Fourth Quarter and Full Year 2018 Earnings Conference Call

March 14, 2019

NYSE: **TEN**

Safe Harbor

Forward-Looking Statements

This communication contains forward-looking statements. These forward-looking statements include, but are not limited to, (i) all statements, other than statements of historical fact, included in this communication that address activities, events or developments that we expect or anticipate will or may occur in the future or that depend on future events and (ii) statements about our future business plans and strategy and other statements that describe Tenneco's outlook, objectives, plans, intentions or goals, and any discussion of future operating or financial performance. These forward-looking statements are included in various sections of this communication and the words "may," "will," "believe," "should," "could," "plan," "expect," "anticipate," "estimate," and similar expressions (and variations thereof) are intended to identify forward-looking statements. Forward-looking statements included in this communication concern, among other things, benefits of the Federal-Mogul acquisition; the combined company's plans, objectives and expectations (including the proposed separation of DRiV™ from the Powertrain Technology business); future financial and operating results; and other statements that are not historical facts. Forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to materially differ from those described in the forward-looking statements, including the possibility that the combined company may not complete the spin-off of DRiV from the Powertrain Technology business (or achieve some or all of the anticipated benefits of such a spin-off); the possibility that the transaction may have an adverse impact on existing arrangements with Tenneco, including those related to transition, manufacturing and supply services and tax matters; the ability to retain and hire key personnel and maintain relationships with customers, suppliers or other business partners; the risk that the benefits of the transaction, including synergies, may not be fully realized or may take longer to realize than expected; the risk that the transaction may not advance the combined company's business strategy; the risk that the combined company may experience difficulty integrating or separating all employees or operations; the potential diversion of Tenneco management's attention resulting from the transaction; as well as the risk factors and cautionary statements included in Tenneco's periodic and current reports (Forms 10-K, 10-Q and 8-K) filed from time to time with the SEC. Given these risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results. Unless otherwise indicated, the forward-looking statements in this release are made as of the date of this communication, and, except as required by law, Tenneco does not undertake any obligation, and disclaims any obligation, to publicly disclose revisions or updates to any forward-looking statements.

In addition, please see Tenneco's financial results press release for factors that could cause Tenneco's future performance to vary from the expectations expressed or implied by the forward-looking statements herein.

Agenda

- Fourth Quarter Highlights
- Segment Results & Financial Overview
- Full Year 2018 Overview
- Outlook
- Q&A

Tenneco Participants:

Brian Kesseler – Co-CEO

Roger Wood – Co-CEO

Jason Hollar – EVP & CFO

Ron Hundzinski – EVP, Finance

Linae Golla – VP IR

Non-GAAP Results: Please see 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.

Prior period revisions: Financial results for 2017 and the first three quarters of 2018 have been revised for certain immaterial adjustments, which will be further discussed in Tenneco's Form 10-K for the year ended December 31, 2018.

Fourth Quarter Highlights

- Q4 revenue of $4.3B, up over 80% in constant currency primarily driven by the completion of the Federal-Mogul acquisition on October 1, 2018
  - Delivered strong Q4 organic growth of 4%*, outpacing industry light vehicle production** by 10 percentage points
    - Light vehicle industry production down 6% globally
    - Outperformance driven by commercial truck and off-highway organic revenue up 12%* and light vehicle revenue up 3%*
- VA adjusted EBITDA margin of 10.9%
- Adjusted EPS of $1.30
- High confidence in achievement of synergy goals
- Year end pro forma leverage ratio of 3.0x (net debt/pro forma LTM adjusted EBITDA), as anticipated following the closing of the Federal-Mogul acquisition

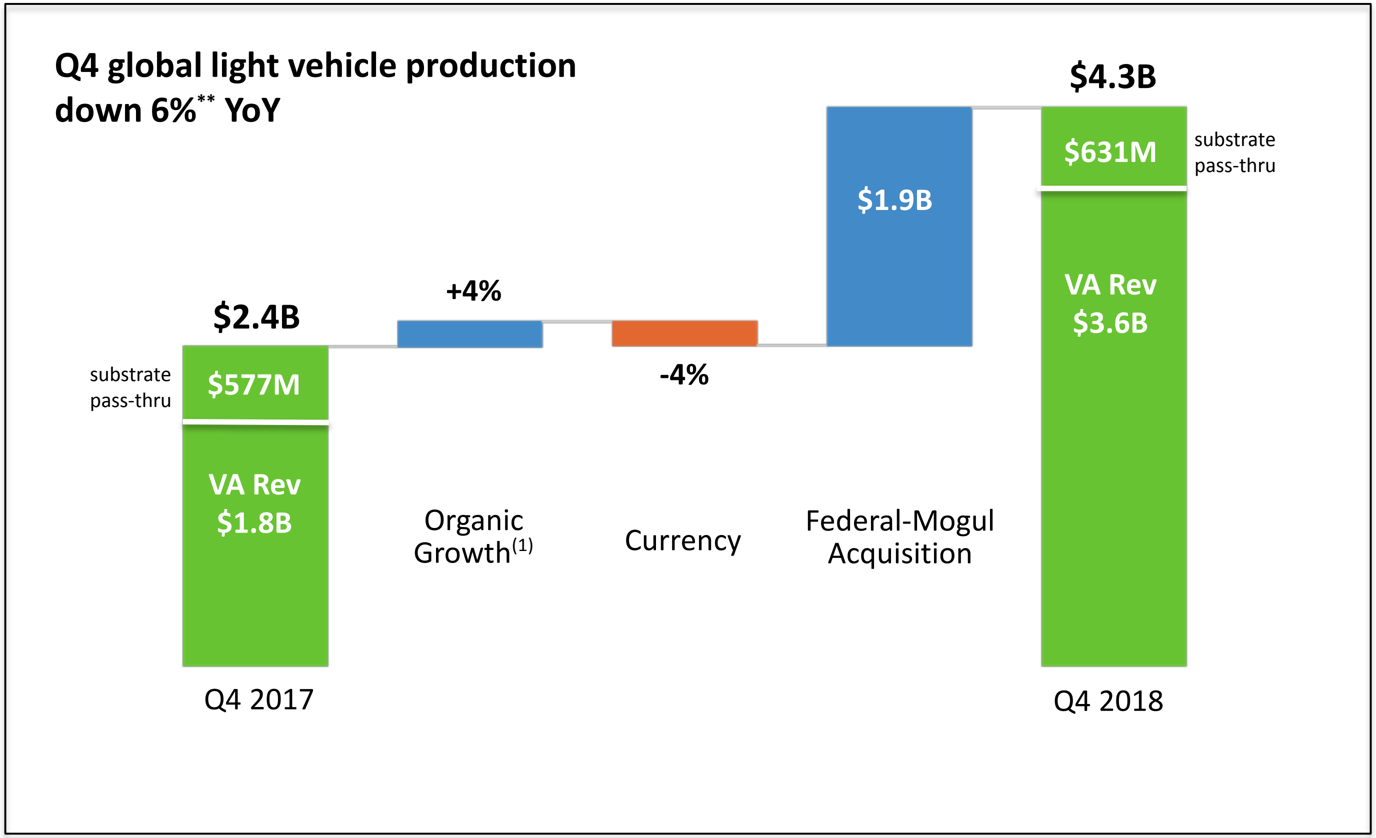
* Organic revenue growth is measured at 2017 constant currency rates and excludes acquisitions and divestitures.

Delivered strong organic growth that outpaced industry production by 10 points

**IHS light vehicle production forecast and Tenneco estimates

Q4 Revenue

TOTAL REVENUE $4.3B, up over 80%* including F-M acquisition



(1) Organic revenue growth is measured at 2017 constant currency rates and excludes acquisitions and divestitures.

Q4 revenue in line with previous expectations; growth over market of 10 points

**IHS light vehicle production forecast and Tenneco estimates

* In constant currency

Q4 Value-Add Revenue

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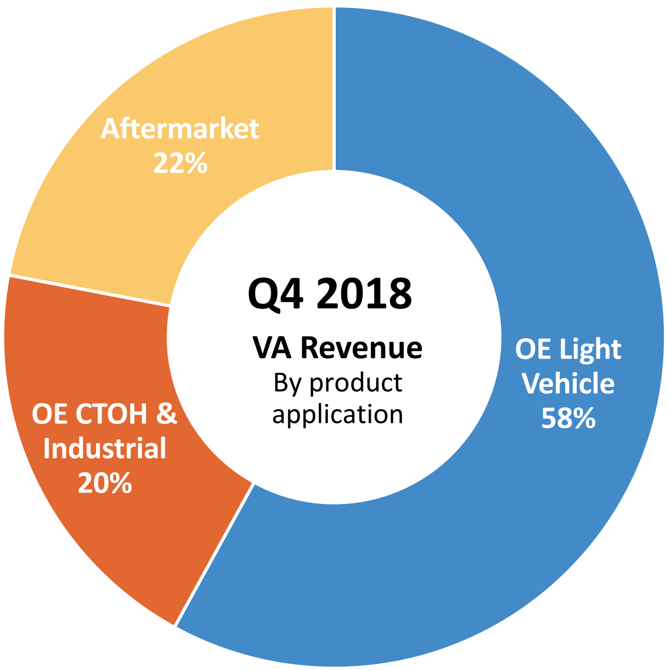
VALUE-ADD REVENUE $3.6B, up over 100%* including F-M acquisition



SEGMENT VA REVENUE		YOY comparison*
Clean Air (OE)	$1,024M	+1%
Powertrain (OE)	$1,112M	PRO FORMA 0%
Ride Performance (OE)	$469M	+3%
Aftermarket (AM)	$268M	0%
Motorparts (OE & AM)	$774M	PRO FORMA -5%

- **Well-positioned in North America light vehicle**
  - Strong mix with > 80% of light vehicle revenues from pickups and SUVs in all OE businesses
- **Commercial truck, off-highway and industrial exposure**
- **Steady, countercyclical aftermarket business**

PRO FORMA reflects fourth quarter 2018 revenue performance as a segment of TEN compared to prior period performance under Federal-Mogul

Well-positioned, diversified portfolio with strong end-market exposures

* In constant currency

Q4 Earnings

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Q4 ADJUSTED EBITDA $399M

- VA adjusted EBITDA margin of 10.9%
- Adjusted EBITDA headwinds
  - Unfavorable market mix due to lower volumes in higher margin China business and the aftermarket and the related impact on manufacturing efficiencies
  - Tariffs, steel and other material economics
    - Legacy TEN $7M ($2M steel, $5M tariffs)
    - Legacy F-M $5M

ADJUSTED DILUTED EPS $1.30

- Adjusted net income of $105M, up 15% YOY
- Effective tax rate of 26%, compared to 23% in Q4 2017
- Q4 diluted share count of 80.7M, including the 29.4M shares issued for the purchase of Federal-Mogul

Q4 Clean Air Segment

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VA REVENUE $1,024M, up 1%*

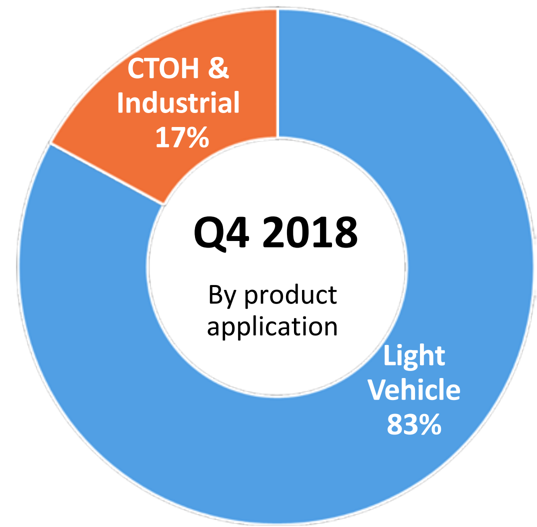
Light Vehicle VA Revenue $851M, down 2%*

- Outpaced global industry production by 4 points, outpacing in all regions except North America due to cadence of launches
- EMEA growth outpaced production by 5 points on ramp up of launches with Daimler, Ford and BMW
- Launched 6 hybrid programs in Q4; total of 9 launches in FY 2018

CTOH & Industrial VA Revenue $173M, up 15%*

- Continued strong growth lead by AMER up over 30% on new business with Daimler Truck and OH volumes up double digits
- EMEA up high single digits with higher CT volumes and CAT off-highway up double digits
- APAC slightly down with India revenues up double digits on new CT business and higher volumes with Deere for OH applications offset by lower China CT volumes

Adj. EBITDA $151M; VA Adj. EBITDA Margin 14.7%



Q4 Commercial Highlights

- 41 program awards, ~50% incremental, including:
  - Continued new business growth momentum in APAC with 16 awards from LV and CTOH customers
  - 16 hybrid program awards in Q4; 11 in Europe and 5 in APAC
    - FY 2018 awards: 25 hybrid programs
    - FY 2019 launches: 20 hybrid programs

* In constant currency

Q4 Powertrain Segment

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VA REVENUE $1,112M, flat* PRO FORMA

Light Vehicle VA Revenue $692M, down 5%* PRO FORMA

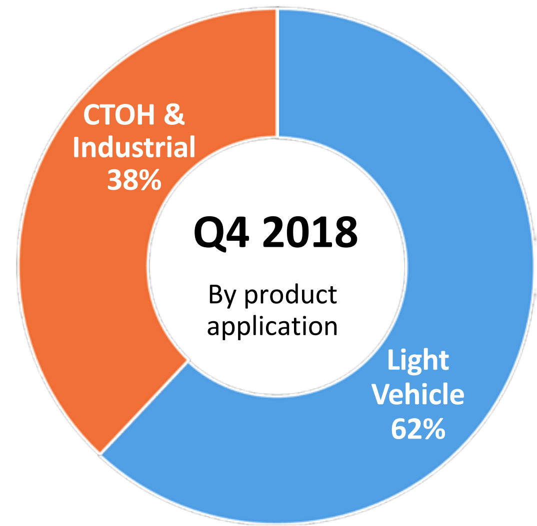
- Light vehicle performance slightly better than global industry production, despite LV diesel decline in Europe
- Notable launches:
  - Pistons and engine bearings for NA diesel engine program
  - MicroTorq® seals, gaskets and heat shields on NA diesel and gas light truck and SUV platform
  - Piston rings in China

CTOH & Industrial VA Revenue $420M, up 10%* PRO FORMA

CTOH & Industrial revenues up in all 3 regions:

- AMER up on strong volumes with CT customers and strength from OH & Industrial customers - Deere and Rolls-Royce Power Systems
- EMEA CT up with Daimler, MAN/Scania, Volvo Group and DAF on robust demand; OH & Industrial also higher
- APAC up low double digits on strong demand in India and strength in China with Cummins, CAT and Dongfeng Volvo

Adj. EBITDA $134M; VA Adj. EBITDA Margin 12.1%



Q4 Commercial Highlights

- Received two Automotive News PACE Award Finalist nominations
  - DuraForm® G91 pistons which support engines running at higher temperatures and loads
  - PRiME3D® software which reduces development time for optimizing power cylinder components

PRO FORMA reflects fourth quarter 2018 revenue performance as a segment of TEN compared to prior period performance under Federal-Mogul

* In constant currency

Q4 Ride Performance Segment

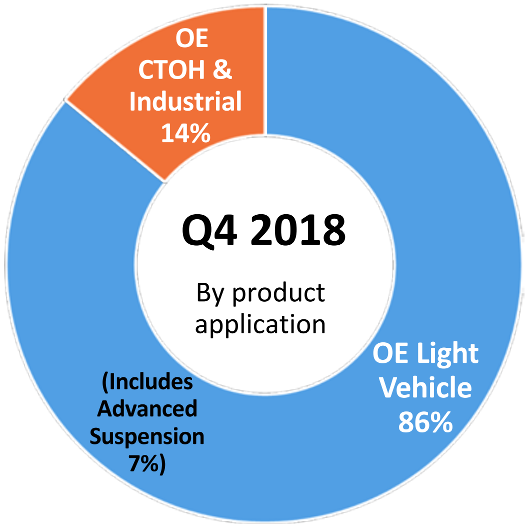
VA REVENUE $469M, up 3%*

Original Equipment

- Light vehicle revenue up 1%* globally, outpacing production by 7 points – outpacing in all regions
  - Advanced suspension revenue up 8%*, including 3 launches in Q4, 2 are incremental, for a total of 10 launches in 2018
  - Strong performance in China with revenue ~flat despite production -15% on strong global OEM customer mix
- Commercial truck & off-highway up 17%* led by double digit growth in Americas on higher volumes with Daimler Truck, Paccar, Hendrickson and Volvo Truck

Adj. EBITDA $38M; VA Adj. EBITDA Margin 8.1%

- NA manufacturing footprint realignment (close 2 plants) is in progress – expect savings run-rate of $20M to $25M by end of 2020
- Beijing plant relocation progressing with all production lines in new plant; 2 remaining manufacturing processes will be on site by end of Q2 19
- Steel recovery agreement completed with final customer



Q4 Commercial Highlights

- Incremental advanced suspension program win in Europe
- Expecting 11 advanced suspension launches in 2019 (6 incremental)
- Announced Öhlins acquisition (closed Jan. 2019) enhancing our technology position in advanced suspension
- NVH Solutions team received the 2018 PACCAR Quality Award

* In constant currency

Q4 Aftermarket Segment

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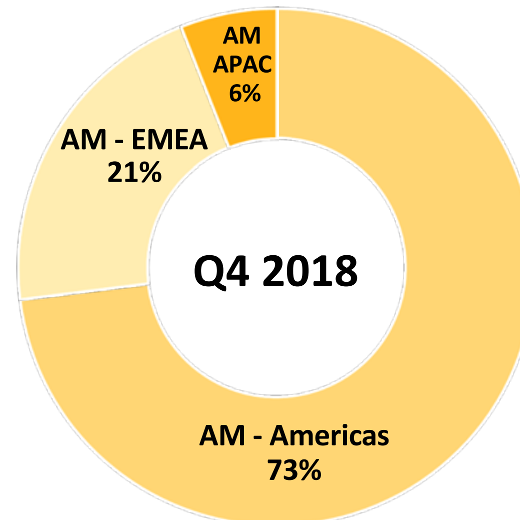
VA REVENUE $268M, flat*

Aftermarket

Americas	**flat***	• North America down slightly • NA out the door retail sales continue to trend up in Q4 • Double digit growth in SA continues
EMEA	**-1%***	• EMEA overall flat with mixed results by product and region • Emerging markets up, excluding Turkey, and flat to down in established markets impacted by continued customer consolidation
APAC	**+ 5%***	• Continued double digit growth in China; growth with top 20 customers as we benefit from channel consolidation • India revenue growth of 6%

Adj. EBITDA $30M; VA Adj. EBITDA Margin 11.2%

- FY 2018 segment VA adj. EBITDA margin 15.2%
- Argentina functional currency impact on costs
- Manufacturing inefficiencies and timing of certain costs in the quarter



Q4 Commercial Highlights

- NA continues expanding vehicle coverage in the quarter with over 800 SKUs launched in FY18
- China added 12 new customers (74 for FY18) and expanded product coverage to 74% as of year end, with 70 new SKUs (390 new SKUs in FY18)

* In constant currency

Q4 Motorparts Segment

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VA REVENUE $774M, down 5%* PRO FORMA

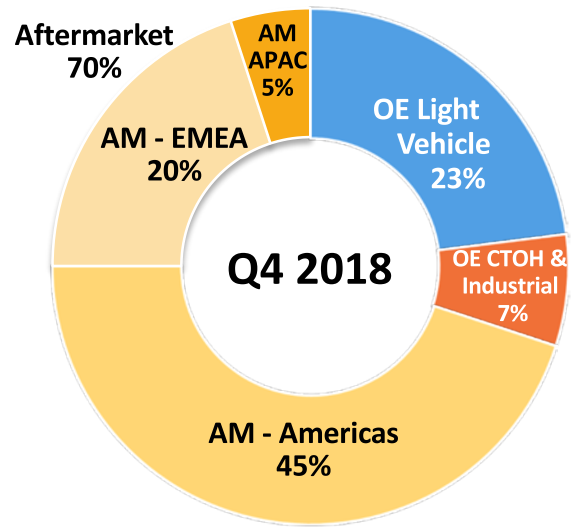
Original Equipment VA Revenue $233M, down 3%* PRO FORMA

- OE performance outpaced LV industry production by 3 points
- North America sales above market driven by strong SUV portfolio
- Strong performance in China significantly outpaced market with favorable global OEM customer mix

Aftermarket VA Revenue $541M, down 6%* PRO FORMA

Americas	- 10%*	• Business losses from previous periods – expected to normalize by end of 2019 • Customer inventory reductions in North America
EMEA	+ 3%*	• New business wins and improved service levels from distribution footprint expansion
APAC	- 1%*	• Exiting smaller customers as we ramp up with larger China players • Includes positive trends in India from increased consumption

Adj. EBITDA $70M; VA Adj. EBITDA Margin 9.0%



Q4 Commercial Highlights

- OE Braking business awards, including:
  - Front axle program on a best-selling pickup truck in NA
  - 2 programs for German luxury SUVs
  - In Asia, a top-selling small car and mid-size SUV
- Multi-year agreement finalized with The Network in the NA aftermarket and expanding partnerships in Latin America and Asia

PRO FORMA reflects fourth quarter 2018 revenue performance as a segment of TEN compared to prior period performance under Federal-Mogul

* In constant currency

Q4 Adjustments

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- Restructuring and related expense of $20M pre-tax (including $3M of D&A), or 18-cents per diluted share primarily related to the NA RP footprint restructuring and accelerated move of our Beijing RP plant
- Costs related to the Federal-Mogul acquisition that closed on October 1, 2018 of $102M pre-tax, or $1.04 per diluted share
  - $53M acquisition and spin costs
  - $49M costs to achieve synergies
- Adjustments and write-offs related to the acquisition of $116M pre-tax, or $1.19 per diluted share
  - $106M purchase accounting
  - $10M debt extinguishment costs
- Charge due to retroactive application of an anti-dumping duty on a supplier's products of $16M pre-tax, or 15-cents per diluted share
- Other adjustments primarily related to other cost reduction initiatives, pension adjustments and goodwill impairment of $14M pre-tax, or 15-cents per diluted share

Tax Expense

Reported Q4 tax benefit of $10M, includes

- Tax benefits for adjusted items:
  - $17M for acquisition and spin costs and cost to achieve synergy
  - $20M for purchase accounting and debt extinguishment
  - $4M for restructuring and related
  - $7M for remaining adjustments
- Other discrete tax items (net benefit) of $5M

Before those Q4 items, adjusted tax expense is $43M

- Adjusted effective tax rate of 26% in the quarter and 24% for full year 2018

Cash tax payments of $34M in Q4 (including Federal-Mogul)

- 2018 cash tax payments of $113M

2019 expectations

- Adjusted effective tax rate of 28% to 30%
- Cash taxes of $190M to $220M

Consistent with expectations, higher Q4 effective tax rate includes Federal-Mogul operations

Cash Flow

- **Cash generated from operations of $402M in the fourth quarter**
  - An additional $72M in proceeds were received from certain factored receivables and is classified in the investing section of the cash flow statement
- **Capital expenditures of $248M in the quarter** (including Federal-Mogul)
- **Paid $20M in dividends, at $0.25/share in Q4**
  - Board of Directors approved Q1 dividend of $0.25/share to be paid in March
  - During 2018, we paid $59M in dividends

Seasonally strong Q4 cash performance

Debt and Cash Position

$ Millions

	December 31,	
	2018	2017
Total Debt	$5,493	$1,461
Cash Balances(1)	702	318
Net Debt	$4,791	$1,143

(1) Includes restricted cash

- Interest expense of $71M in the quarter
- Except for scheduled amortization of term loans under the senior credit facility, our LT debt principal payments are not payable until 2022 and later
- Net debt / pro forma adjusted EBITDA* ratio of 3.0x as of December 31, 2018
  - 2018 pro forma adjusted EBITDA of $1,597M (pro forma VA adjusted EBITDA margin 10.4%)

Leverage ratio in line with expectations following the close of the F-M acquisition

* Including noncontrolling interests.

Synergy Update from Federal-Mogul Acquisition

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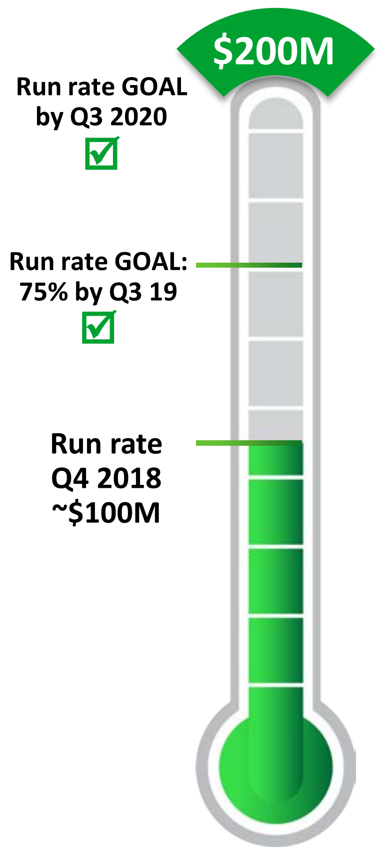
Earnings Synergies



Targeted source of savings:

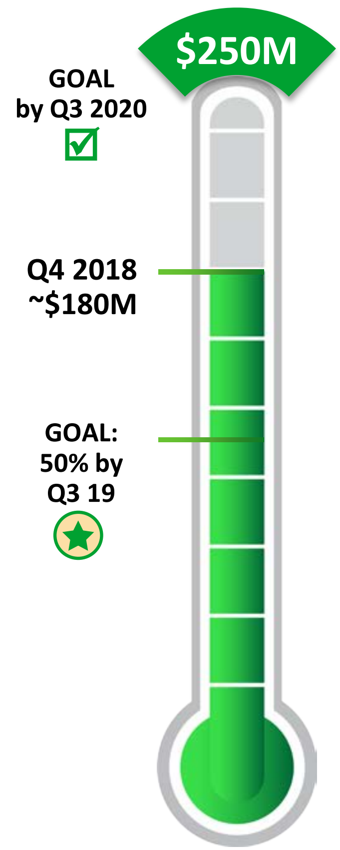
- G&A and Engineering (3 to 2 corporate structures)
- Supply Chain
- Sales Force and Go To Market

Expect 75% run rate by Q3 2019

Goal split

- $115M DRiV™ (SpinCo)
- $85M New Tenneco

Working Capital Synergies



One-time working capital synergies

Targeted sources of savings:

- $125M inventory reduction
- $125M accounts payable terms

Achieved ~75% of goal by Q4 2018

- Payables on track
- Inventory ahead of schedule

Goal on track
Goal exceeded

ESTIMATED COST TO ACHIEVE SYNERGIES OF APPROXIMATELY $150M

High confidence in achievement of synergy goals

Q1 2019 Segment Reporting

- In Q4 2018 we measured our results of operations under the existing segmentation and added the two Federal-Mogul businesses
- As part of our transition towards the spin, we will revise our segments in Q1 2019 to reflect how the businesses are being managed as of January 1st and onward

Q4 2018 REPORTING
5 Segments

Legacy Tenneco

1. **Clean Air**
2. **Aftermarket (AM)**
3. **Ride Performance (OE)**

Legacy Federal-Mogul

4. **Powertrain**
5. **Motorparts**
   5a AM
   5b OE

Q1 2019 REPORTING
4 Segments

Post-Separation

1. Clean Air (1)
2. Powertrain (4)

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3. Motorparts
- AM business (2+5a)

4. Ride Performance
- OE business (3+5b)

DRiV

Establishing expectations for reporting new companies during the transition period

Full Year 2018 Highlights

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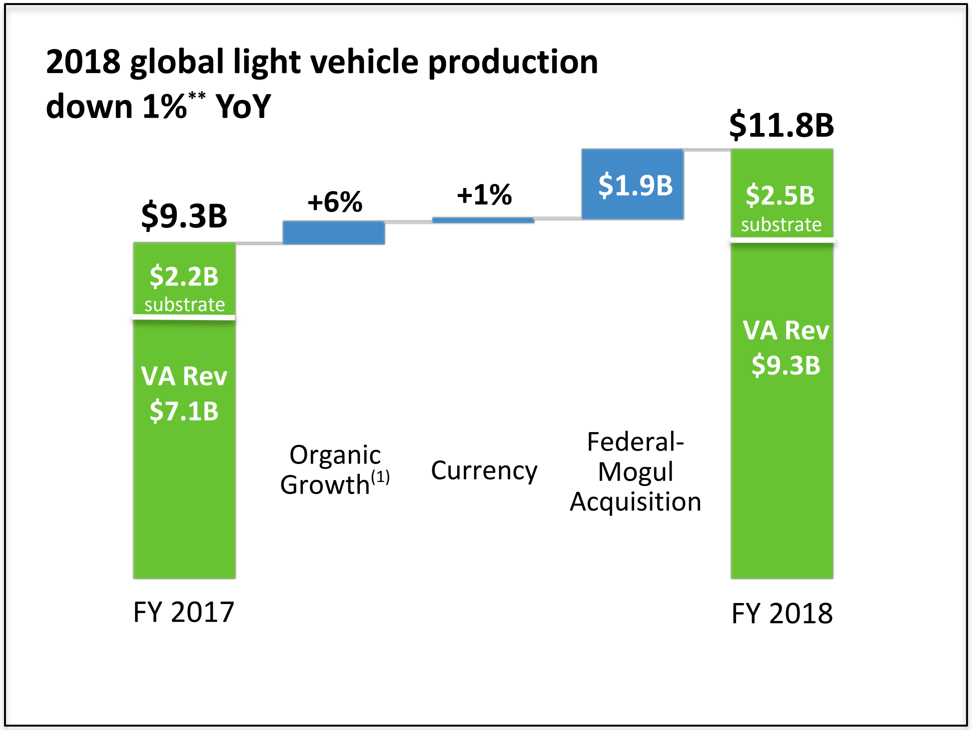
TOTAL REVENUE $11.8B, up over 25%* including F-M acquisition since October 1, 2018



Organic revenue growth of +6%(1), outperforming industry production by 7 percentage points

- Light vehicle industry production -1%**
- LV organic revenue growth of +5%(1)
- CTOH organic revenue growth of +24%(1)

Closed acquisition of Federal-Mogul on October 1, 2018

- Executing on plan to realign and separate into two focused, industry-leading companies in H2 2019

(1) Organic revenue growth is measured at 2017 constant currency rates and excludes acquisitions and divestitures.

2018 organic revenue growth outperformed LV production by 7 points

**IHS light vehicle production forecast and Tenneco estimates

* In constant currency

FY 2018 Pro Forma Value-Add Revenue

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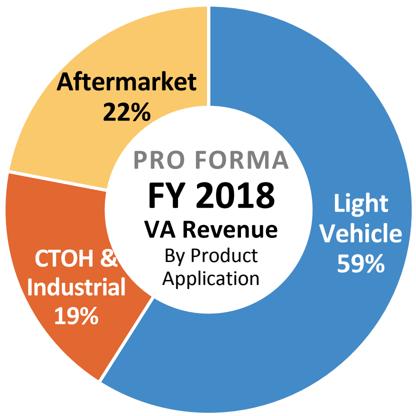
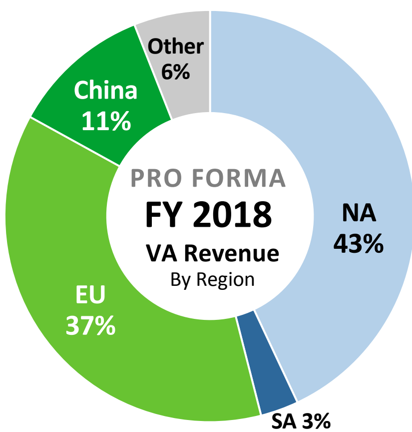
PRO FORMA

VALUE-ADD REVENUE $15.4B, up 2%* including pro forma F-M revenue for both years;
Pro forma total revenue $17.9B, up 3%*





SEGMENT VA REVENUE

SEGMENT VA REVENUE		YOY comparison*
Clean Air (OE)	**$4,207M**	**+4%**
Powertrain (OE)	PRO FORMA $4,737M	PRO FORMA +2%
Ride Performance (OE)	**$1,949M**	**+8%**
Aftermarket (AM)	**$1,221M**	**0%**
Motorparts (OE & AM)	PRO FORMA $3,245M	PRO FORMA -3%

- **Well-positioned in North America light vehicle**
  - Strong mix with > 80% light vehicle revenues from pickups and SUVs in all OE businesses
- **Commercial truck, off-highway and industrial exposure**
- **Steady, countercyclical aftermarket business**

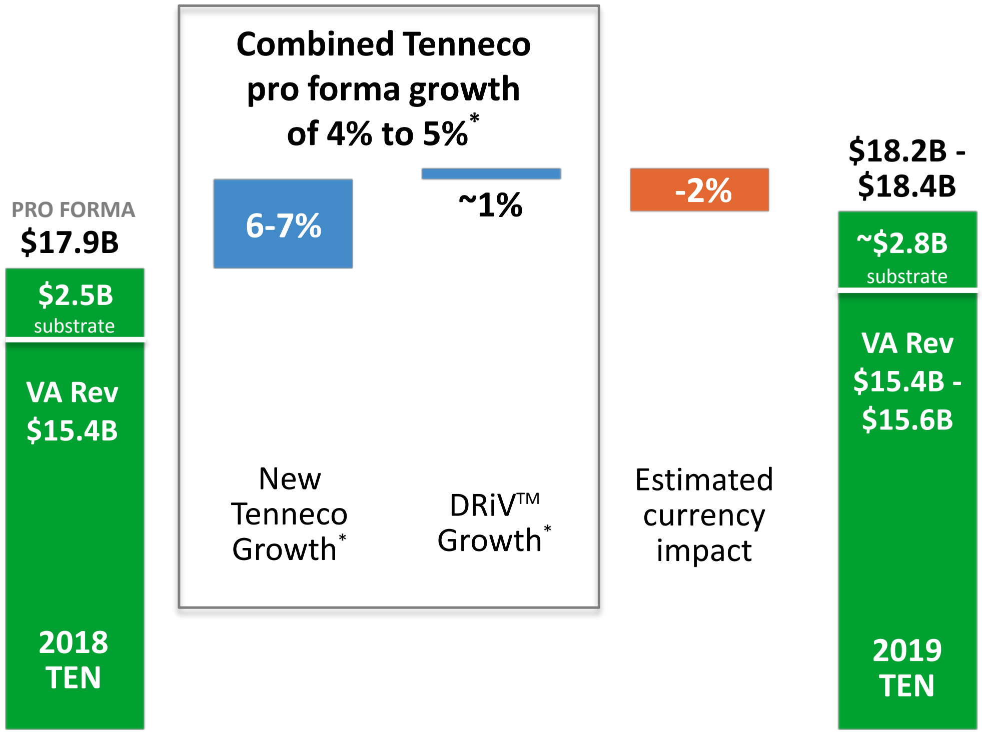
PRO FORMA (full year) reflects 2018 revenue performance under TEN plus Q1 – Q3 2018 performance of Powertrain and Motorparts under Federal-Mogul compared to 2017 TEN plus Federal-Mogul revenue performance. PRO FORMA (by segment) reflects 2018 performance under TEN plus Q1 – Q3 2018 performance under Federal-Mogul compared to 2017 performance under Federal-Mogul.

Well-positioned, diversified portfolio with strong end-market exposures

* In constant currency

2019 Revenue Outlook

Revenue – 2019 Outlook



Pro forma revenue growth* expected to outpace LV industry production by 6 to 7 percentage points

- Light vehicle production expected down 2%** in 2019
- Outperformance driven by growth in CTOH & Industrial, LV program launches and substrate pass-thru revenue
- Includes the carryover impact of lost Motorparts business in North America

Rebalancing the DRiV™ portfolio

- Focus on advanced technology
  - Closed Öhlins transaction on Jan. 10th, enhancing our technology position in advanced suspension
- Sold the F-M wiper business March 1st, optimizing the portfolio to make it leaner and stronger as we prepare for the spin-off

* Pro Forma revenue growth is measured at 2018 constant currency rates and includes FM acquisition in prior periods
** IHS Feb. 2019 global light vehicle production and Tenneco estimates
See slide 27 for Tenneco Projections and slide 26 for production and currency assumptions

Pro forma revenue growth over market of 6 to 7 percentage points

2019 Outlook – Key Items

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2019 Combined Tenneco Outlook

Revenue	$18.2B - $18.4B
VA adj. EBITDA[1] margin	~Flat
Interest expense	$300M - $320M
Adjusted effective tax rate	28% - 30%
Cash taxes	$190M - $220M
Capital expenditures	$730M - $780M
Depreciation & Amortization	~$635M
Substrate revenue (Clean Air pass-thru)	~$2.8B

VA adjusted EBITDA[1] margin

- 2018 pro forma* VA adjusted EBITDA[1] margin 10.4%
- Expect 2019 VA adjusted EBITDA[1] margins to be approximately flat
  - 2019 incremental gross synergies expected around $80M
  - Expect 2019 dis-synergies of $30M to $40M
    - Senior leadership and other additional public company costs
    - Incremental IT system costs
    - Continue to expect total net earnings synergies of $200M
  - Higher steel costs, tariffs and unfavorable market mix due to lower volumes in higher margin China business and the aftermarket
  - Currency headwinds expected to impact margin -10bps

(1) including noncontrolling interests
* Pro Forma results include FM acquisition in prior periods
See slide 27 for Tenneco Projections and slide 26 for production and currency assumptions

Q1 2019 Outlook

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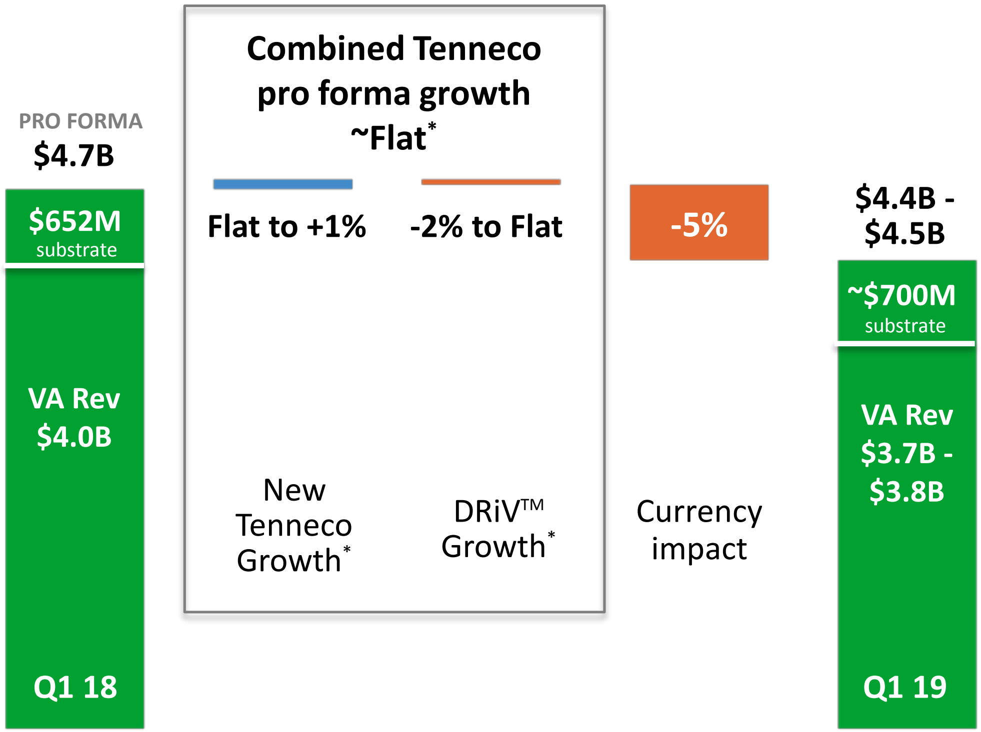
Revenue – Q1 2019 Outlook



Pro forma revenue growth* expected to outpace LV industry production by about 6 percentage points

- Light vehicle production expected down 6%** in Q1
- Outperformance driven by growth in CTOH & Industrial, LV program launches and substrate pass-thru revenue

Expect unfavorable market mix in earnings due to lower volumes in higher margin China business and the aftermarket

* Pro Forma revenue growth is measured at 2018 constant currency rates and includes FM acquisition in prior periods

** IHS Feb. 2019 global light vehicle production and Tenneco estimates

See slide 27 for Tenneco Projections and slide 26 for production and currency assumptions

Expect to continue to significantly outpace industry production

(1) including noncontrolling interests

Leverage and Financing Update

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Leverage Expectations

- **Anticipate year end 2019 to be around pro forma Q4 2018 leverage levels (~3.0x)** based on 2019 outlook provided on slide 21 -22
- **Leverage at spin**
  - Each company will be set up to succeed
  - Focused on earnings and working capital synergies to build the foundation for a successful spin
  - Expect higher leverage on DRiV compared to New Tenneco due to the non-cyclical nature of the aftermarket business
- **Net leverage mid to long-term goals**
  - DRiV 1.5x to 2.0x
  - New Tenneco 1.0x to 1.5x

DRiV™ (SpinCo) Financing Update

- **Current credit facility and bonds will remain with New Tenneco**
- **Proceeds from DRiV financing will be primarily used to reduce debt on New Tenneco**
- **DRiV financing activity expected to begin by Q3 2019**
  - Bank facility: revolver and term loan(s)
  - Bond
  - Balance of variable vs. fixed based on market conditions

* Leverage ratio is net debt/LTM Adjusted EBITDA

DRiV financing activities on track, according to plan

Driving Towards Realignment and Separation

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Next steps to complete spin:

- **January 2019**
  - CEOs and leadership teams named and in place
  - Reporting as Combined Tenneco, operating internally as two separate divisions
- **February 2019**
  - SpinCo name/logo announced - DRiV Incorporated
  - New Tenneco logo announced
- **Q2/Q3 2019** SEC approval of Form 10 targeted
- **Q3 2019** DRiV™ financing activities to begin

DRiV Incorporated –
Aftermarket & Ride Performance Company

- *Driving advancements that help people get the most out of every vehicle, every ride, every race and every journey*

DRiV

New Tenneco –
Powertrain Technology Company

- *Driving progress toward cleaner, more efficient mobility*

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Second half 2019 – expected separation into two publicly traded companies

Appendix:
Industry Production – YOY% Change

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Major Regions	Q4'18	FY'18	Q1'19	FY'19
North America	2%	-1%	-1%	-1%
South America	-9%	3%	-2%	6%
Europe	-4%	-1%	-5%	-1%
China	-15%	-4%	-15%	-8%
India	-7%	6%	0%	5%
Global LV Industry Production	-6%	-1%	-6%	-2%

2019 Currency Rate Assumptions

Euro/USD	1.15
RMB/USD	0.145

Global 2019 light vehicle production forecast down 2% YOY

Source: IHS Automotive February 2019 global light vehicle production forecast and Tenneco estimates.

Appendix:
Tenneco Projections

Tenneco's revenue outlook for 2019 is as of March 2019. Revenue assumptions are based on projected customer production schedules, IHS Automotive February 2019 forecasts, Power Systems Research January 2019 forecasts and Tenneco estimates. Furthermore:

- 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.
- Projections are based on the anticipated pricing of each program over its life.
- Except as otherwise indicated, projections assume a fixed foreign currency value. This value is used to translate foreign business to the U.S. dollar.
- 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.

In addition to the information set forth herein, Tenneco's projections are based on the type of information set forth under "Order Fulfillment" in Item 1 – "Business" as set forth in Tenneco's Annual Report on Form 10-K for the year ended December 31, 2018. Please see that disclosure for further information.

Certain elements of the restructuring and related expenses, legal settlements and other unusual charges we incur from time to time cannot be forecasted accurately. In this respect, we are not able to forecast EBIT or EBITDA (and the related margins) on a forward-looking basis without unreasonable efforts on account of these factors and the difficulty in predicting GAAP revenues (for purposes of a margin calculation) due to variability in production rates and volatility of precious metal pricing in the substrates that we pass through to our customers.

Adjusted EBITDA** as a Percentage of Value-add Revenue – Reconciliation of Non-GAAP Results

TENNECO

As Revised* ($ Millions)	Q1'18*	Q2'18*	Q3'18*	Q4'18	FY'18
Net sales and operating revenues	$ 2,581	$ 2,533	$ 2,371	$ 4,278	$ 11,763
Less: Substrate sales	652	621	596	631	2,500
Value-add revenues (1)	$ 1,929	$ 1,912	$ 1,775	$ 3,647	$ 9,263
EBIT	$ 119	$ 109	$ 109	$ (31)	$ 306
Depreciation and amortization	60	60	60	165	345
EBITDA**	$ 179	$ 169	$ 169	$ 134	$ 651
Adjustments (reflect non-GAAP (2) **measures)**					
Restructuring and related expenses	10	23	12	17	62
Cost reduction initiatives	2	8	-	8	18
Acquisition and spin costs	13	18	12	53	96
Costs to achieve synergies	-	9	4	49	62
Purchase accounting adjustments	-	-	-	106	106
Anti-dumping duty charge	-	-	-	16	16
Environmental charge	-	4	-	-	4
Warranty charge	5	-	-	-	5
Litigation settlement accrual	-	-	10	-	10
Loss on debt modification	-	-	-	10	10
Pension charges	-	-	-	3	3
Goodwill impairment charge	-	-	-	3	3
Adjusted EBITDA** **(non-GAAP Financial Measures)** (3)	$ 209	$ 231	$ 207	$ 399	$ 1,046
Adjusted EBITDA** **as % of value-add revenue** (4)	10.8%	12.1%	11.7%	10.9%	11.3%

(1) Tenneco presents the above reconciliation of revenues in order to reflect value-add revenues separately from substrate sales, which include precious metals pricing, which may be volatile. Substrate sales occur when, at the direction of its OE customers, Tenneco purchases catalytic converters or components thereof from suppliers, uses them in its manufacturing processes and sells them as part of the completed system. While Tenneco original equipment customers assume the risk of this volatility, it impacts reported revenue. Excluding substrate sales removes this impact. Tenneco uses this information to analyze the trend in revenues before this factor. Tenneco believes investors find this information useful in understanding period to period comparisons in the company's revenues.

(2) Generally Accepted Accounting Principles

(3) Tenneco presents the above reconciliation of GAAP to non-GAAP earnings measures primarily to reflect the results in a manner that allows a better understanding of the results of operational activities separate from the financial impact of decisions made for the long-term benefit of the company and other items impacting comparability between the periods. Adjustments similar to the ones reflected above have been recorded in earlier periods, and similar types of adjustments can reasonably be expected to be recorded in future periods. Using only the non-GAAP earnings measures to analyze earnings would have material limitations because its calculation is based on the subjective determinations of management regarding the nature and classification of events and circumstances that investors may find material. Management compensates for these limitations by utilizing both GAAP and non-GAAP earnings measures reflected above to understand and analyze the results of the business. The company believes investors find the non-GAAP information helpful in understanding the ongoing performance of operations separate from items that may have a disproportionate positive or negative impact on the company's financial results in any particular period.

(4) Tenneco presents adjusted EBITDA as a percentage of value-add revenue to assist investors in evaluating our company's operational performance without the impact of substrate sales.

*Financial results for first three quarters of 2018 have been revised for certain immaterial adjustments, which will be further discussed in Tenneco's Form 10-K for the year ended December 31, 2018.

** including noncontrolling interests.