			
	North America	Europe SA & India	Asia Pacific	Total	North America	Europe SA & India	Asia Pacific	Total
<b>Total Revenue</b>	\$ 771	\$ 528	\$ 253	\$ 1,552	\$ 323	\$ 276	\$ 61	\$ 660
<b>Less: Substrate sales</b>	273	190	56	519	-	-	-	-
<b>Value-add revenue</b>	\$ 498	\$ 338	\$ 197	\$ 1,033	\$ 323	\$ 276	\$ 61	\$ 660
<b>Adjusted EBIT</b>	\$ 66	\$ 30	\$ 39	\$ 135	\$ 49	\$ 15	\$ 12	\$ 76
<b>Adjusted EBIT as a % of revenue</b>	8.6%	5.7%	15.4%	8.7%	15.2%	5.4%	19.7%	11.5%
<b>Adjusted EBIT as a % of value-add revenue</b>	13.3%	8.9%	19.8%	13.1%	15.2%	5.4%	19.7%	11.5%
	2Q 2015				2Q 2015			
	North America	Europe SA & India	Asia Pacific	Total	North America	Europe SA & India	Asia Pacific	Total
<b>Total Revenue</b>	\$ 746	\$ 471	\$ 244	\$ 1,461	\$ 360	\$ 252	\$ 57	\$ 669
<b>Less: Substrate sales</b>	269	170	56	495	-	-	-	-
<b>Value-add revenue</b>	\$ 477	\$ 301	\$ 188	\$ 966	\$ 360	\$ 252	\$ 57	\$ 669
<b>Adjusted EBIT</b>	\$ 67	\$ 13	\$ 28	\$ 108	\$ 52	\$ 16	\$ 9	\$ 77
<b>Adjusted EBIT as a % of revenue</b>	9.0%	2.8%	11.5%	7.4%	14.4%	6.3%	15.8%	11.5%
<b>Adjusted EBIT as a % of value-add revenue</b>	14.0%	4.3%	14.9%	11.2%	14.4%	6.3%	15.8%	11.5%

# Clean Air – Revenue

- **Clean Air VA revenue of \$1,033M up 7%; in constant fx up 10%**
  - **NA VA revenue \$498M, up 4%; constant currency up 5%:**
    - LV revenue growth of 6% on strong light truck mix
    - Commercial truck & off-highway revenue up 4% on Ford medium duty truck business and additional content on CAT and Deere Tier 4 final programs despite lower off-highway volumes
  - **ESI VA revenue \$338M, up 12%; in constant currency up 17%:**
    - LV revenue growth of 19% on strong production volumes in Europe driven by the ramp-up on programs launched last year including the Chevy Cruze and Opel Astra, the Jaguar XE and XF models and the Daimler A&B class vehicles as well as a new program launched this year with Daimler. Higher LV volumes in India also contributed, including on programs with Ford, BMW and Mahindra.
    - Commercial truck & off-highway revenue up 14% primarily driven by the ramp-up on Stage 4 off-highway products and higher commercial truck volumes in Europe
  - **Asia Pacific VA revenue \$197M, up 5%; in constant currency up 10%:**
    - LV revenue up 7% due to stronger LV volumes in China
    - Commercial truck & off-highway revenue increased 44% driven by continued ramp-up of Kubota off-highway programs in Japan and higher commercial truck volumes in China

# Ride Performance – Revenue

- **Ride Performance revenue of \$660M, down 1%; in constant currency up 2%**
  - **NA revenue \$323M, down 10%; in constant currency down 9%:**
    - LV revenue down 9% on weak passenger car mix
    - Commercial truck down 18% on lower production volumes
    - Aftermarket sales roughly even with last year, excluding the prior year Carquest new business inventory load
  - **ESI revenue \$276M, up 10%; in constant currency up 16%:**
    - LV revenue growth of 25% outpaced industry production on the launch and ramp-up of programs with MONROE<sup>®</sup> Intelligent Suspension technology with VW, Renault, Nissan and Ford. Additional programs ramped-up in Europe with Daimler and Jaguar to drive the increase as well as higher LV volumes in India.
    - CTOH down \$7M on the sale of the Marzocchi specialty business
    - Aftermarket revenue growth in South America and Europe
  - **Asia Pacific revenue \$61M, up 7%; in constant currency up 12% on higher LV volumes in China, including on programs with Hyundai**

# Product Line EBIT and Margin

- **Clean Air adjusted EBIT up 25% to \$135M, including \$7M in negative currency comparison**
  - **Clean Air VA adjusted EBIT margin of 13.1%, up 190 bps driven by:**
    - Higher light vehicle volumes in North America, Europe, India and China
    - CTOH incremental technology content
    - Operational cost improvements
- **Ride Performance adjusted EBIT of \$76M, roughly flat YOY, includes \$4M in negative currency comparison**
  - **Ride Performance adjusted EBIT margin of 11.5%, even with last year but improved compared to first quarter**
    - Sequential cost improvement on a number of MONROE® Intelligent Suspension program launches in Europe and expect the improvement to continue
    - Reflects higher light vehicle volumes in Europe, India and China and stronger aftermarket sales in Europe and S. America

# Margin Expansion Opportunities

- **Clear vision on improvement opportunities in both product lines; key drivers include:**
  - Leveraging technology content and volume growth in both product lines
  - Optimizing component design and process complexity
  - Constant review and investment in the design of the regional and global supply chain network to deliver the best cost
  - Driving continuous improvement across every element of our business
- **Continued confidence in our ability to capitalize on our revenue growth and improve margin performance**

# Second Quarter Adjustments

- **Restructuring and related expense of \$5M pre-tax, or 6-cents per diluted share, for cost improvement initiatives**
  - \$3M in Europe (\$1M CA; \$2M RP)
  - \$1M in South America (RP)
  - \$1M in North America (RP)
- **Refinancing costs of \$16M in the second quarter, or 18-cents per diluted share**
- **Net tax expense of \$2M, or 5-cents per diluted share, for tax adjustments to prior year estimates**

# Tax Expense

- **Tax expense of \$40M**

- Includes tax benefit of \$1M on restructuring and related costs and \$6M on debt refinancing costs, as well as a tax expense of \$2M for adjustments to prior year estimates
- Before those 2Q items, adjusted tax expense is \$45M
  - Effective tax rate of 27% in the quarter and 29% year-to-date
- 2Q cash tax payments were \$37M

- **2016 tax expectations**

- Now expect a full year effective tax rate between 29% and 30%
- Cash taxes at the lower end of the previous range of \$140M and \$160M

# Debt and Cash Position

\$ Millions	June 30,	
	2016	2015
<b>Total Debt</b>	\$ 1,360	\$ 1,230
<b>Cash Balances</b>	314	252
<b>Net Debt</b>	\$ 1,046	\$ 978

- **2Q16 adjusted interest expense of \$18M**
  - In 2Q we refinanced \$500M of 6 7/8% notes due in 2020 with new 5.0% notes due in 2026
    - Annual interest expense savings of \$9M
    - New note terms reduce restrictive covenants
    - In July, we completed the redemption of the remaining outstanding 6 7/8% notes that were not tendered in June and will record an additional \$8M of refinancing costs in 3Q
    - Now expect 2016 annual interest expense of about \$70M
- **Net debt / Adjusted LTM EBITDA\* ratio was 1.3x at the end of the quarter, even with a year ago**

\* Including noncontrolling interests.



# Cash Flow

- **Cash generated from operations of \$129M in the quarter, about even with last year**

- Continued strong working capital performance

- **YTD cash from operations \$100M, up 22%, compared to \$82M last year**

- **Capital expenditures of \$65M in the quarter primarily to support new programs in Europe and North America**

- For full year 2016, we now expect capital expenditures of about \$360M

- **Repurchased 772,805 shares in 2Q for \$41M**

- Since we announced the buyback at the beginning of 2015, we have repurchased 5.4 million shares for \$270M, or 9% of shares outstanding at that time.

- Remaining authorization of \$280M which we expect to complete out of free cash flow by the end of 2017

## Working Capital Metrics (L3M):

	2Q'16	2Q'15	B(W)
<b>DSO</b> excl. factoring	61	62	1
<b>DOH</b>	37	36	(1)
<b>DPO</b>	72	71	1

# Second Quarter YTD

\$ Millions, except as noted	1H'16	1H'15	B/(W)	% Change
<b>Total Revenue</b>	4,348	4,153	195	5%
<b>Value-add Revenue <sup>Δ</sup></b>	3,319	3,194	125	4%
<b>EBIT</b>	301	275	26	9%
<b>EBIT (% of VA Revenue)</b>	9.1%	8.6%	0.5%	6%
<b>Adjusted EBIT <sup>†</sup></b>	320	287	33	11%
<b>Adjusted EBIT <sup>†</sup> (% of VA Revenue)</b>	9.6%	9.0%	0.6%	7%
<b>Net Income</b>	143	127	16	13%
<b>EPS (\$)</b>	2.49	2.06	0.43	21%
<b>Adjusted Net Income <sup>†</sup></b>	169	140	29	21%
<b>Adjusted EPS (\$) <sup>†</sup></b>	2.95	2.27	0.68	30%
<b>Cash Flow From Operations</b>	100	82	18	22%

Δ Value-add Revenue is total revenue less substrate sales.

† Adjusted for restructuring activities, refinancing costs and tax adjustments.

# Outlook

- **In 3Q we expect to outpace industry production by 2 percentage points resulting in total revenue growth of 7%, assuming constant currency**
  - 3Q aggregate industry production forecast to grow 5%\* ( LV +5%\*, CTOH -1%\*)
  - Revenue growth driven by stronger light vehicle volumes globally, the launch and ramp up on new programs and a solid contribution from the global aftermarket
  - Commercial truck & off-highway revenue expected roughly in line with industry production
  - Based on current exchange rates, anticipate currency headwinds of around 1% in 3Q
- **For the full year we continue to expect to outpace industry production by 3 percentage points for total revenue growth of 6%, assuming constant currency**
  - Aggregate industry production forecast to grow 3%\* in 2016
  - Revenue growth driven by the strength of our position on light vehicle platforms globally, increasing emissions regulations driving content growth, increasing demand for electronic suspension and our leadership position in the global aftermarket
- **Expect continued YOY adjusted margin expansion for remainder of 2016**
- **Future business is secured to outpace aggregate industry production by 3 to 5 percentage points in 2017 and 2018 (confirming guidance)**

\* Source: IHS Automotive July 2016 global light vehicle production forecast, Power Systems Research (PSR) July 2016 global commercial truck & bus forecast, PSR off-highway engine production in U.S. and Europe and Tenneco estimates.

# Appendix: Commercial Truck, Off-Highway and Other Revenue Details



\$ Millions, Unaudited

	2016				2015			
	Q1		Q2		Q1		Q2	
	Revenues	Value-add Revenues	Revenues	Value-add Revenues	Revenues	Value-add Revenues	Revenues	Value-Add Revenues
<b>Clean Air Division</b>								
North America	\$ 92	\$ 66	\$ 86	\$ 58	\$ 86	\$ 55	\$ 87	\$ 56
Europe, South America & India	73	44	79	49	73	44	75	44
Asia Pacific	35	21	36	22	31	19	26	16
<b>Total Clean Air Division</b>	<b>\$ 200</b>	<b>\$ 131</b>	<b>\$ 201</b>	<b>\$ 129</b>	<b>\$ 190</b>	<b>\$ 118</b>	<b>\$ 188</b>	<b>\$ 116</b>

# Appendix: Pension and OPEB



\$ Millions

Pension	2013	2014	2015	2Q'16	2016E
Defined Benefit Expense	\$26	\$15*	\$15	\$3	\$13*
Defined Benefit Contributions	\$57	\$46	\$25	\$4	\$44

OPEB	2013	2014	2015	2Q'16	2016E
Expense	\$3	\$3	\$8	\$3	\$9
Cash Payments	\$8	\$8	\$9	\$2	\$9

\* Does not include settlement or curtailment amounts

# Appendix: Working Capital as a % of Revenue – Reconciliation of Non-GAAP Results



\$ Millions, Unaudited

	2015	2014	2013	2012	2011	2010	2009	2008
<b>Receivables</b>	\$ 1,112	\$ 1,088	\$ 1,060	\$ 986	\$ 980	\$ 826	\$ 596	\$ 574
<b>Inventory</b>	682	688	656	687	592	547	428	513
<b>Less: Payables</b>	1,376	1,372	1,359	1,186	1,171	1,048	766	790
<b>Working Capital</b>	\$ 418	\$ 404	\$ 357	\$ 467	\$ 401	\$ 325	\$ 258	\$ 297
<b>Revenue</b>	\$ 8,209	\$ 8,420	\$ 7,964	\$ 7,363	\$ 7,205	\$ 5,937	\$ 4,649	\$ 5,916
<b>Percentage of Revenue</b>	5.1%	4.8%	4.5%	6.3%	5.6%	5.5%	5.5%	5.0%

Tenneco presents the above reconciliation for purposes of computing working capital as a percentage of revenue. We include total receivables, inventory and payables in the calculation as these are the components of working capital that we have the most direct control over and because they are most closely related to the cash flow performance of our operations.

Appendix:

# Tenneco's Revenue Projections



Tenneco's revenue projections for 2016 are as of July 2016. Revenue assumptions are based on projected customer production schedules, IHS Automotive July 2016 forecasts and Power Systems Research July 2016 forecasts.

Tenneco's revenue projections for 2017 and 2018 are as of January 2016. Revenue assumptions are based on projected customer production schedules, IHS Automotive December 2015 forecasts and Power Systems Research January 2016 forecasts.

In addition to the information set forth on this slide and slide 19, Tenneco's revenue projections are based on the type of information set forth under "Outlook" in Item 7 – "Management's Discussion and Analysis of Financial Condition and Results of Operations" as set forth in Tenneco's Annual Report on Form 10-K for the year ended December 31, 2015. Please see that disclosure for further information. Key additional assumptions and limitations described in that disclosure include:

- Revenue projections are based on original equipment manufacturers' programs that have been formally awarded to the company; programs where the company is highly confident that it will be awarded business based on informal customer indications consistent with past practices; and Tenneco's status as supplier for the existing program and its relationship with the customer.
- Revenue projections are based on the anticipated pricing of each program over its life.
- Revenue projections assume a fixed foreign currency value. This value is used to translate foreign business to the U.S. dollar.
- Revenue projections are subject to increase or decrease due to changes in customer requirements, customer and consumer preferences, the number of vehicles actually produced by our customers, and pricing.