



WE SEE

THE STRENGTH OF ONE EMERSON





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# 2018 Emerson Investor Conference

## New York City, NY

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Thursday, February 15, 2018

8:30 – 9:45	Business Overview / Strategic Update	David Farr
9:45 – 10:45	Automation Solutions	Mike Train
10:45 – 11:00	Break	
11:00 – 11:20	Final Control Update, V&C Integration	Ed Monser
11:20 – 12:20	Commercial & Residential Solutions	Bob Sharp
12:20 – 1:00	Questions & Answers	
1:00 – 2:00	Lunch	

# Emerson Attendees

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David Farr	Chairman and Chief Executive Officer
Ed Monser	President
Frank Dellaquila	Senior Executive Vice President and Chief Financial Officer
Steve Pelch	Chief Operating Officer and Executive Vice President - Organization Planning and Development
Bob Sharp	Executive President, Emerson Commercial & Residential Solutions
Mike Train	Executive President, Emerson Automation Solutions
Sara Bosco	Senior Vice President, Secretary and General Counsel
Mark Bulanda	Senior Vice President, Planning and Development
Kathy Button Bell	Senior Vice President and Chief Marketing Officer
Tim Reeves	Director, Investor Relations
Judson Duncan	Vice President, Planning

# 2018 Investor Conference Business Update

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David N. Farr

Chairman and Chief Executive Officer

February 15, 2018

# Agenda

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2017 Review

Market Outlook

The One Emerson Strategy Continues To Move Forward

Financial Outlook

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## Safe Harbor Statement

Given the complexities associated with the Tax Cuts and Jobs Act (the “Tax Act”), the ultimate effects on repatriation cost and other tax items may differ materially from the provisional amounts presented herein due to additional regulatory guidance that may be issued and further evaluation of the Company’s actions, assumptions and interpretations.

Our commentary and responses to your questions may contain forward-looking statements, including our outlook for the remainder of the year, and Emerson undertakes no obligation to update any such statement to reflect later developments. Factors that could cause actual results to vary materially from those discussed today are provided in our most recent Annual Report on Form 10-K and subsequent reports as filed with the SEC, as well as the impact of the Tax Act described above.

## Non-GAAP Measures

In this presentation we will discuss some non-GAAP measures (denoted with an \*) in talking about our company’s performance, and the reconciliation of those measures to the most comparable GAAP measures is contained within this presentation or is available at our website [www.emerson.com](http://www.emerson.com) under the investors tab.

## Trademark Ownership Statement

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# 2017 February Investor Conference --

## Versus 2017 Actual Performance

### Perform as “New Emerson”

- ✓ **Finish executing on restructuring plans to right-size cost structure** given global macroeconomic trends and smaller two platform business footprint
- ✓ Use cash proceeds and strong cash flow / balance sheet to **aggressively acquire complementary businesses and enable organic growth**
- ✓ Position company to fully **capitalize on pending global energy market recovery**

### 1. Fully Integrate Acquisitions

- ✓ Aggressively execute on initial cost and revenue synergy plans
- ✓ Explore additional synergy opportunities as they emerge
- ✓ Pentair V&C Integration is ahead of plan



Critical for Pentair V&C

### 2. Continue Rationalizing Base

- ✓ Continue rationalization and restructuring of our 2 core platforms -- **Perfect Execution**
- ✓ Boost profitability, creating a leaner organization positioned for premium growth and premium valuation -- **Key to Controlling Our Own Destiny**

**Note: We have one last piece, optimizing touch points among Corporate and our two Platforms**

### 3. Position and Execute for Growth

- ✓ Pursue both organic growth opportunities and acquisitions, especially in Process / Hybrid / Discrete Automation and Commercial & Residential areas
- Execute **deals worth ~\$3B, adding ~\$2B to total sales by 2021**, in addition to the acquisition of Pentair V&C
- Potential for **additional \$1-2B of strategic acquisitions for another ~\$1B of sales**
- ✓ Regrow Emerson to \$20+B in annual revenues by 2021, recover lost earnings and cash flow

We Successfully Built the Foundation for the New Emerson

# Emerson's 2017 Financial Performance --

## Compared to Guidance at Last Year's Investor Conference

	<b><u>2017 Guidance</u></b> <i>Feb. 2017 Investor Conference<sup>1</sup></i>	<b><u>2017 Actual*</u></b> <i>Excl. V&amp;C</i>	<b><u>2017 Actual</u></b> <i>as Reported</i>
<b>Sales</b>	<b>\$14.1 - \$14.4B</b>	<b>\$14.7B</b>	<b>\$15.3B</b>
<b>Underlying Sales Growth*</b>	<b>(2%) - 0%</b>	<b>1%</b>	<b>1%</b>
<b>Gross Margin</b>	<b>~43.4%</b>	<b>43.2%</b>	<b>42.0%</b>
<b>EBIT Margin*</b>	<b>~17.9%</b>	<b>17.9%</b>	<b>16.4%</b>
<b>Operating Cash Flow Continuing Ops</b>	<b>~\$2.5B</b>		<b>\$2.7B</b>
<b>EPS Continuing Ops</b>	<b>\$2.47 - \$2.62</b>	<b>\$2.69</b>	<b>\$2.54</b>
<b>Dividends per share</b>	<b>\$1.92</b>		<b>\$1.92</b>
<b>Dividend to FCF Continuing Ops Ratio*</b>	<b>62%</b>		<b>56%</b>
<b>Cash Returned to Shareholders</b>	<b>~1.5B</b>		<b>\$1.6B</b>

<sup>1</sup> At the February 2017 Investor Conference, guidance did not account for results of the V&C acquisition which was completed April 29, 2017

The Emerson Global Team Exceeded February 2017 Forecast in Sales, Profits and Cash Flow. Also, Successfully Closed the Pentair Valves & Controls Acquisition. Performance in 2017 Led to Strong Orders Momentum Going Into 2018



# 2018 Investor Conference -- Fiscal 2018 Key Focus Areas

## Key 2018 Take Aways

- Achieve premium underlying sales\* growth for all of Emerson: 5% - 7%
- Drive strong earnings momentum within GAAP EPS by reaching \$3.05 - \$3.15 EPS in 2018 -- ~20% GAAP EPS growth
- Deliver another strong year of operating cash flow -- \$2.9+B -- 17% of sales
- Expected dividend per share increase of 2¢

### 1. Grow Underlying Sales\* in Both Platforms: 5% - 7%

- Deliver positive underlying sales\* growth within both platforms -- 5 - 7% EMR growth
- Return Automation Solutions to above market underlying\* growth: 6% - 8% in 2018
- Continue strong, above market underlying\* growth within Commercial & Residential Solutions -- 3<sup>rd</sup> year. Targeting another premium underlying \*sales growth year: 4% - 6% in 2018

### 2. Continue Margin Expansion and Drive V&C Operating Margins\* to 10%+ by 2<sup>nd</sup> half of 2018

- Strong profit margin performance within both platforms is important to return to Emerson consolidated margin improvement -- Especially within Automation Solutions -- Must leverage profitability at ~ 35% as sales growth returns and absorbs V&C lower margins
- Successfully integrate V&C acquisition and expand margins to deliver Automation Solutions leverage goals – fiscal 2018 earnings / cash flow accretive

### 3. Grow Operating and Free Cash Flow to Fund Growth and Shareholder Returns

- Continued focus on cash flow management as Emerson returns to growth by generating \$2.9+B in operating cash flow
- Invest \$575M of capital, enhanced by new Tax Reform
- Maintain FCF / Net Income Conversion\* ~120%

2018 Will Be an Exciting Year -- It Is an Opportunity for Both Focused Platforms Within Our Organization to Grow While Maintaining a Strong Focus on Margins and Cash Conversion -- A Strong Demonstration of Emerson's New Focused 2 Platform Strategy

# Emerson's 2018 Forecast -- Stronger Sales, Earnings, and Cash Flow Growth

	<u>2017</u>	<u>2018E Forecast</u>	<u>% Change 2017 - 18E</u>
Sales (GAAP)	\$15.3B	\$17.0 – \$17.3B	11% - 13%
Underlying Growth*	1%	5% - 7%	
Gross Margin	42.0%	~43.1%	~110 bps
EBIT Margin*	16.4%	~16.7%	~30 bps
GAAP EPS Continuing Ops	\$2.54	\$3.05 - \$3.15	20% - 24%
Dividends Per Share	\$1.92	\$1.94	+1%
Operating Cash Flow Continuing Ops	\$2.7B	~\$2.9B	+8%
Cash Returned to Shareholders	\$1.6B	~\$2.0B	

<u>Global GFI: FY 2018</u>	<u>2017-18E</u>
<u>Assumptions</u>	<u>% Change</u>
U.S.	3.5% - 4.5%
Canada	3.5% - 4.5%
Europe	3.5% - 4.5%
Middle East & Africa	3.5% - 4.5%
China	4.5% - 5.5%
Asia Pacific Excl. China	2.5% - 3.5%
Latin America	1.5% - 2.5%

## Other 2018 key assumptions:

- Currency Tailwinds ~\$0.3B
- Tax Rate: 25%-27%
- 2018 Share Repurchase: ~\$750M (\$1B by end of calendar year)
- Closed acquisitions: ~\$750M (includes Paradigm & Cooper Atkins)
- Capital Expenditures: ~\$575M, ~3.4% of sales
- Oil prices: \$50-\$70
- First year pre-tax acquisition acctg. charges: 2017 (\$93M), 2018E ~(\$45M)
- Intangibles amortization: 2017 (\$117M), 2018E ~(\$180M)

# Mature Markets: Gross Fixed Investment (GFI) Trends

## 2018 and 2019 Look Pretty Good -- GFI Not GDP!

### Canada

- Nonresidential investment continues to trend higher as business confidence remains high
- Energy investments accelerating in 2018
- NAFTA concerns, but should be resolved by 2019

**2017: 0.6%**  
**2018E: 4.0%**  
**2018E - 2021F: 3.0%**

### Europe

- **Western Europe** expected to continue to grow ~4%
- **Eastern Europe** should improve growth to 4+%
- **Russian GFI** growth should rebound as interest rates come down, and Oil & Gas prices stay firm, and investments start happening

**2017: 3.9%**  
**2018E: 4.0%**  
**2018E - 2021F: 2.5%**

### United States

- Baseline GFI growth better than expected -- driven by improved business spending
- Good GDP growth -- driven by business spending/investments and the new tax plan
- Stronger growth results in a lower unemployment rate, higher wages and improved consumer spending

**2017: 2.3%**  
**2018E: 4.0%**  
**2018E - 2021F: 3.5%**

Reflective of tax reform

### World

**2017: 2.8%**  
**2018E: 3.8%**  
**2018E - 2021F: 3.7%**

Source: IHS Economics and Emerson Management Assessment; Europe ignores impact of Ireland ~\$50B Intellectual Property investment

Mature Markets Expected to Grow ~3.5% in 2018 -- Better Than the 2.8% in 2017.  
 Emerson Expects to Deliver 5+% Underlying Sales Growth\* in Mature Markets in 2018

# Emerging Markets: Gross Fixed Investment (GFI) Trends

## 2018 and 2019 Will Accelerate Due to Strong Growth in USA and Europe

### Middle East & Africa

- Saudi Arabia's economy expected to emerge from recession in 2018
- Capital expenditures expected to improve, especially around energy and downstream investments
- New power investments are happening

2017: 1.2%

2018E: 3.7%

2018E - 2021F: 4.5%

### China

- Steady capital investments continue around export expansion, environmental improvements and new technology industries
- Exports will add to China's economic growth and new investments

2017: 2.9%

2018E: 5.0%

2018E - 2021F: 5.0%

### Latin America

- Mexico's economy finally improving and now expects solid fixed investment growth in 2018 and 2019
- Brazil's economy is still weak and we don't see much improvement in our end markets in 2018
- NAFTA concerns, but should be resolved by 2019

2017: (2.0%)

2018E: 2.0%

2018E - 2021F: 3.0%

### Asia Pacific (Excluding China)

- India's GFI growth will improve to ~5% with solid industrial / environmental investments
- Southeast Asia's GFI growth of ~4.5% will be driven by all industrial sectors

2017: 3.5%

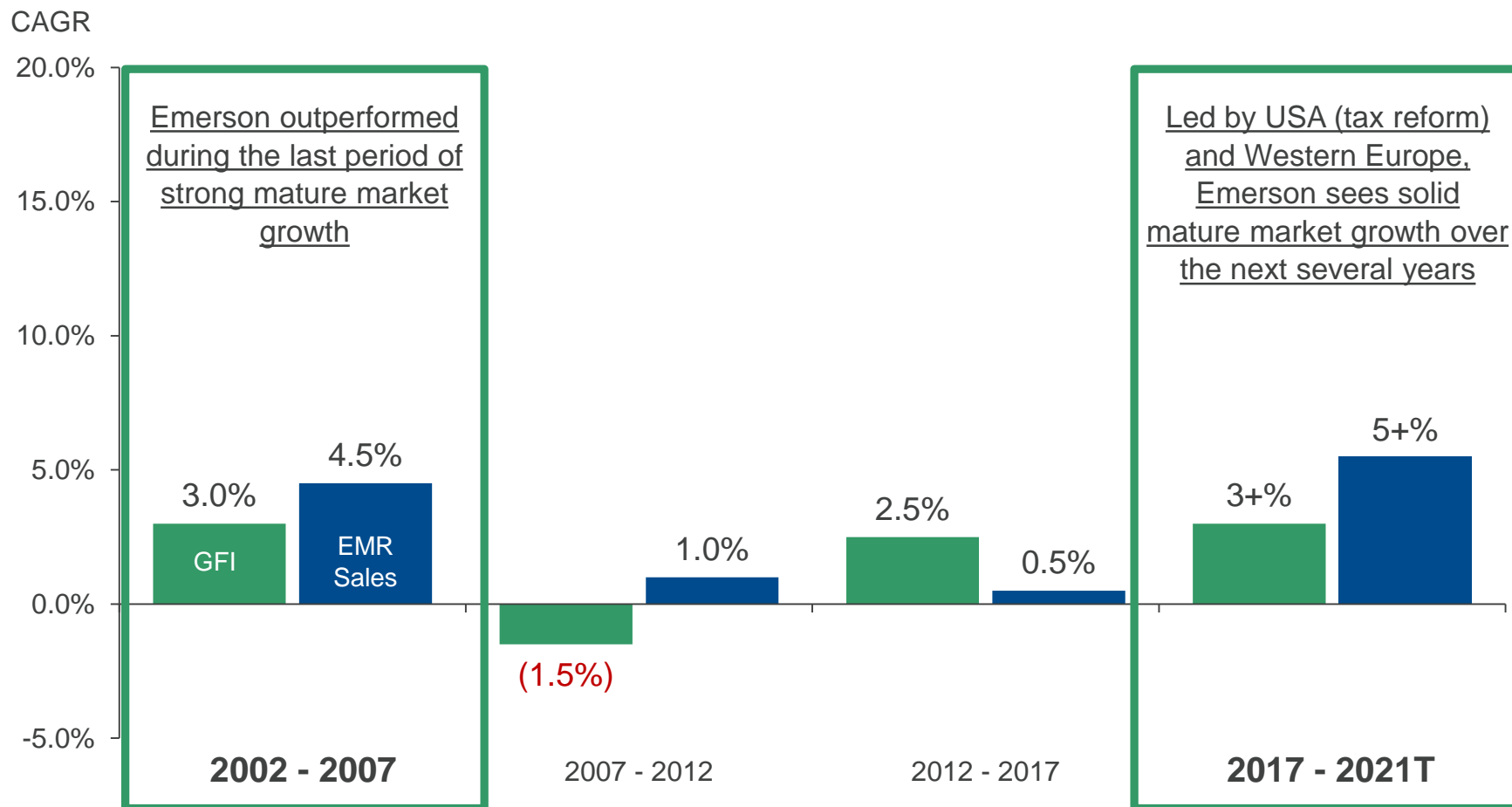
2018E: 2.9%

2018E - 2021F: 3.7%

Source: IHS Economics and Emerson Management Assessment

Emerging Markets Expected to Grow ~4.5% in 2018, Outgrowing Mature Markets, Emerson Expects to Deliver 6 - 7% Underlying Sales Growth\* in Emerging Markets in 2018

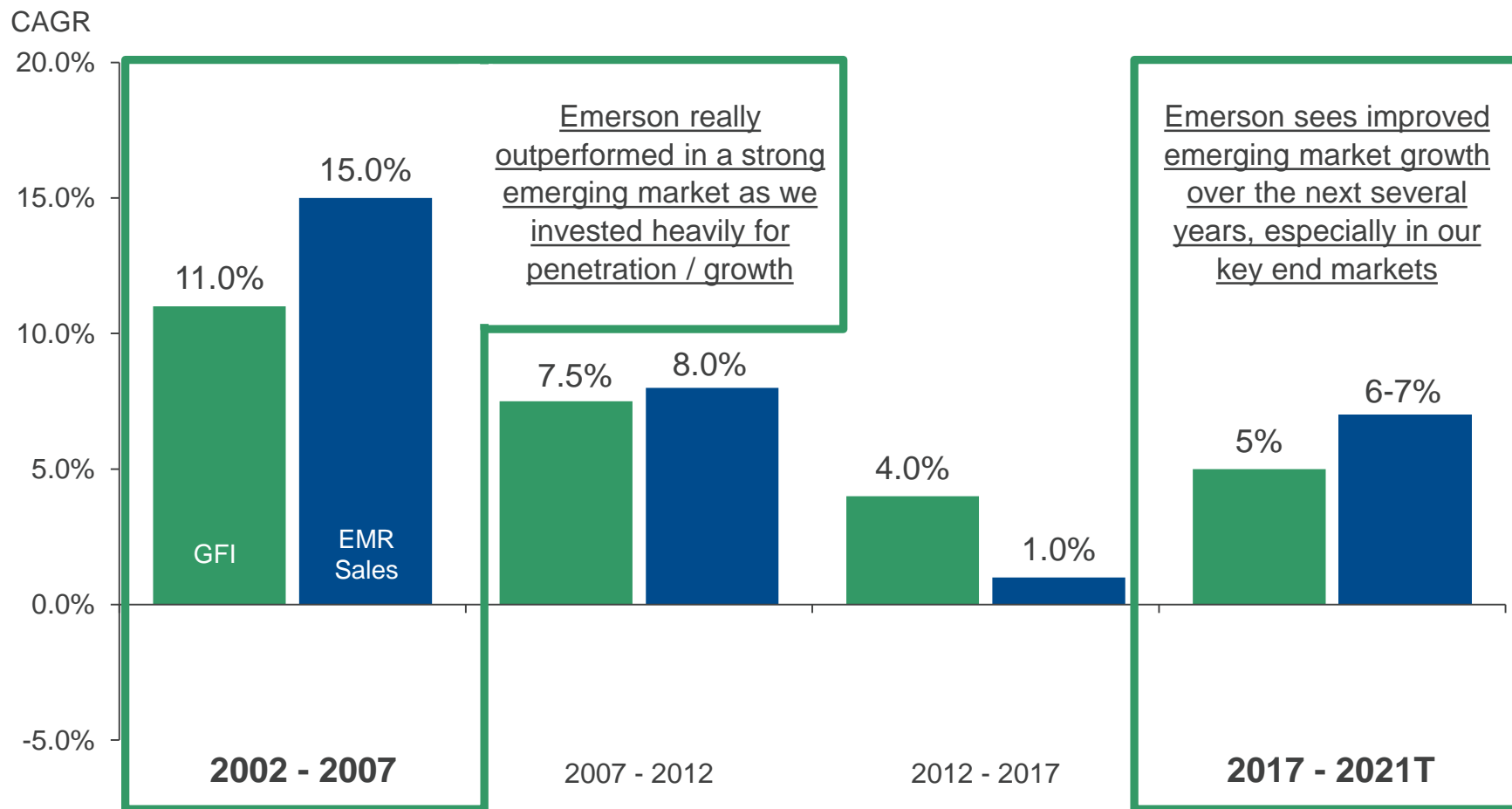
# Mature Markets: GFI and Emerson Sales Growth Rates



Source: GFI - IHS Economics; EMR Sales - Underlying sales excluding acquisitions, divestitures and currency impact\*

Mature Market Growth Should Increase to ~3% -- With a Stronger North America and Western Europe, Emerson Should Drive Premium Growth With This Economic Scenario -- Similar to 2002 - 2007

# Emerging Markets: GFI and Emerson Sales Growth Rates

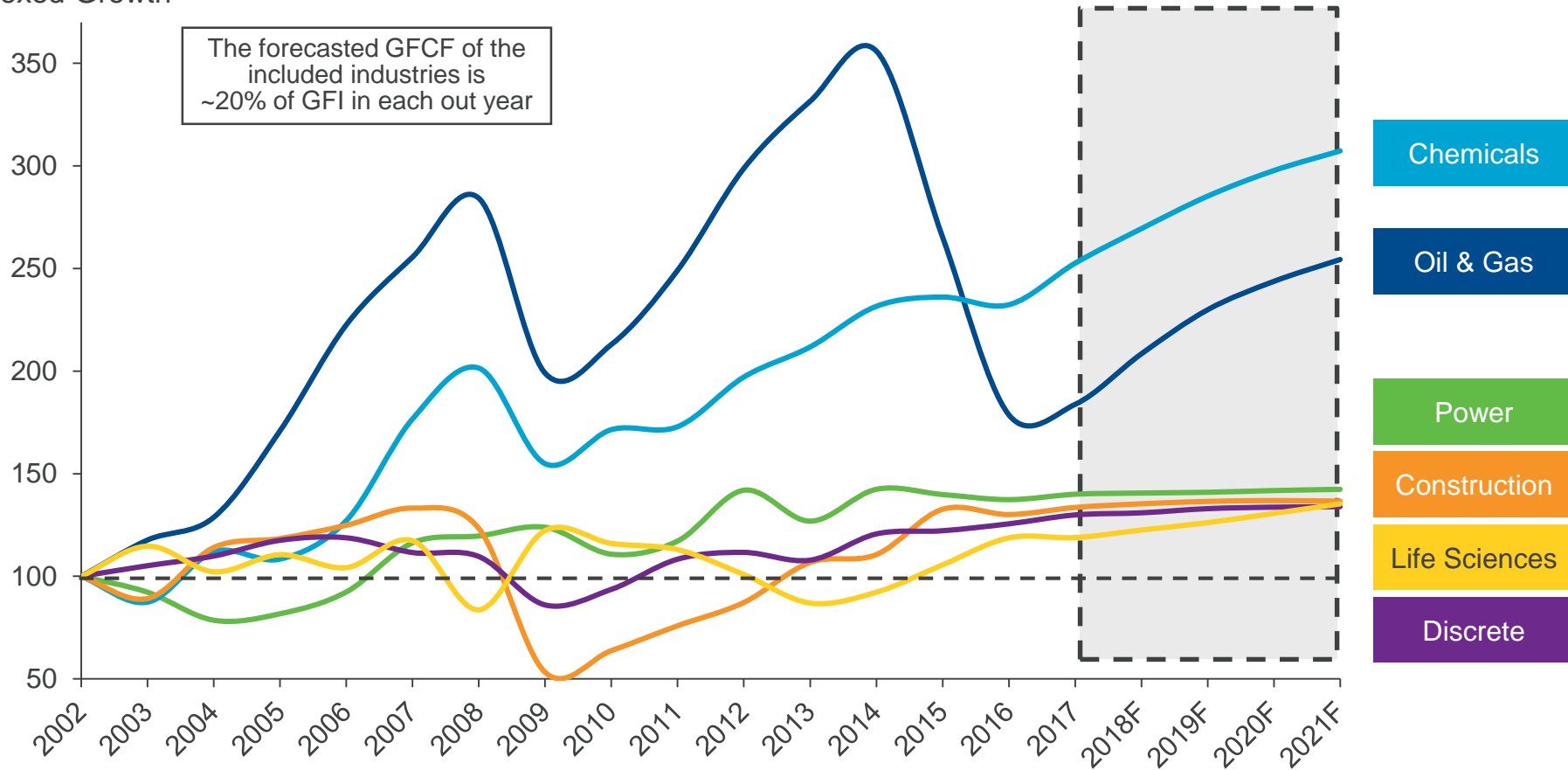


Source: GFI - IHS Economics; EMR Sales - Underlying sales excluding acquisitions, divestitures and currency impact\*

Expected to Outpace Mature Market GFI Over the Next 3 Years, We Will Leverage Our Strong Position in Emerging Markets to See Solid 6% - 7% Underlying Sales Growth\* -- Like We Did in 2002 - 2007 Time Period -- Lower Growth, but Larger Stronger Base

# U.S. Gross Fixed Capital Formation (GFCF), a Subset of GFI, Forecasts --- Post U.S. Tax Reform Enactment

Indexed Growth



Source: GFCF - IHS Economics, January 2018

Gross Fixed Capital Formation Is Showing Steady or Accelerating Capital Expenditure Forecasts Across Our Core End Markets

# U.S. Tax Reform Positively Impacts Our Core Markets and Incremental Capital Investment

## Oil & Gas

“At ExxonMobil, we plan to **invest more than \$50 billion** over the next five years to expand our business **in the United States**. These investments are underpinned by the unique strengths of our company and **enhanced by the historic tax reform** recently signed into law.... The recent changes to the U.S. corporate tax rate coupled with smarter regulation create **an environment for future capital investments.**”

Darren Woods, ExxonMobil CEO

## Chemicals

“We see the comprehensive **tax reform** in the United States as a **catalyst for increased domestic capital investment**, which will take advantage of enhanced competitiveness and pro-business investment incentives.”

Andrew Liveris,  
DowDuPont  
Executive Chairman

## Oil & Gas

“From a business standpoint, tax reform is quite transformational... there will be **a lot of capital attracted to the U.S.** in my opinion, just speaking from BP’s perspective”

Bob Dudley,  
BP CEO

## Life Sciences

“**Tax reform** clearly **provides incentives** for us to **invest heavily** in innovation and advanced technologies **here in the U.S.**, and that is exactly what we will do... we expect to **invest on the order of \$2.5 billion in capital expenditures in the U.S.** over the next 5 years.”

Robert Bradway, Amgen CEO

## Cold Chain

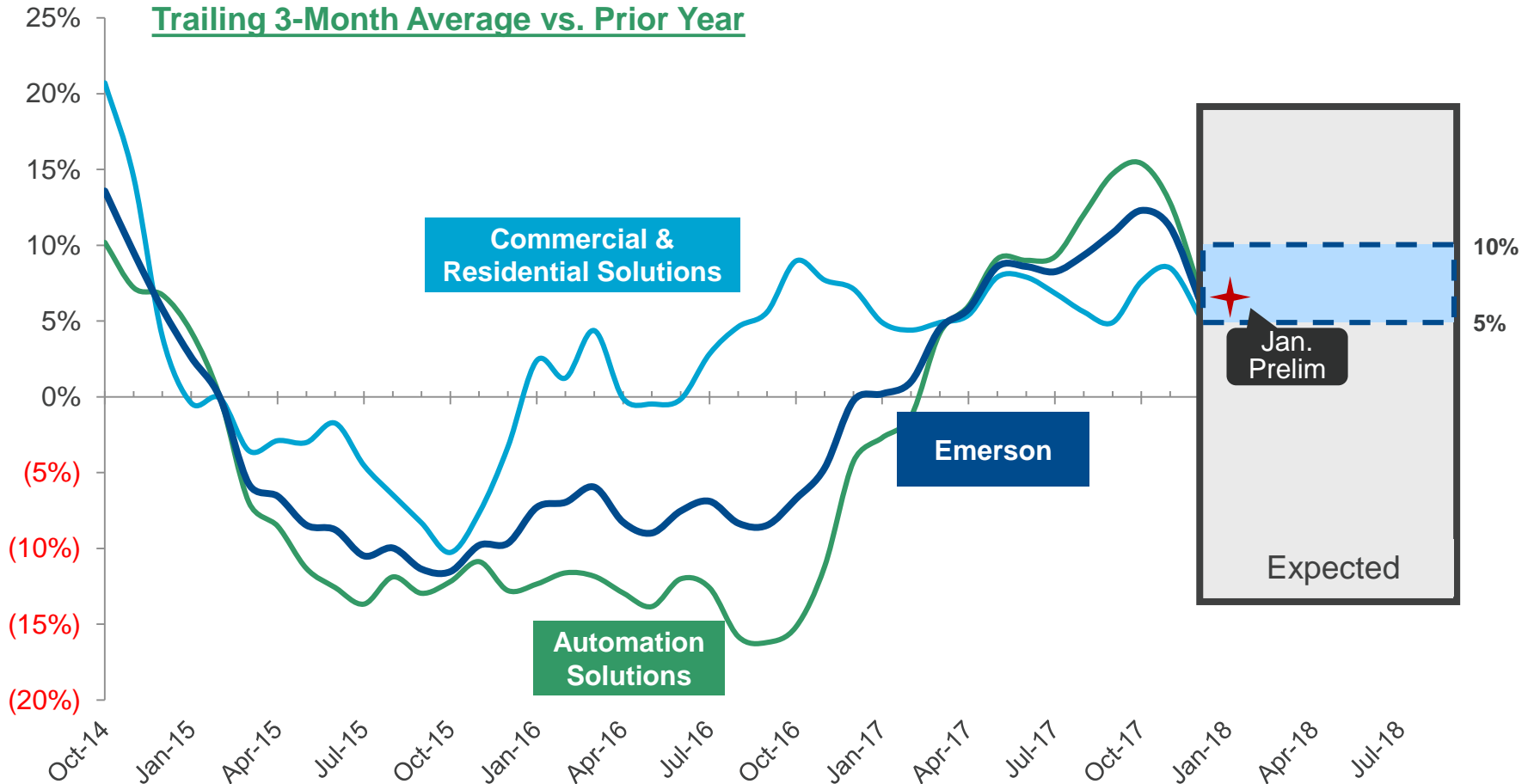
“The benefit that the franchises and the company will receive as **a result of U.S. tax reform**, we are further accelerating our investment in Experience of the Future in the U.S. ... Between the company and our franchises **over the next 2 years, we will invest approximately \$6B** to transform the U.S. business.”

Steve Easterbrook, McDonald’s CEO

Additional Investments Brought on by Tax Reform Are Not ‘Shovel Ready’ Projects -- Companies Are Evaluating Opportunities and We Anticipate Orders and Sales Will Come Starting in Late 2018 and Going Into 2019 and 2020



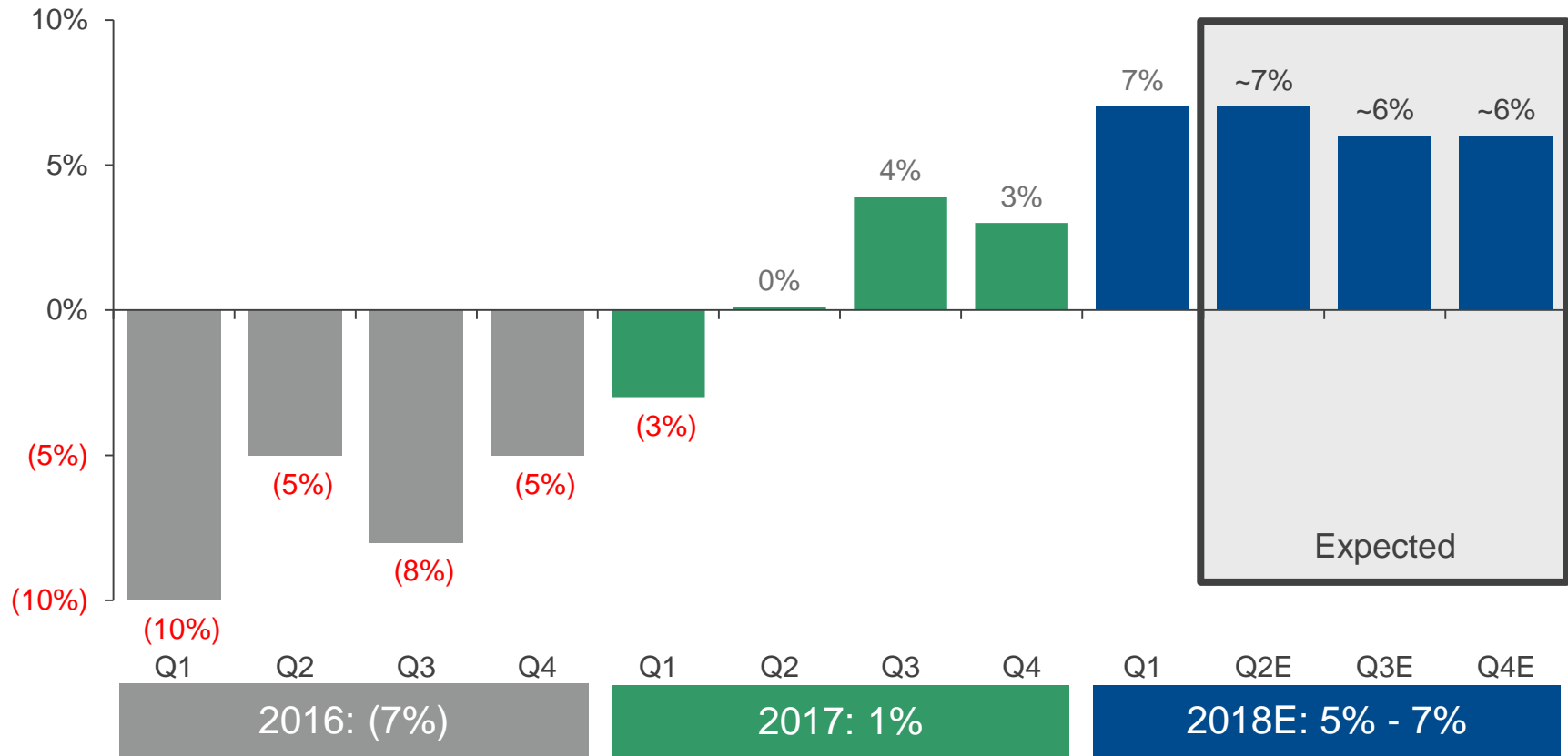
# Underlying Order Trends -- Continue to Support Solid 2018 Underlying Sales Growth



Emerson's Orders Are Expected to Rebound Into the 5 - 10% Range for the Next 10 Months. Comparisons Are Tough, but Underlying Demand Is Still Very Good. We Will Bounce Between the 5 - 10% Range -- + or - Some Months

# Quarterly Underlying Sales Growth\* -- Maintaining Positive Momentum

Emerson underlying sales growth\* (year-over-year change by quarter)



Note: All data shows Emerson continuing operations

Throughout 2017 We Saw Global Stabilization, Recovery, and Increased Investments.  
 Now 2018 Is Seeing a Stronger and Improving Business Investment Environment  
 Driving Our 5% - 7% Underlying Growth\* Year for Emerson

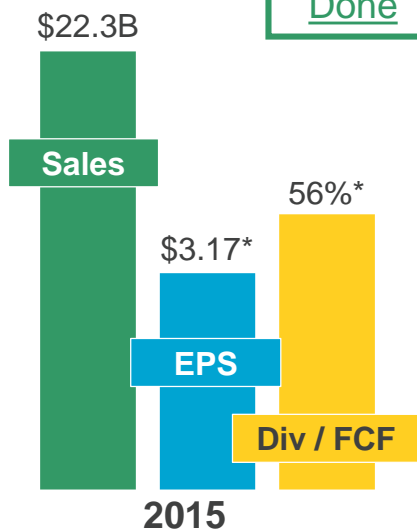
# Three Phases of Our June 2015 Transformation Journey Announced After a 12 Month Internal Review

## Phase 1

Repositioning Emerson around two key platforms

- Executed divestitures
- Announced V&C Acquisition

✓ ✓  
Done

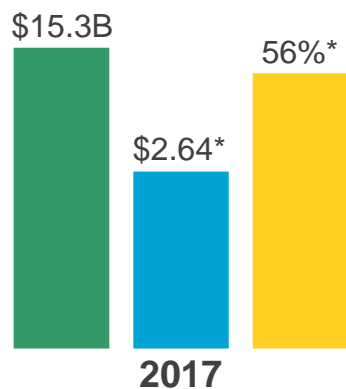


## Phase 2

Building the new Emerson core and returning to profitable sales, earnings, and cash flow growth

- Orders have turned
- Foundation for growth in place

✓ ✓  
Done



## Phase 3

Position the Company for the Next Generation

Accelerating core growth:

- Strong end market growth
- Technological innovation
- Bolt-on acquisitions

Continue to build the synergies between our two world class platforms

- Expand solutions to customers in common end markets
- Leverage software to create actionable insights from our data-rich technologies

We continuously evaluate our portfolio for divestitures and strategic acquisitions in both platforms

30-Jun-15

30-Sep-16

30-Sep-17

30-Sep-21

The Path Is Clear and We Are Charging Forward – The Core Company Is Strong and Has Many Value Creation Opportunities Through Organic and Acquisitive Growth

# Emerson's Two Core Business Platforms

We concentrate on the most complex and important challenges facing the world in the process, industrial, commercial, and residential markets

## AUTOMATION SOLUTIONS



**\$204B Market**  
**~\$11.1B 2018E Sales**  
**~53,500<sup>1</sup> Employees**

- Making the greatest use of the world's valuable resources
- Helping nations move their economies forward in a responsible way
- Enabling the performance and safety of industry when it matters most
- Advancing the industries that are the backbone of daily life

## COMMERCIAL & RESIDENTIAL SOLUTIONS

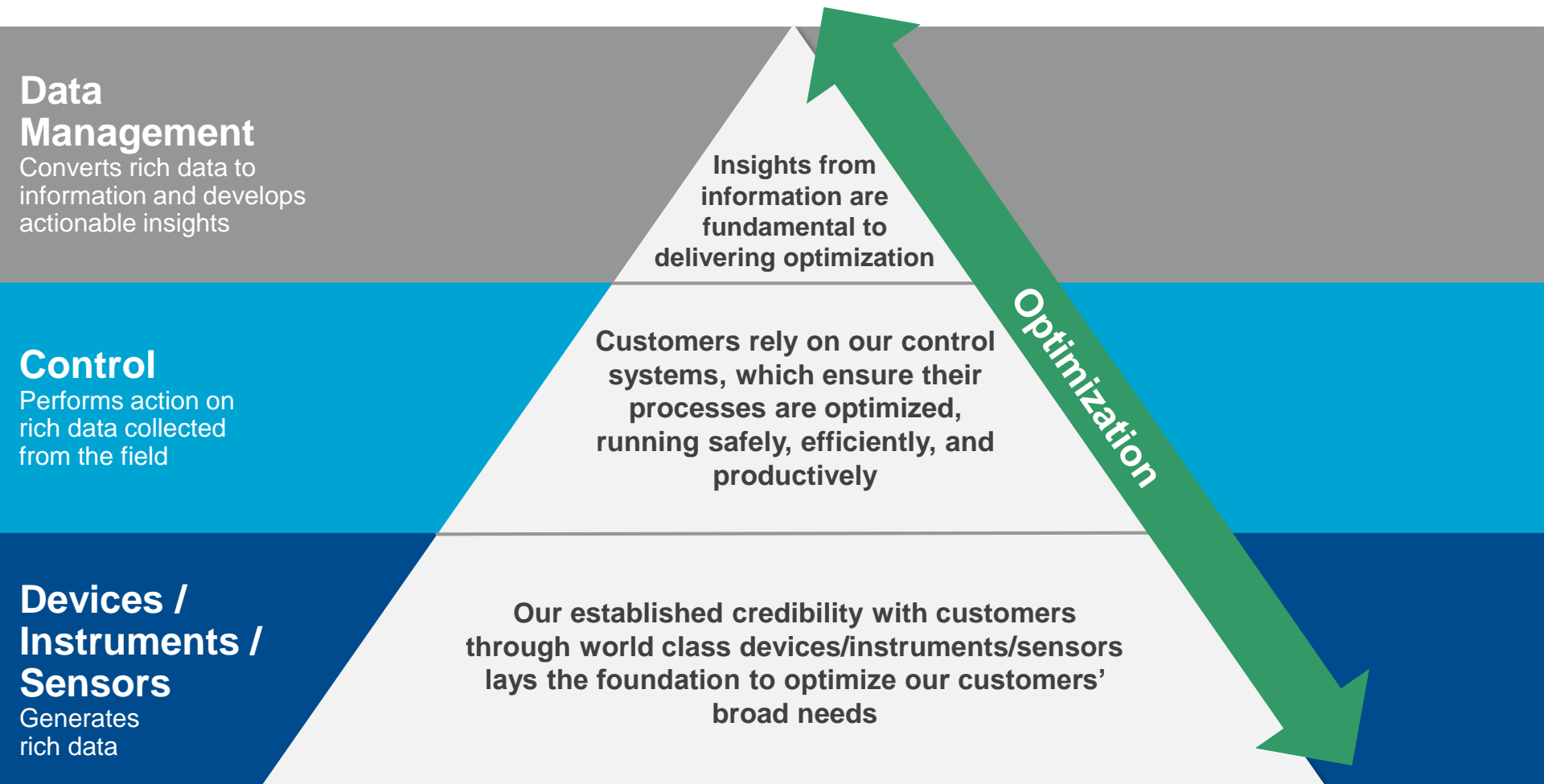


**\$39B Market**  
**~\$6.0B 2018E Sales**  
**~26,500 Employees**

- Ensuring human comfort and health
- Protecting food quality and sustainability
- Advancing energy efficiency and environmental conservation
- Creating sustainable infrastructure
- Continuing momentum at our Helix Innovation Center

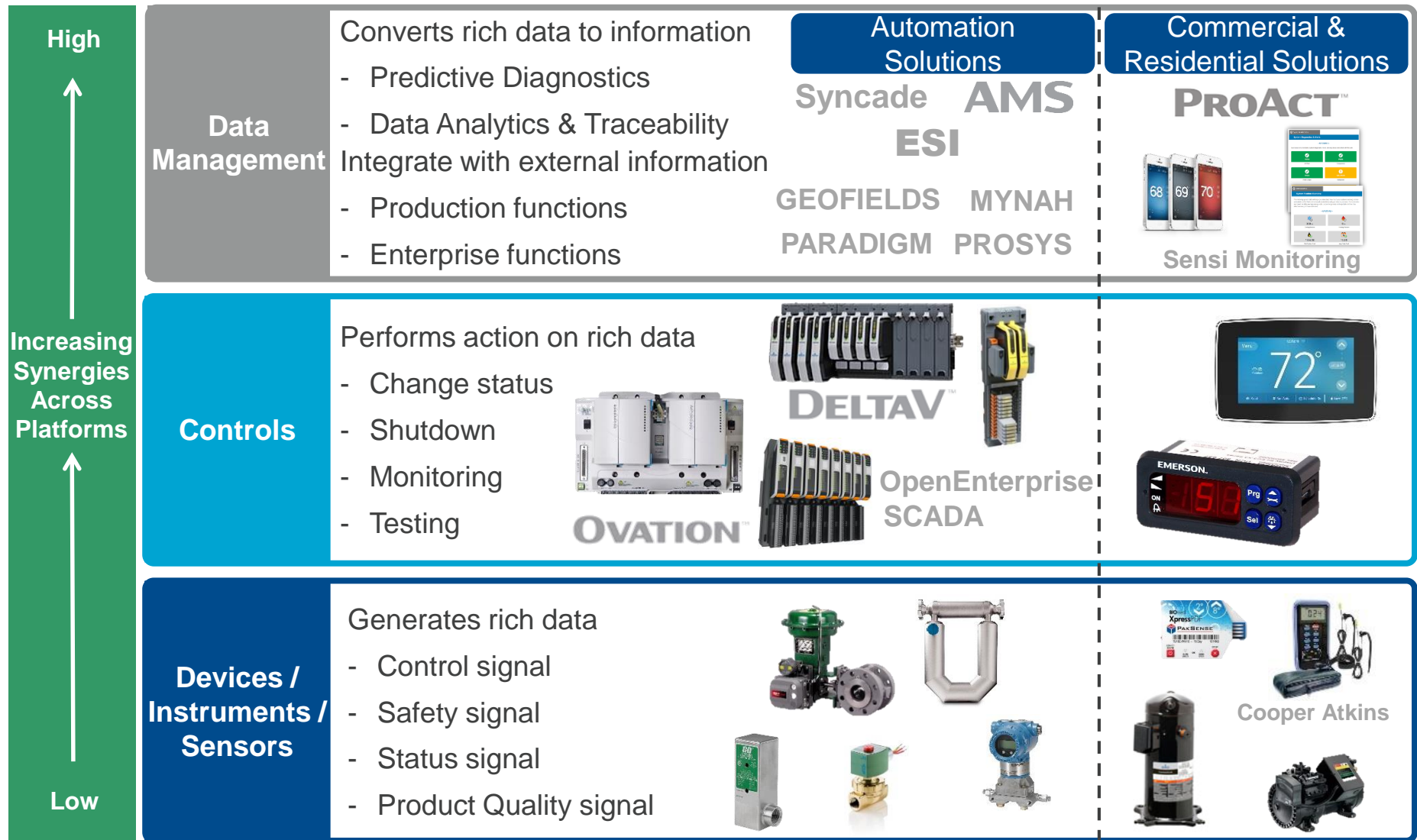
<sup>1</sup>Reflects number of employees at 9/30/17, including the impact of the Valves & Controls acquisition

# Emerson's Two Platform Strategy: Continue to Move Up the Technology Pyramid Utilizing Our Strong Position in the Devices / Instruments / Sensors and Control Levels



Emerson Has Tremendous Credibility With Our Customers and We Are Uniquely Positioned to Provide Optimized Solutions for Our Customers Up and Down the Technology Pyramid

# Emerson Offers Intelligent Devices, Instruments, Sensors, Controls, and Software Across the Two Platforms

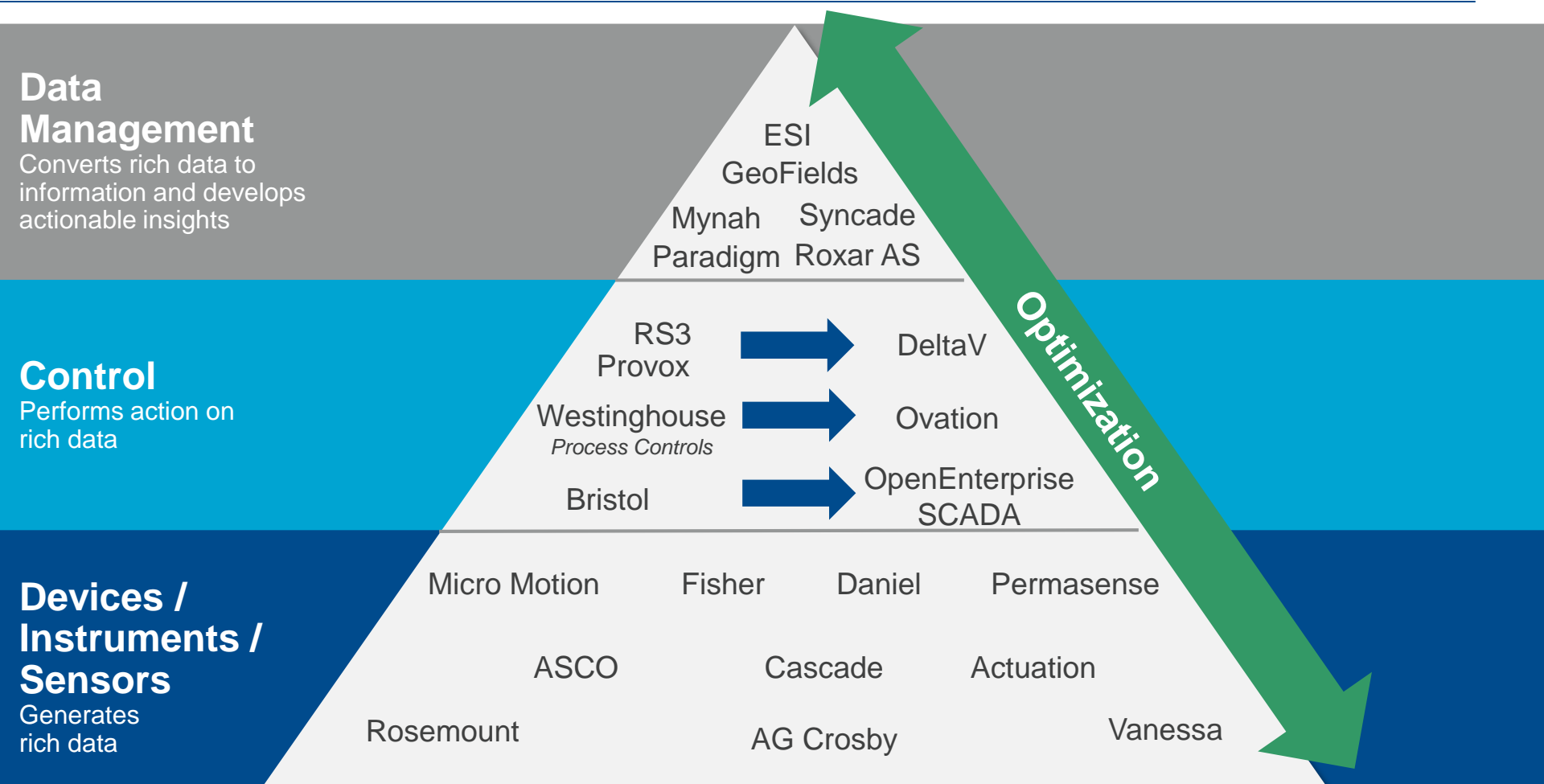


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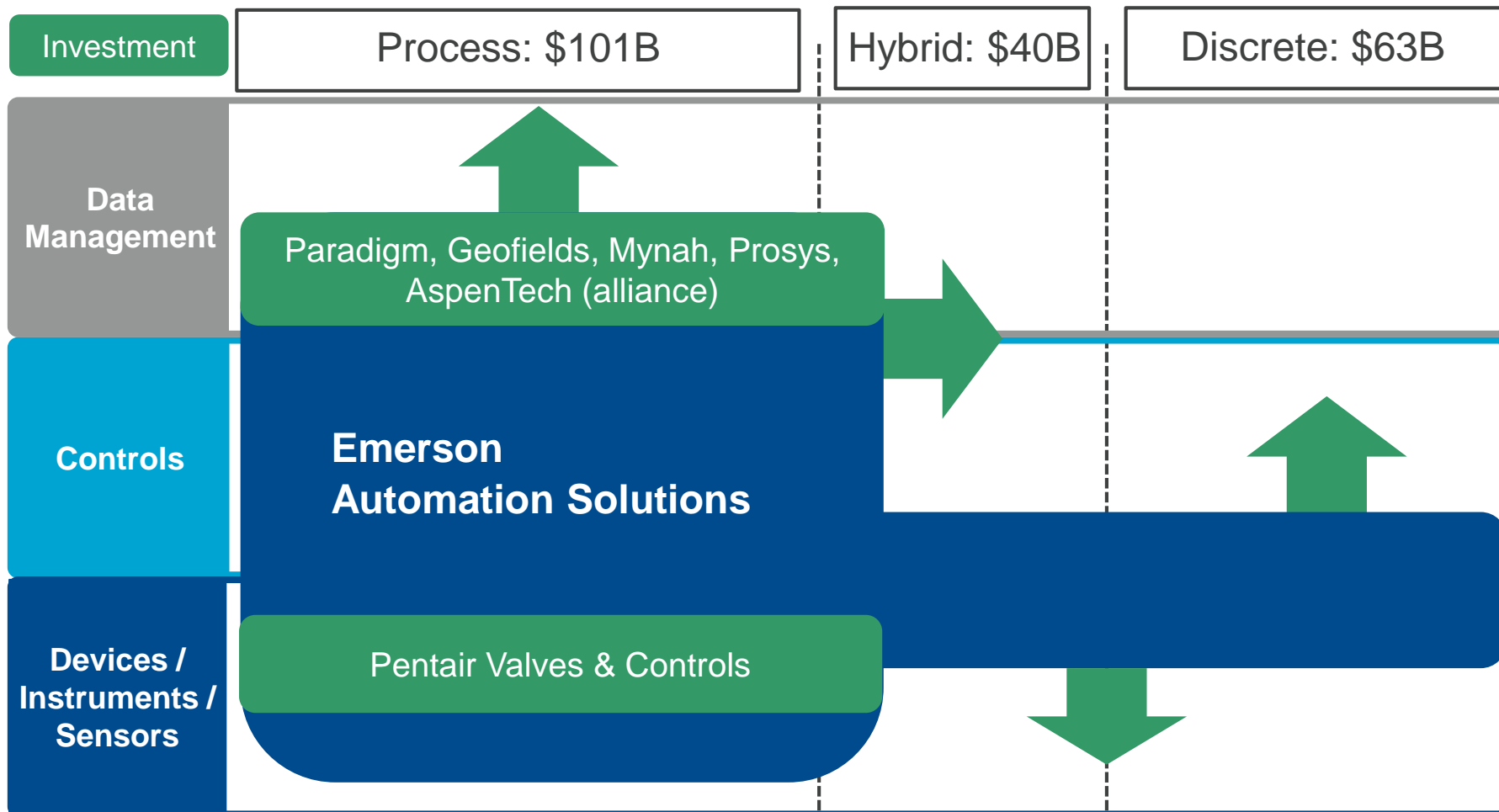


# Automation Solutions: A Complete Portfolio of Solutions for Our Customers



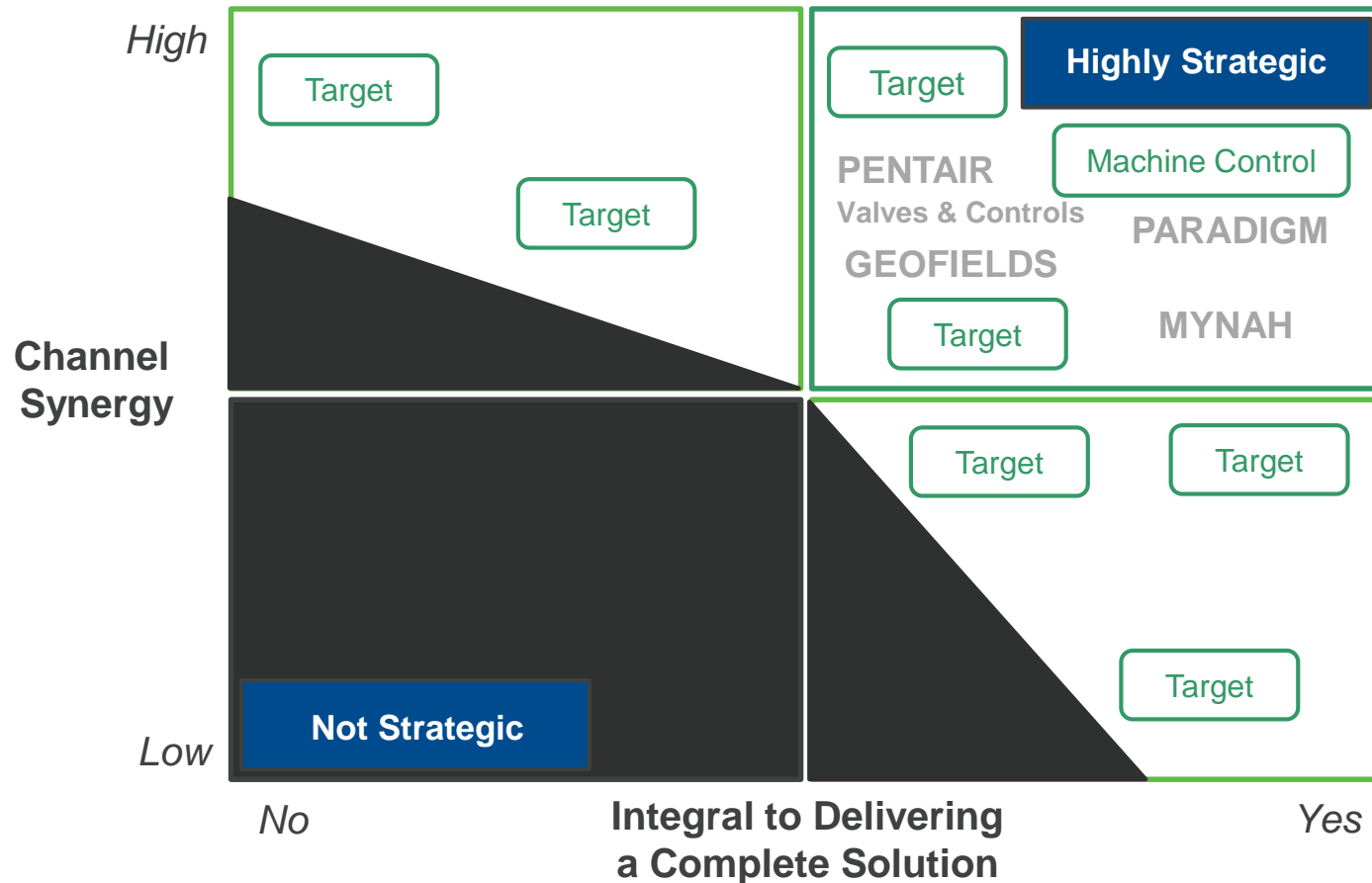
Automation Solutions Has Built a Leading Portfolio Through Organic Technology Developments and Acquisitions Over the Last 20 Years -- In Order to Develop Optimized Solutions for Customers

# Acquisitions and Partnerships Will Play a Key Role in Becoming a Complete Automation Player



Multiple Paths to Expand Offerings -- Significant Progress Since Introducing This Framework in our February 2016 & 2017 Investor Conferences --  
 Much More To Be Done

# Automation Solutions Has Built Our Global Franchise on Strong Technology Development and Acquisitions, and the Successful Integration of These Acquisitions



Opportunity for Acquisitions Across All Technology Layers and End Markets -- A Strong Focus on Discrete and Hybrid Niches for the Next Several Years for Internal Investments and Acquisitions

# We Are Continuously Investing and Innovating Our Products and Solutions Across All Platforms

Provide a Broader / Deeper Solution

Innovate

Acquire



Digital Valve Controller



CHARMs

DELTA V™



Wireless



Rosemount 3051 Platform



Lifecycle Services

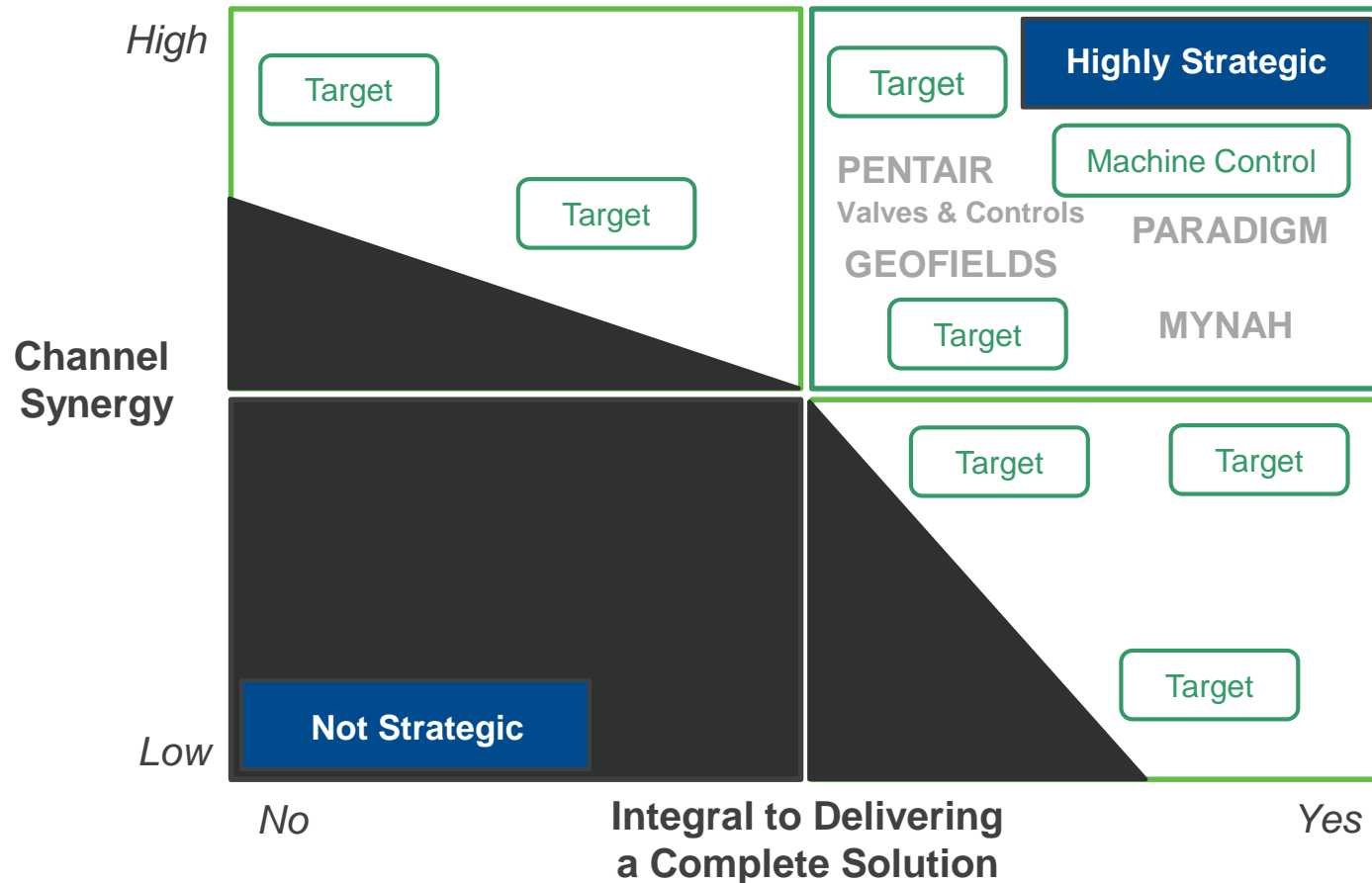
Fisher Controls  
Acquired in 1992

Rosemount  
Acquired in 1976

FMC Blending & Transfer Systems  
Acquired in 2016

We Are Providing Our Customers a Solution That Will Improve Decision Making, Avoid Health and Safety Incidents, Extend the Life of Their Critical Assets, and Enhance Operational Excellence

# Automation Solutions Has Built Our Global Franchise on Strong Technology Development and Acquisitions, and the Successful Integration of These Acquisitions



Opportunity for Acquisitions Across All Technology Layers and End Markets -- A Strong Focus on Discrete and Hybrid Niches for the Next Several Years for Internal Investments and Acquisitions

# We Are Continuously Investing and Innovating Our Products and Solutions Across All Platforms

Provide a Broader / Deeper Solution

Innovate

Acquire



GO Switches

TopWorx  
Acquired 2008



G3 Fieldbus Electronics

ASCO  
Acquired 1985



F-Series Compact, Drainable Coriolis Flow and Density Meters

Micro Motion  
Acquired 1984



Aerosol Microleak Detection System

Cascade Technologies  
Acquired 2014

We Plan to Acquire, Invest, and Innovate in Order to Build Upon Our History as a Leader in Sensing and Control to Provide the Full Discrete / Hybrid Solution

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# Automation Solutions Continues to Invest Across Global Facilities in Order to Drive Innovation

## Systems & Solutions

- Austin, TX
  - Modular Control (PK)
  - Web based HMI
- Pittsburgh, PA
  - Simulation
- Manilla, Philippines
  - Microgrid (OCC100)
  - Reliability software platform
  - Emerson Export Engineering Center
- Pune, India

## Flow

- Boulder, CO
  - Next generation Coriolis
  - IIOT flow apps
  - Pervasive multiphase
  - Ultrasonic flow technology
  - Flow Technology Center
- Stavanger, Norway
- Houston, TX
- Nanjing, China

## Measurement & Analytical

- Shakopee, MN
  - Pressure, temperature, & new sensing technologies
  - Wireless
- Singapore
  - New analytical instruments
  - IIOT apps

## Discrete & Industrial

- Rosemont, IL
- Florham Park, NJ
  - Next generation LED lighting
  - Fluid control
- Louisville, KY
  - Industrial Applications
- Houston, TX

## Final Control

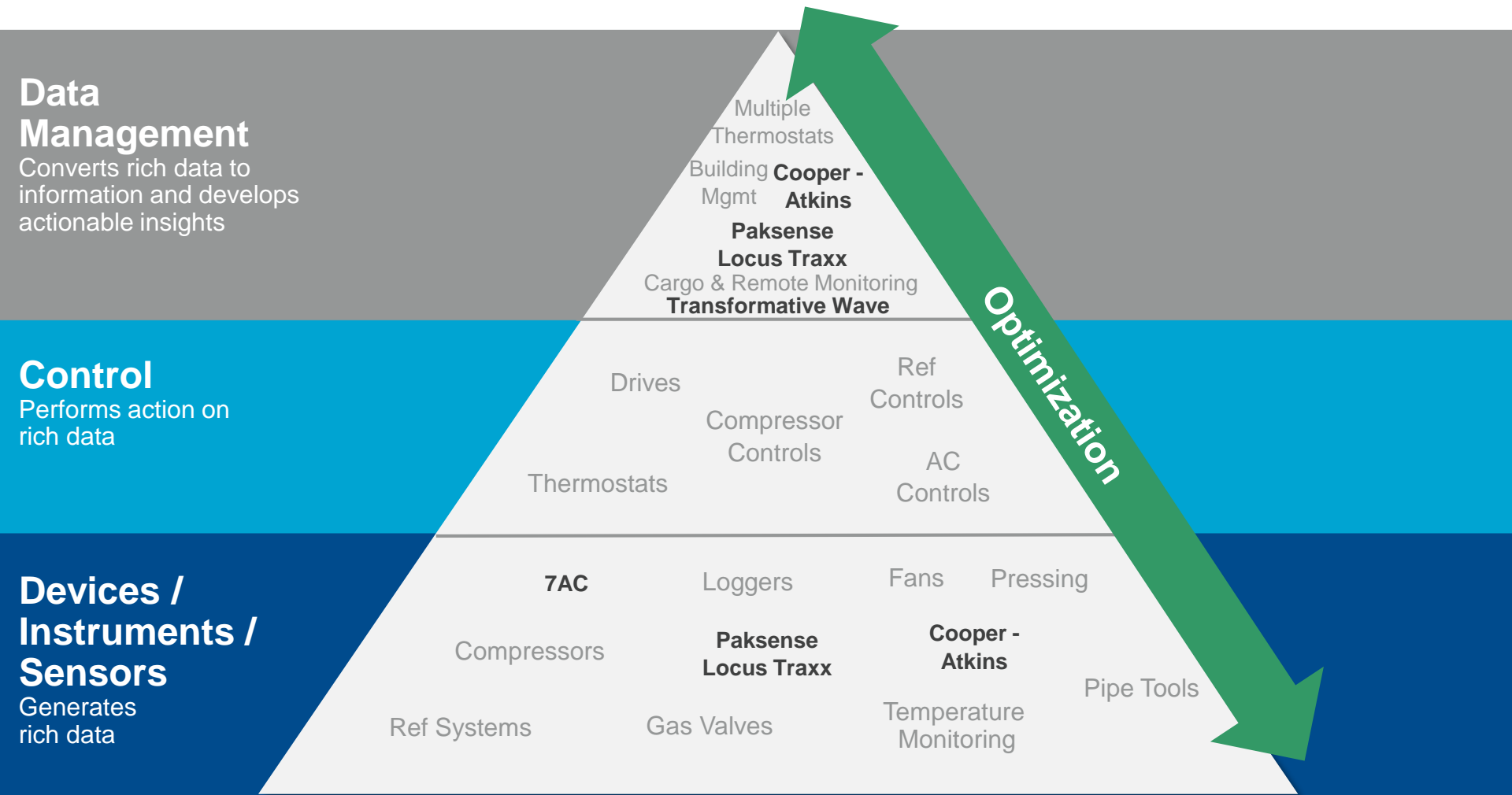
- Marshalltown, IA
  - Additive manufacturing
  - Next generation DVC & RFID
- Singapore
  - Valve actuation technologies
- Houston, TX



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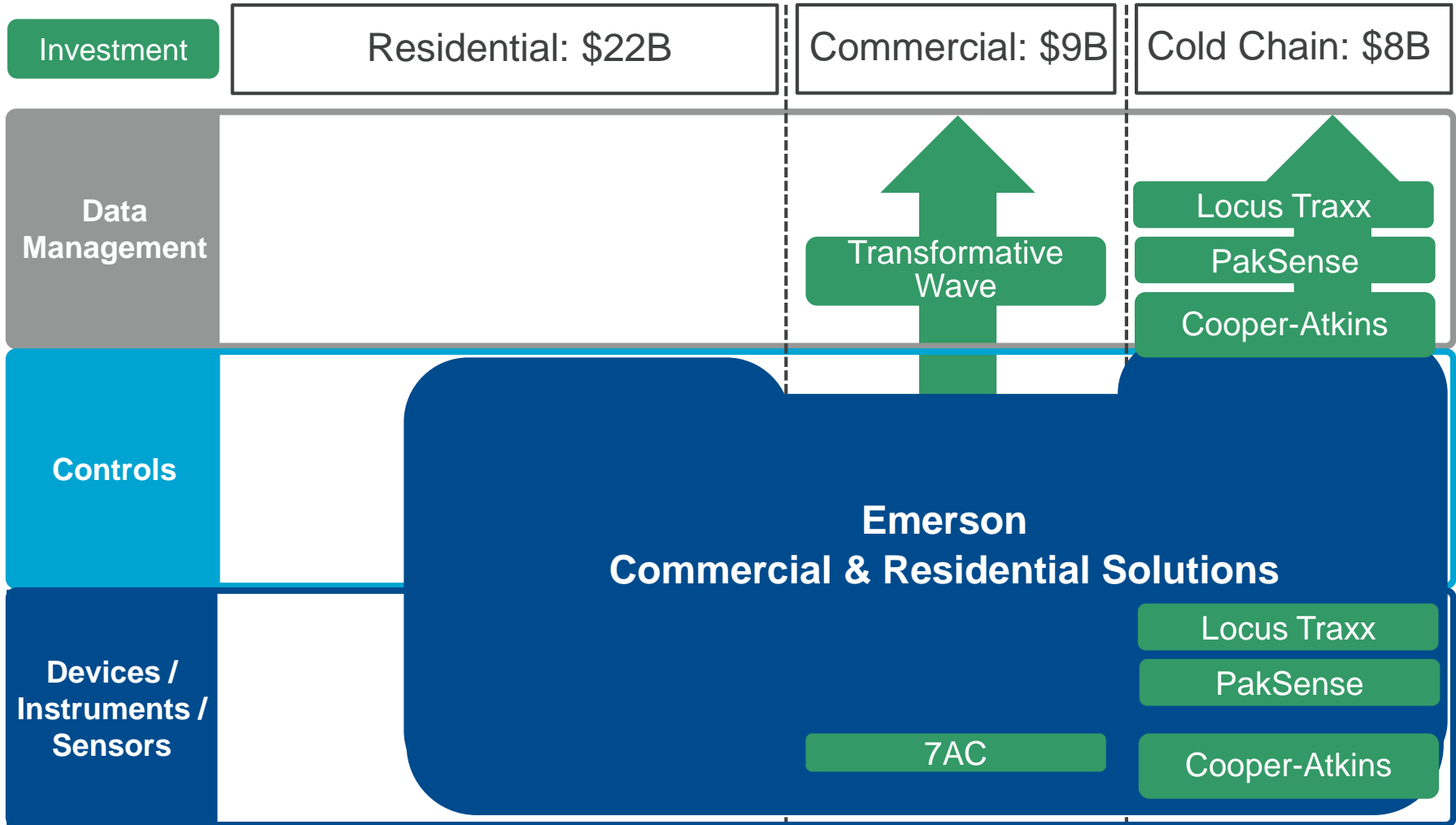
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# Commercial & Residential Solutions Are Moving Up the Technology Pyramid Utilizing Intelligent Devices, Controls, and Software Across the Platform



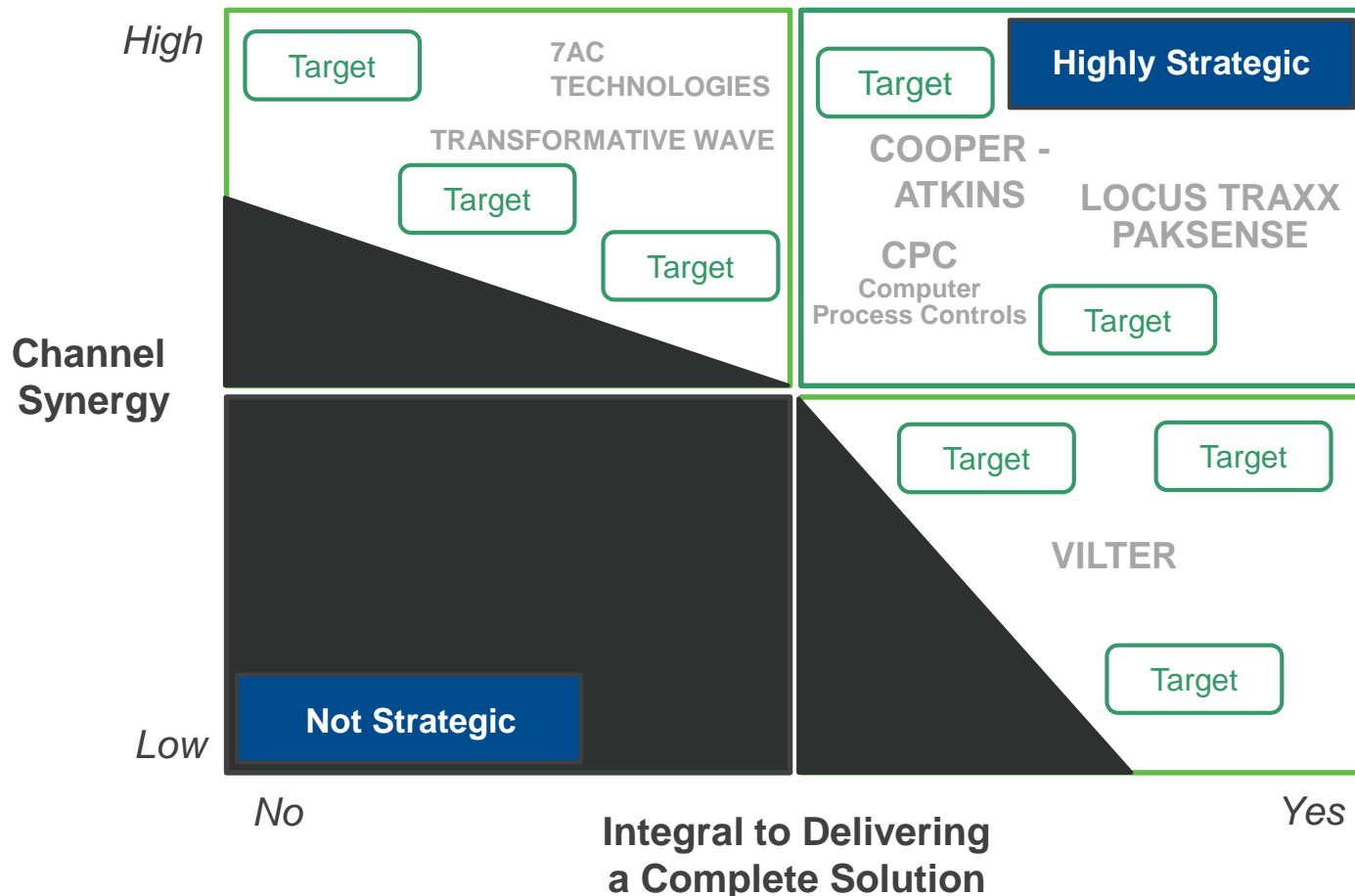
Commercial & Residential Solutions Is Utilizing New Product Programs, Early-Stage Investments, Helix Innovation, and Acquisitions to Fill Out Key Capabilities

# Acquisitions, Partnerships, and New Software Development Will Play a Key Role



Commercial & Residential Solutions Continues to Expand its Solutions Portfolio Through Acquisitions and New Internal Software and Hardware Development

# Robust Acquisition Activity in Commercial & Residential Solutions



Opportunity for Acquisitions Across All Technology Layers and End Markets, the Majority Are Smaller and New Technologies That Connect With Our Core Solution Capabilities and Broaden / Deepen Our Capabilities

# We Are Continuously Investing and Innovating Our Products and Solutions Across All Platforms

Provide a Broader / Deeper Solution



Innovate

Acquire



Condensing Unit

Copeland  
Acquired in 1986



ProAct

Computer Process Controls (CPC)  
Acquired in 1996



Controllers for Small and Medium Compressor Racks

Dixell  
Acquired 2009



Temperature Monitoring

Cooper - Atkins  
Acquired 2018

We Continuously Invest and Innovate Across Our Business in Order to Provide a Solutions Offering to Our Customers

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# Commercial & Residential Solutions Continues to Invest Across Global Facilities in Order to Drive Innovation

## Cold Chain

- Dayton, OH (Helix)**
  - Sidney, OH**
  - Suzhou, China**
  - Aachen, Germany**
- Modular refrigeration systems
  - Commercial kitchen energy management
  - Integrated thermal storage
  - Ammonia scroll technologies

## Heating & Air Conditioning

- Dayton, OH (Helix)**
  - Sidney, OH**
  - Suzhou, China**
  - Aachen, Germany**
- Residential indoor air quality controls
  - Simple building management systems
  - Compressor modulation
  - Low global warming refrigerants

## Tools & Home Products

- Racine, WI**
  - Elyria, OH**
  - St. Louis, MO**
  - St. Truiden, Belgium**
- Food-load sensing in waste disposers
  - RIDGIDConnect data management
  - Hybrid AC/DC vacuum technologies

## Sensors & Controls

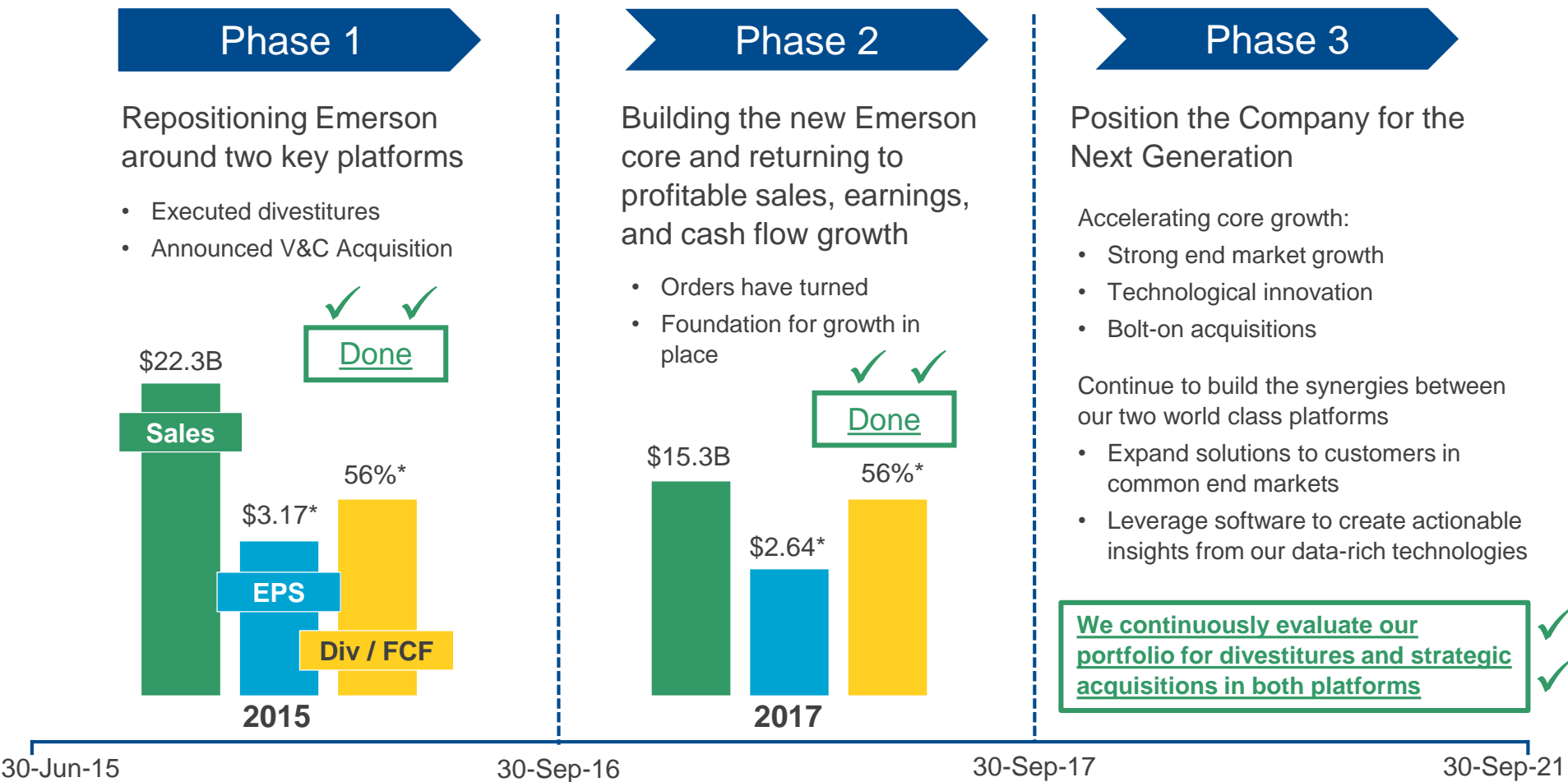
- St. Louis, MO**
  - Mansfield, OH**
- HVAC / IoT monitoring
  - WirelessHART power meter
  - High temperature smart packaged sensor

## Electronics & Solutions

- Atlanta, GA (Helix)**
  - Belluno, Italy**
- IoT cellular sensors
  - Temperature sensor system
  - Machine learning algorithms



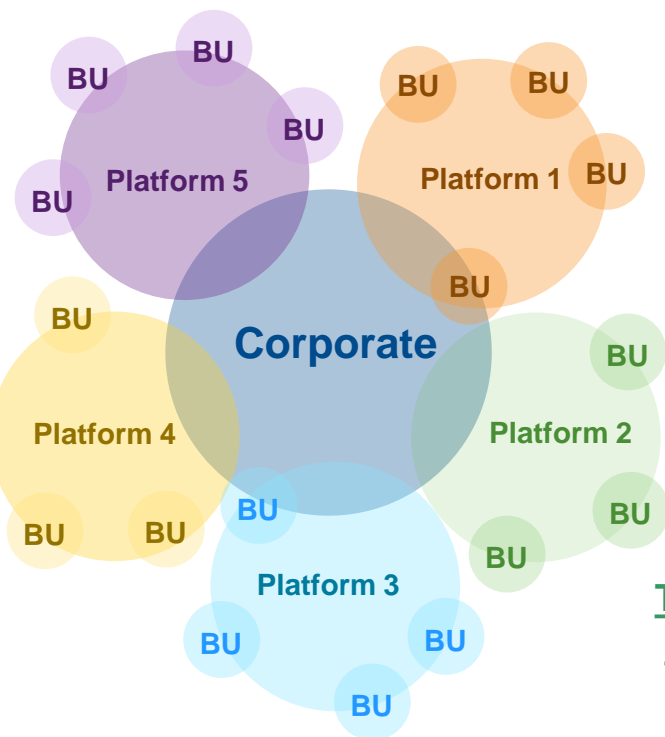
# Three Phases of Our June 2015 Transformation Journey Announced After a 12 Month Internal Review



The Path Is Clear and We Are Charging Forward – The Core Company Is Strong and Has Many Value Creation Opportunities Through Organic and Acquisitive Growth

# Corporate Structure and Platform Interface: Re-evaluating the Right Touch Points

2015



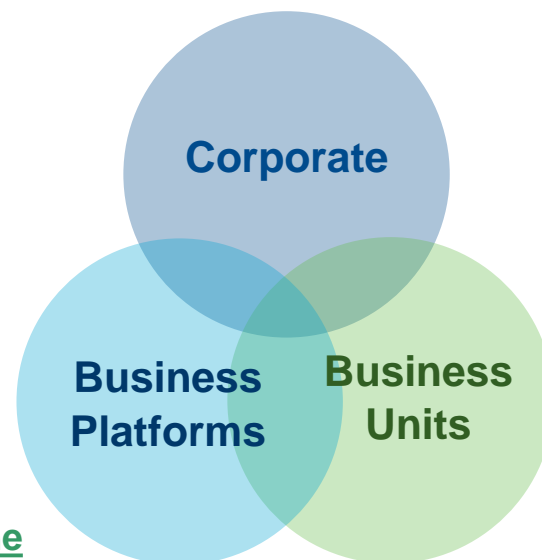
2016 - 2017

1<sup>st</sup> Wave of  
Evaluation Began  
in Phase 2

Task Force  
Subset of OCE  
led by CEO

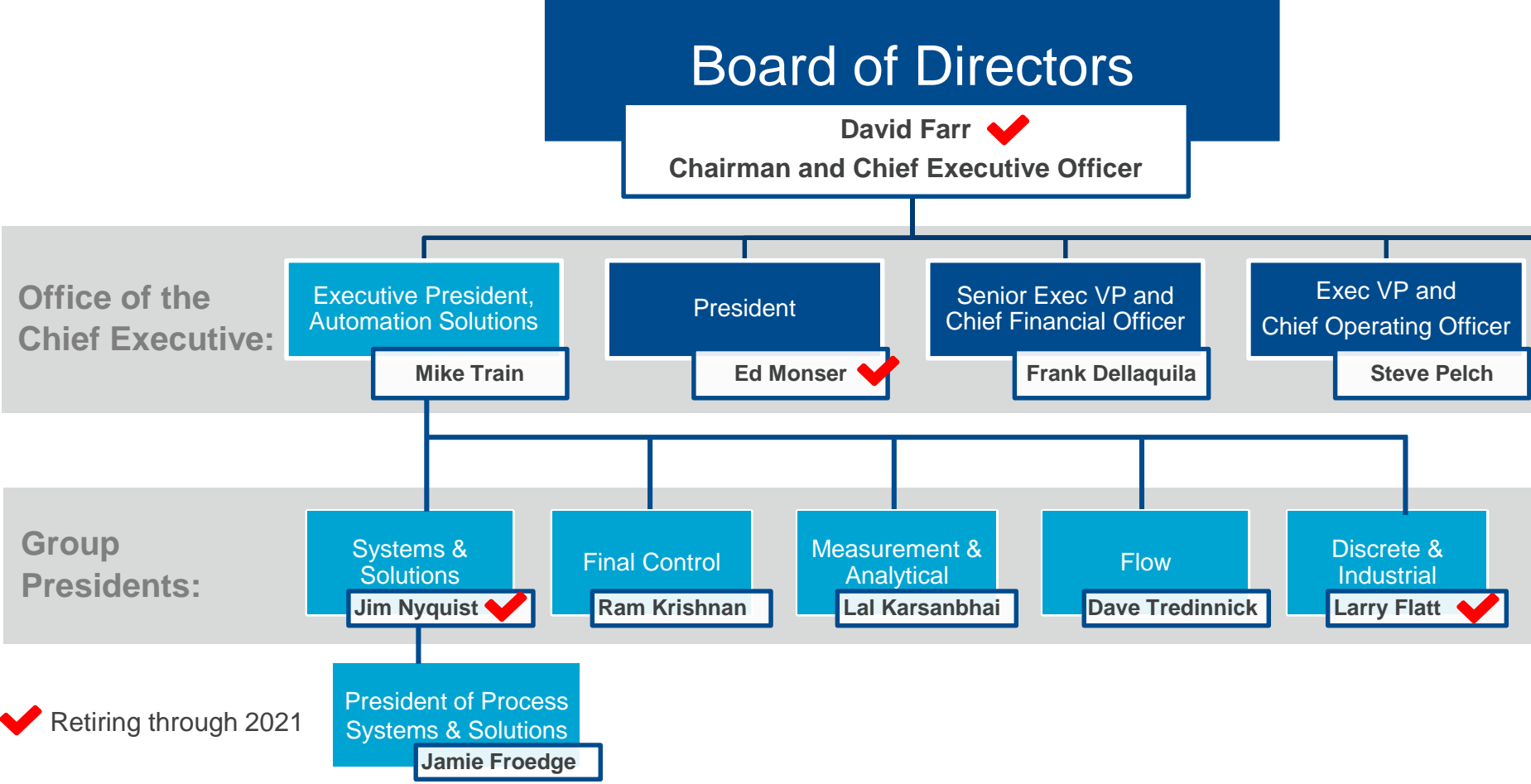
This second phase started in the  
late summer of 2017 and will be  
completed by 09/30/18

2018



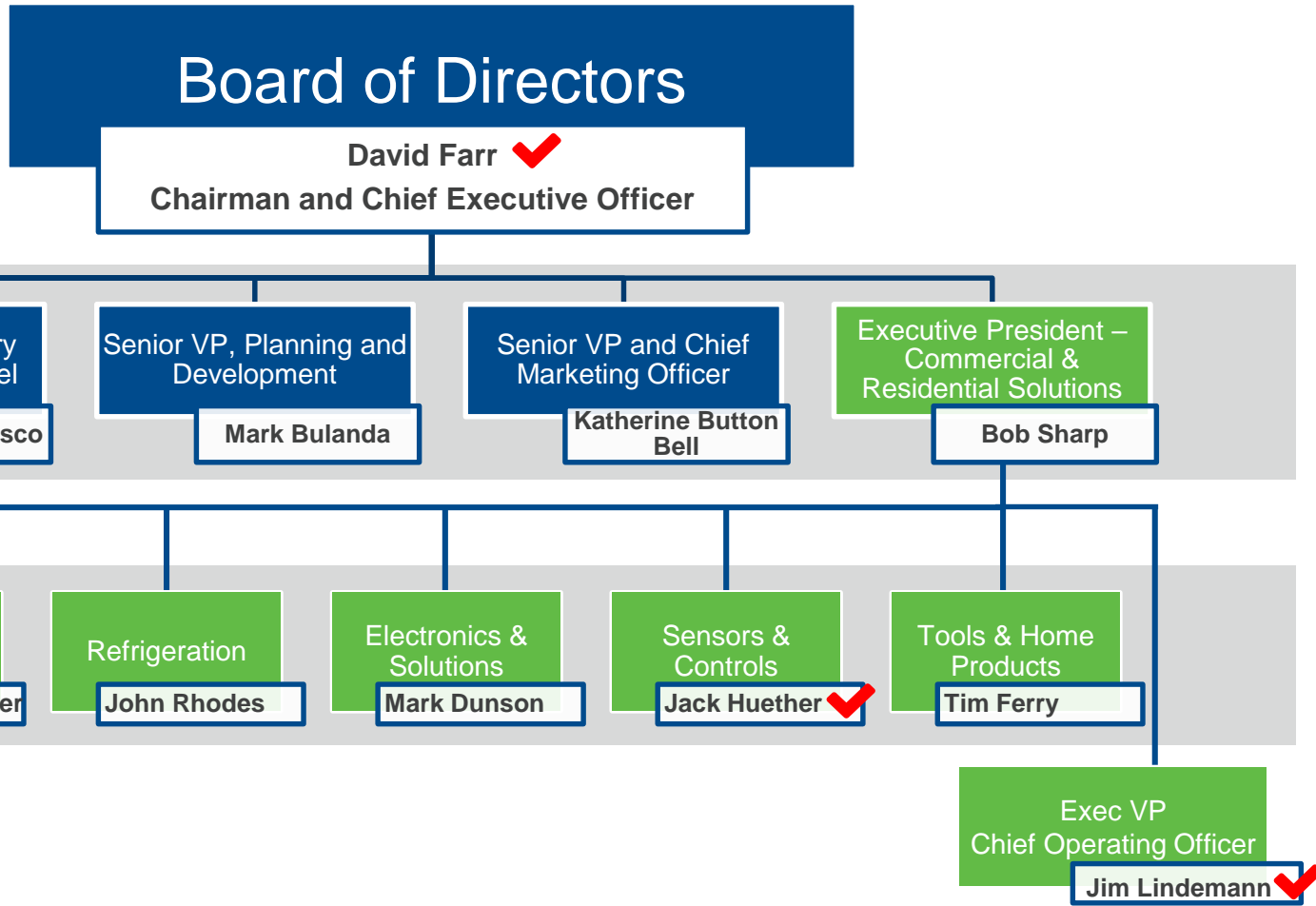
We Must Optimize the Right New Touch Points Relative to Corporate and Platforms / Business Units to Ensure Governance, Compliance, and Oversight --- While Reconfirming Accountability in the Most Efficient / Cost Effective Manner, The Right Balance Between Governance / Cost / Speed / Efficiency

# Organization Update -- Changes Will Continue to Unfold Through 2021



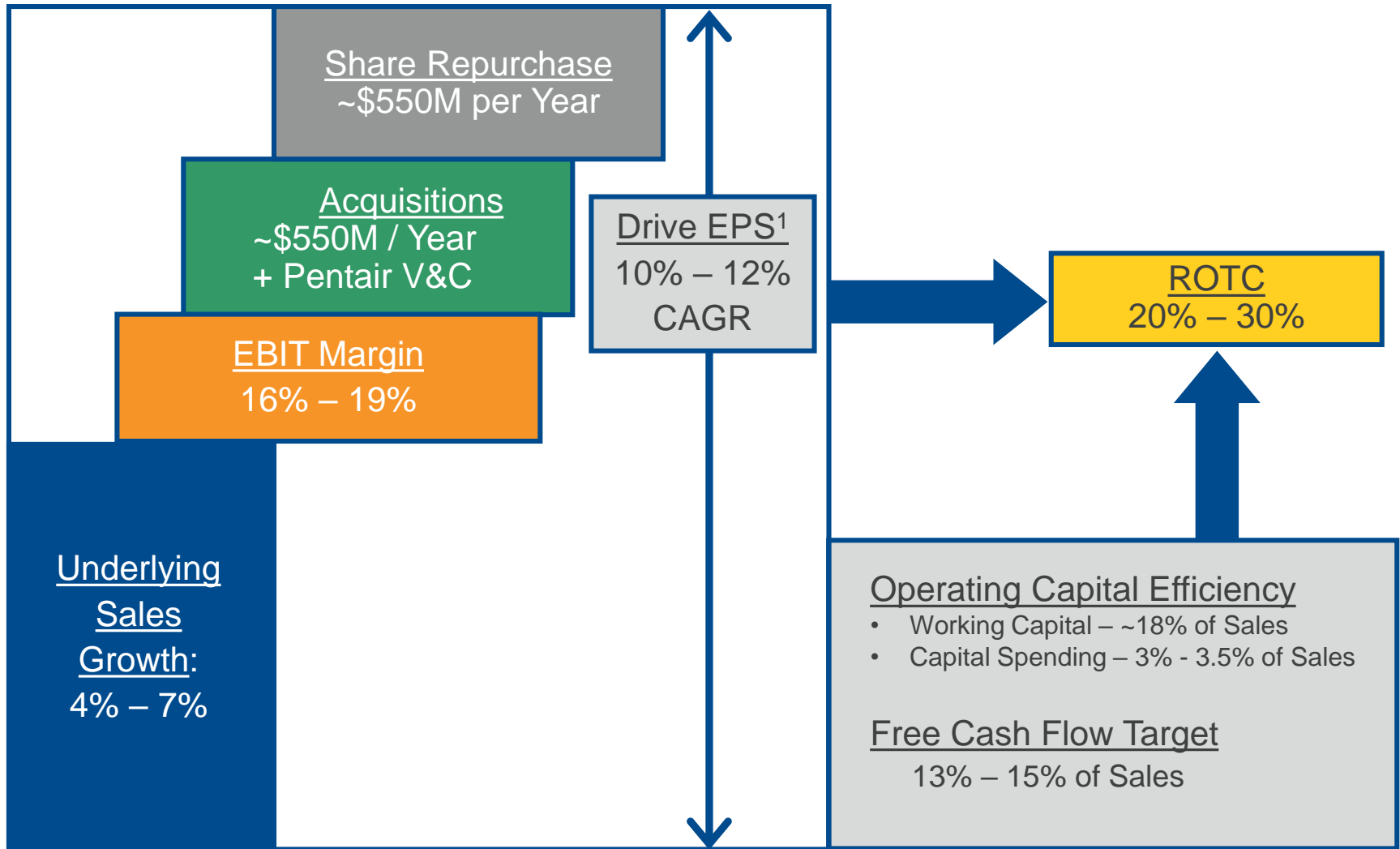
The New Organizational Structure Will Help Drive Our Transformation to a More Focused and Growth-Oriented Company... Then There Will Be an Orderly Transition to the Next Chairman and CEO

# Organization Update -- Changes Will Continue to Unfold Through 2021



The New Organizational Structure Will Help Drive Our Transformation to a More Focused and Growth-Oriented Company... Then There Will Be an Orderly Transition to the Next Chairman and CEO

# Emerson's Shareholder Value Creation Model 2016 - 2021 -- Should be a Solid Growth Period



<sup>1</sup> Excludes Tax Reform impact – (with tax reform ~13%)

# 2018 Key Messages Highlighting Financial Plan Versus 2017 Investor Conference

## Economic Conditions

- Improving underlying markets -- key / critical global economies aligned for growth
  - Automation Solutions is just starting the 2017 - 2020 growth cycle
  - Commercial & Residential Solutions is 7 quarters into their growth cycle

## Margins

- Platform margin targets unchanged for 2020 / 2021
  - Automation Solutions: ~19%
  - Commercial & Residential Solutions: ~25%

## Earnings per Share

- Impact to 2021:
  - ~\$0.30 increase from operational improvements and share repurchase
  - ~\$0.35 increase from tax reform

## Operating Cash Flow

- Impact to 2021:
  - ~\$0.3B increase from operational improvements
  - ~\$0.2B increase from tax reform

## Acquisitions

- Plan unchanged, significant capacity for more if strategic assets become available -- **Currently evaluating adding \$4B of additional spend for acquisitions and share repurchase**

## Capital Expenditures

- Average of ~3.3% - 3.5% of sales through 2021 -- slightly increased

## Share Repurchases

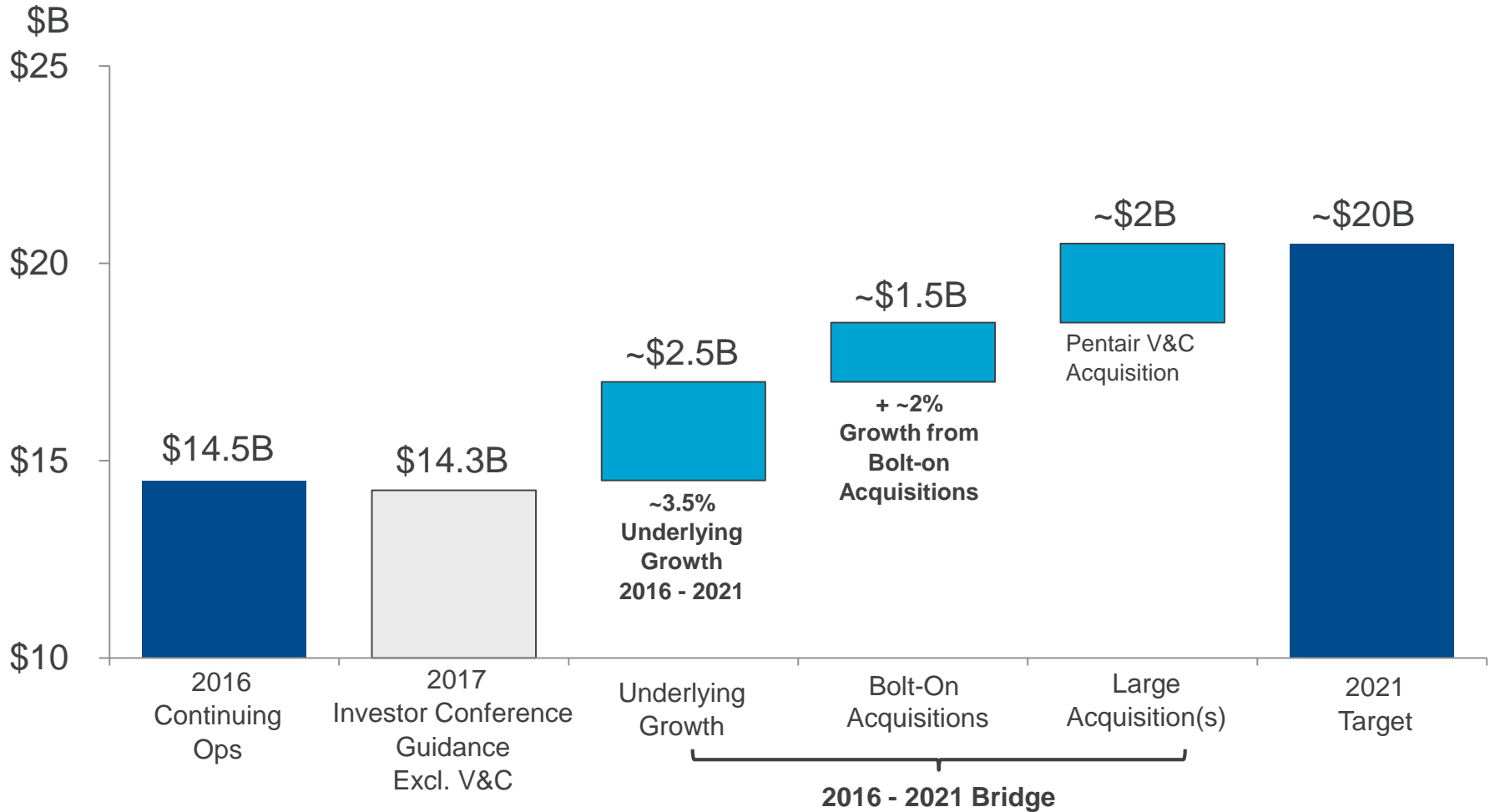
- ~\$600M increase to plan through 2021 and front end loaded --- However, capital allocation plans / strategy will be re-evaluated in 2018 under new tax reform

## Dividends

- Plan to increase dividend versus current pace in 2020, but sooner if we get back to 45% free cash flow coverage by 2019

# 2016 Bridge to 2021T Sales

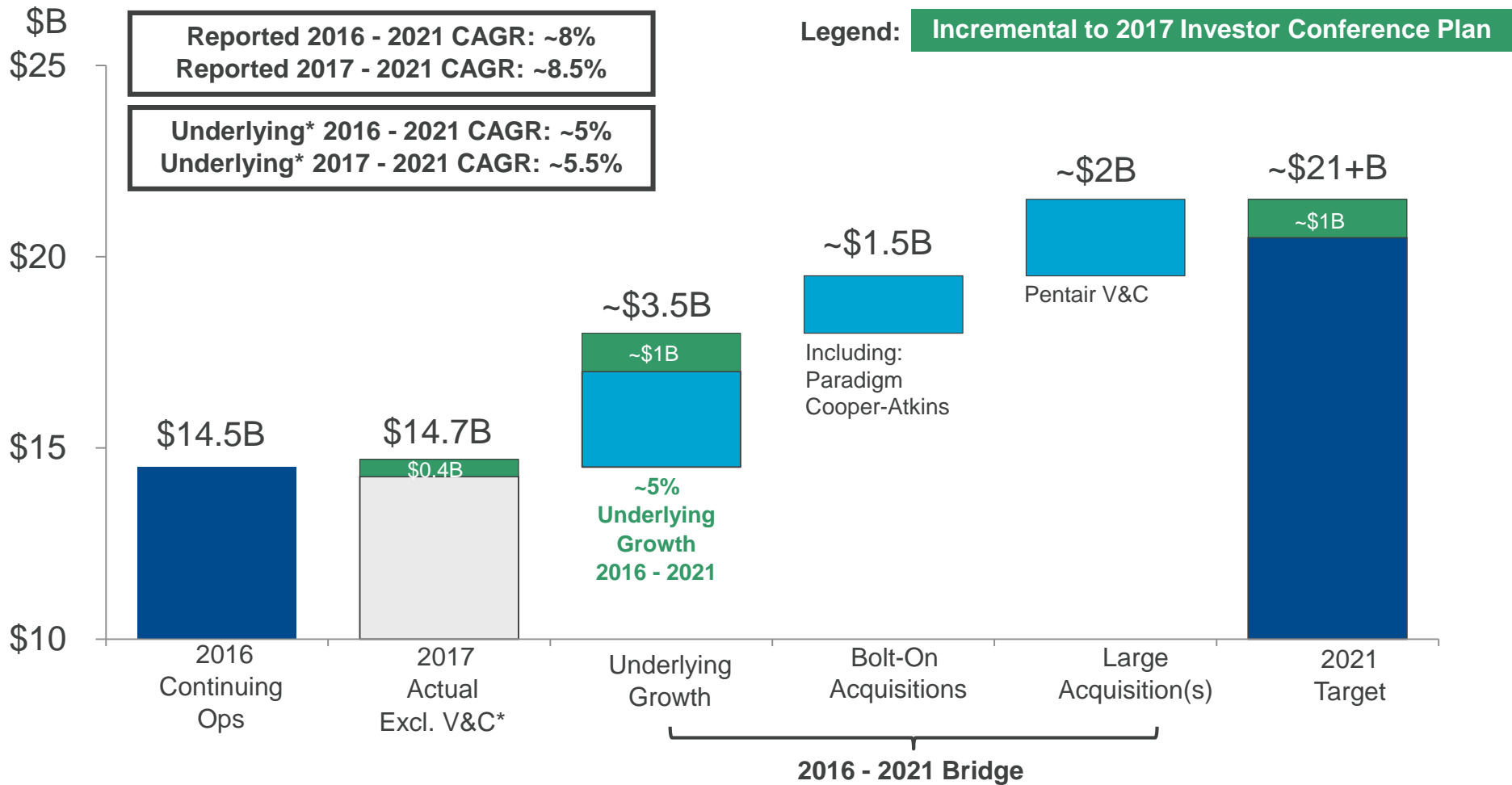
## Guidance from 2017 Investor Conference (New York, NY)



The Repositioned Emerson Has Solid Internal Growth Opportunities Along With Smaller Bolt-On Acquisitions and Potential Larger Strategic Acquisitions (\$3B - \$5B Size)

# 2016 Bridge to 2021T Sales

## 2018 Investor Conference (New York, NY)



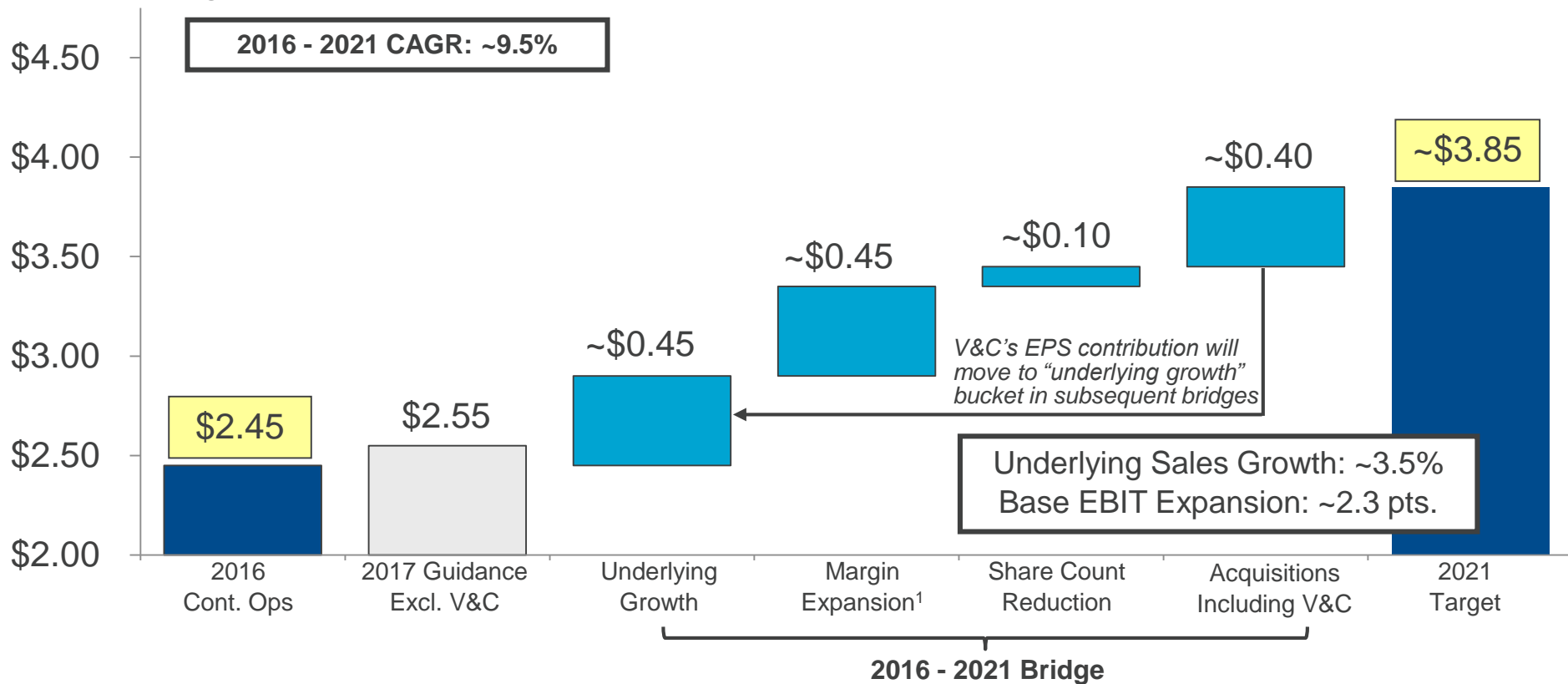
2017 Underlying Sales\* Were Stronger by \$0.4B and Now With Better Global Growth and Both Businesses Growing, We Raised 2016 - 2021 Core Sales Growth by \$1B --- No Changes to Bolt-on Acquisitions or V&C Sales Plans



# 2016 Bridge to 2021T EPS

## Guidance from 2017 Investor Conference (New York, NY)

Target Is 9+% EPS Growth from New Emerson Base



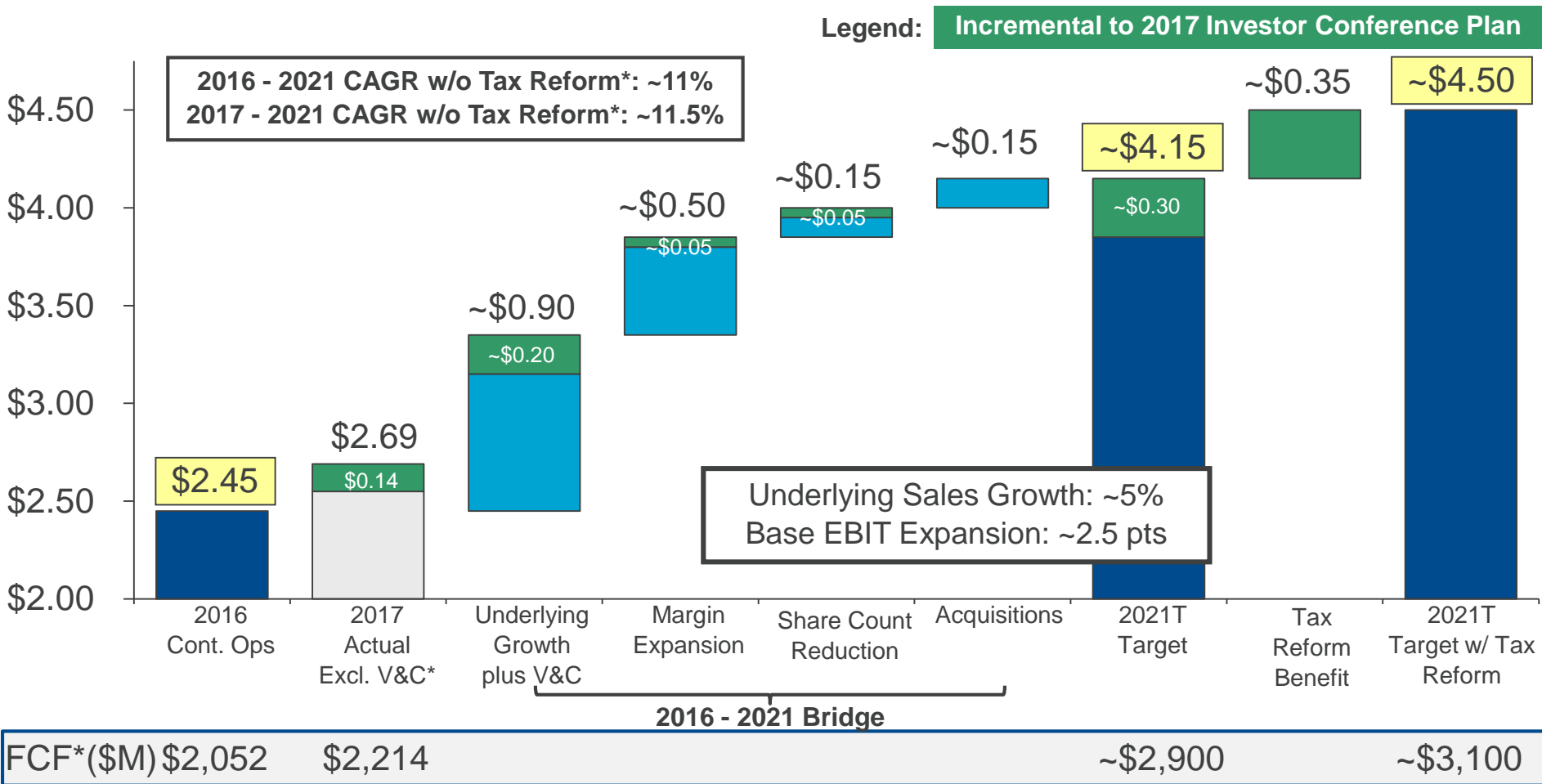
FCF*(\$M)	\$2,052	~\$2,700
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<sup>1</sup> Includes interest reduction

The Goal of the Repositioned / Refocused Emerson Is to Grow Faster, Expand EBIT Margins, and Increase Acquisitions to Drive a Faster EPS Growth Company

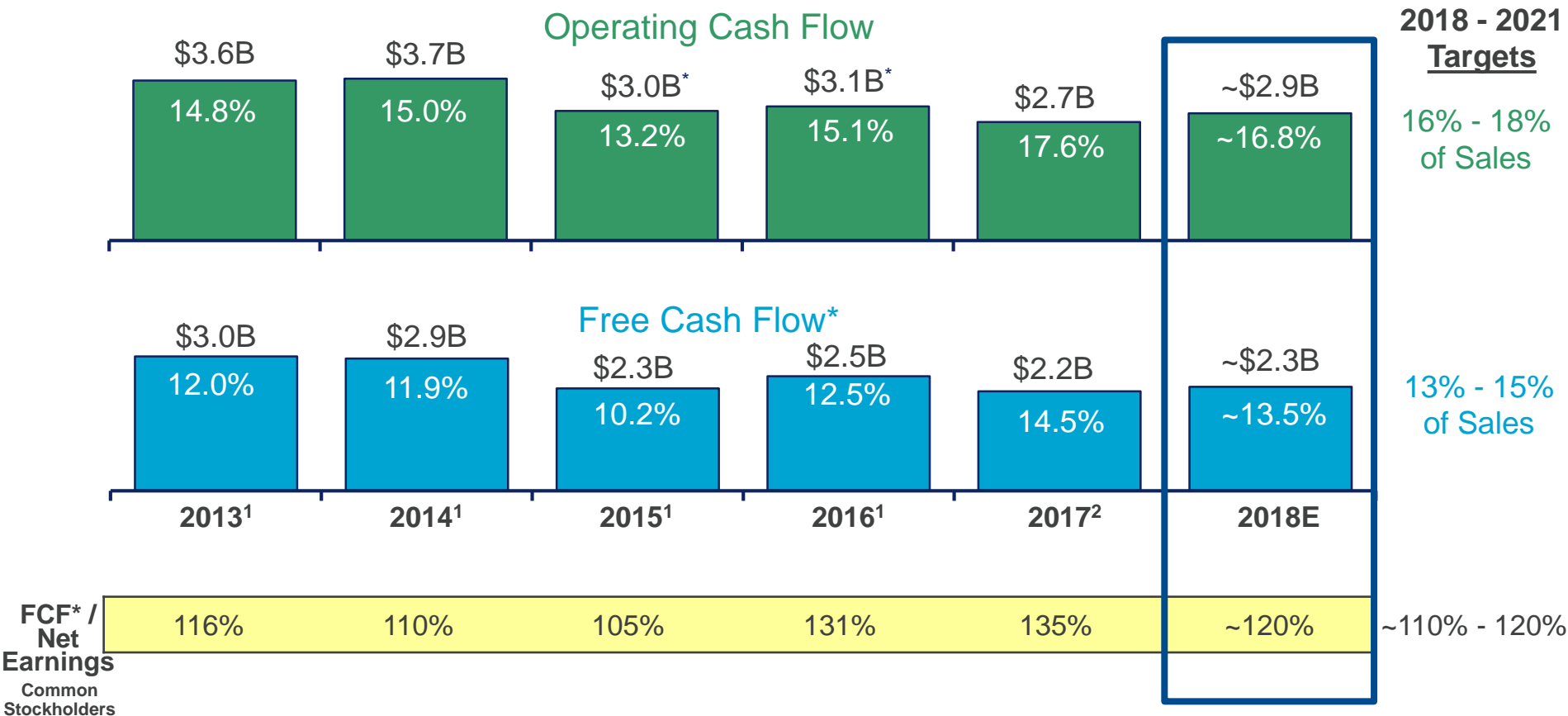
# 2016 Bridge to 2021T EPS

## 2018 Investor Conference (New York, NY)



The Faster Core Underlying Sales Growth, the Success of the Valves & Controls Integration, the Slightly Higher Share Repurchase, and the Tax Reform Benefit Drives a \$4.50 EPS by 2021 --- 13% EPS CAGR

# Operating Capital Efficiency Drives Significantly Higher Cash Flow and Returns for Shareholders

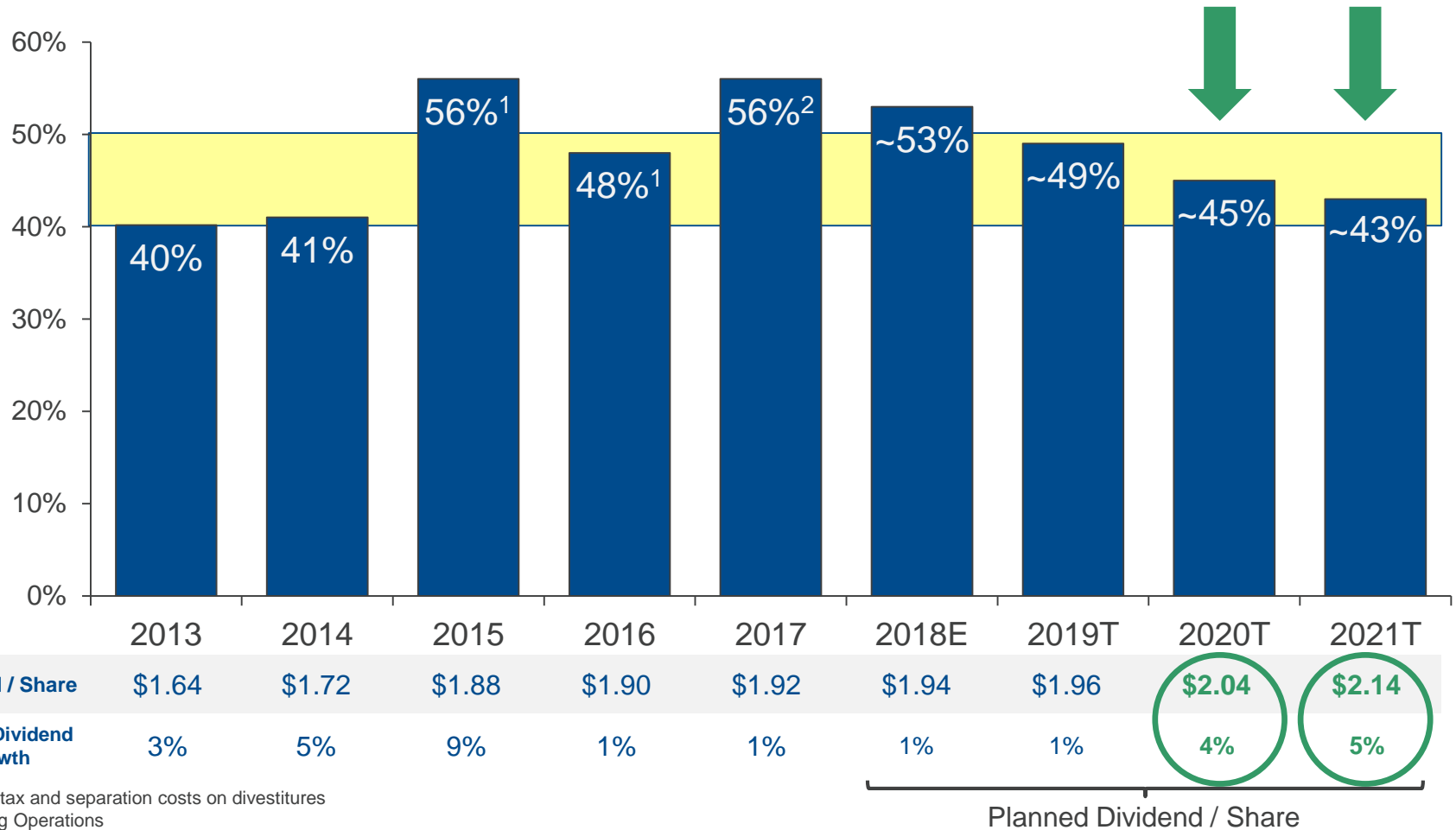


<sup>1</sup>Excludes impact of repositioning items in 2015 and 2016, divestiture gains in 2015, and impairments in 2013 through 2014\*

<sup>2</sup>Continuing Ops

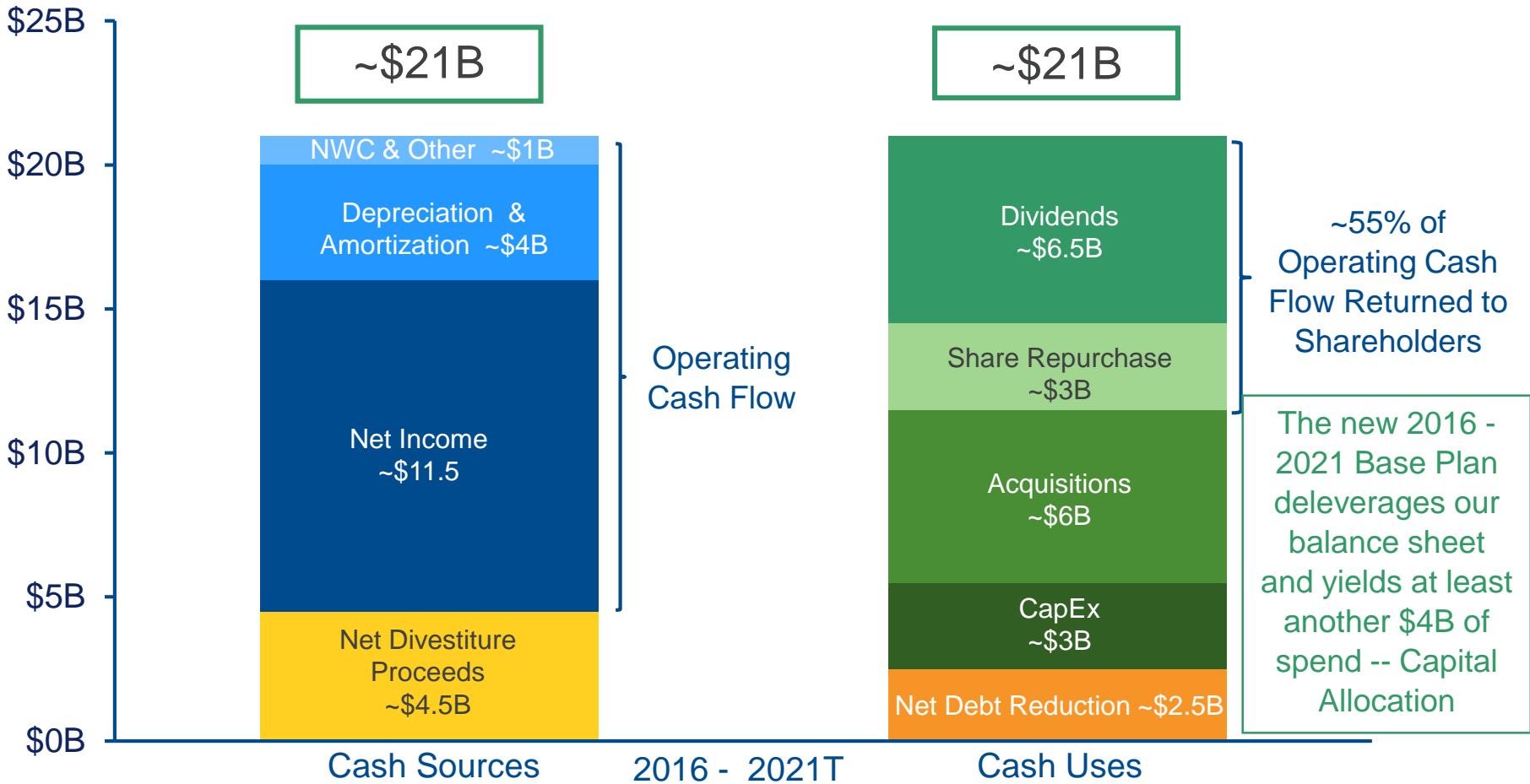
A Strong Legacy of Cash Flow Generation Sets the Foundation for Future Operating Cashflow Growth and Continued Strong Pay Out to Shareholders: 50% - 60% of Operating Cash Flow

# Emerson Planned 2018 - 2021 Dividend to Free Cash Flow\* Ratio



Better Internal Growth and Acquisitions Will Be Key to Achieving Targeted Annual Dividend to Free Cash Flow of 40% - 50% in 2019 -- Reaching 65 Years of Continuous Dividend / Share Increases for Emerson Shareholders in 2021

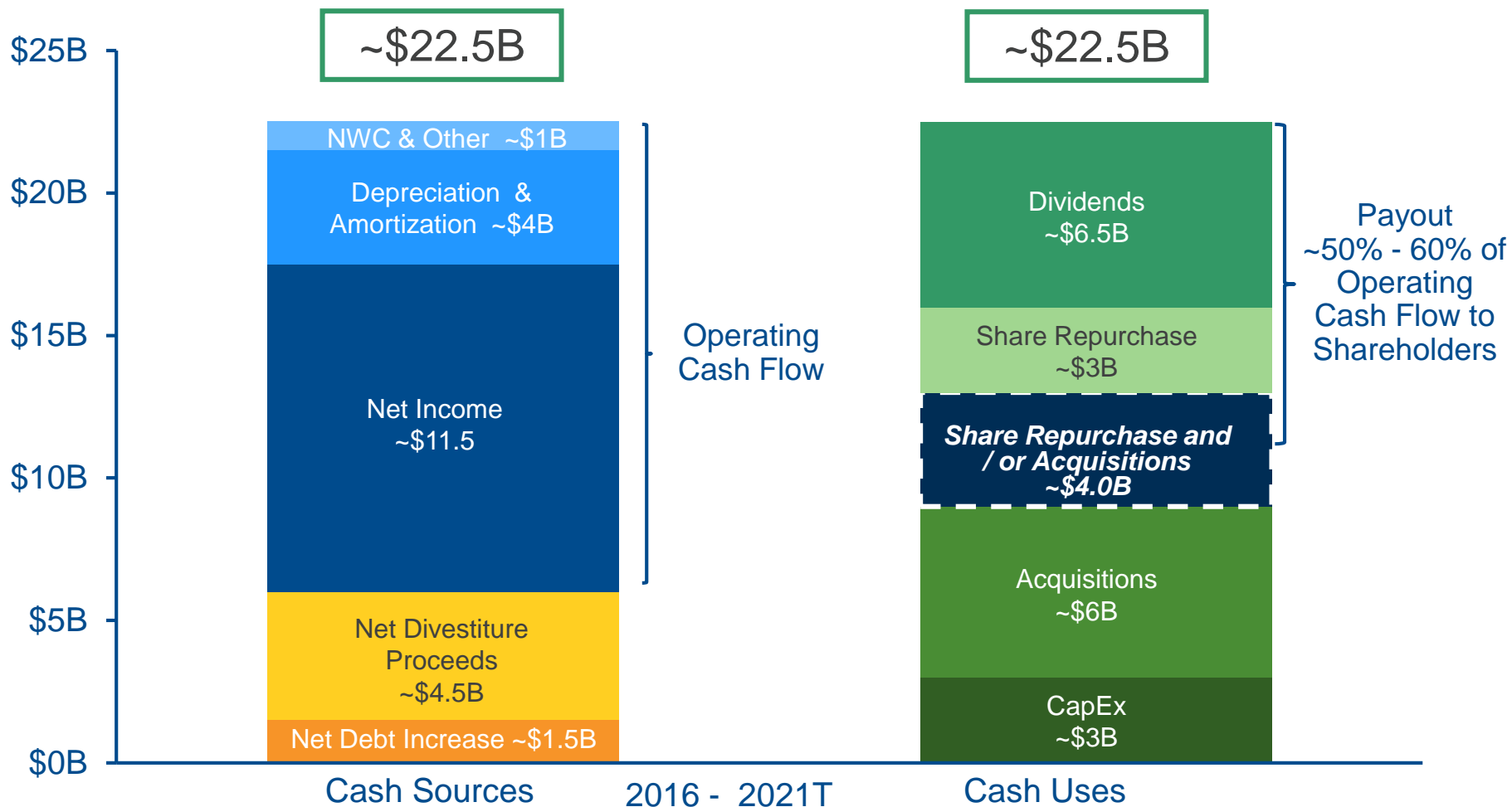
# Sources and Uses of Cash: ~\$21B of Capital Being Deployed Through 2021



Inclusive of Cash Sources and Uses from '17, '18, '19, '20, & '21

Capital Allocation Decisions Are Critical to Increase Long-Term Shareholder Value -- We Have Continuously Planned to Return ~50% - 60% of Cash Flow to Shareholders

# Emerson Has the Capacity To Add \$4.0B for Acquisitions and Share Repurchase



Inclusive of Cash Sources and Uses from '17, '18, '19, '20, & '21

The Upside Case Leverages Our Strong Balance Sheet by Adding \$4B of Incremental Debt To Be Spent on Acquisitions and Share Repurchases -- We Are Evaluating a New Capital Allocation Plan That Could Begin in 2019

# Fiscal 2018 Key Focus Areas -- 2018 Investor Conference

## Key 2018 Take Aways

- Achieve premium underlying sales\* growth for all of Emerson: 5% - 7%
- Drive strong earnings momentum within GAAP EPS by reaching \$3.05 - \$3.15 EPS in 2018 -- ~20% GAAP EPS growth
- Deliver another strong year of operating cash flow -- \$2.9+B -- 17% of sales
- Expected dividend per share increase of 2¢

### 1. Grow Underlying Sales\* in Both Platforms: 5% - 7%

- Deliver positive underlying sales\* growth within both platforms -- 5 - 7% EMR growth
- Return Automation Solutions to above market underlying\* growth: 6% - 8% in 2018
- Continue strong, above market underlying\* growth within Commercial & Residential Solutions -- 3<sup>rd</sup> year. Targeting another premium underlying \*sales growth year: 4% - 6% in 2018

### 2. Continue Margin Expansion and Drive V&C Operating Margins\* to 10%+ by 2<sup>nd</sup> half of 2018

- Strong profit margin performance within both platforms is important to return to Emerson consolidated margin improvement -- Especially within Automation Solutions -- Must leverage profitability at ~ 35% as sales growth returns and absorbs V&C lower margins
- Successfully integrate V&C acquisition and expand margins to deliver Automation Solutions leverage goals – fiscal 2018 earnings / cash flow accretive

### 3. Grow Operating and Free Cash Flow to Fund Growth and Shareholder Returns

- Continued focus on cash flow management as Emerson returns to growth by generating \$2.9+B in operating cash flow
- Invest \$575M of capital, enhanced by new Tax Reform
- Maintain FCF / Net Income Conversion\* ~120%

2018 Will Be an Exciting Year -- It Is an Opportunity for Both Focused Platforms Within Our Organization to Grow While Maintaining a Strong Focus on Margins and Cash Conversion -- A Strong Demonstration of Emerson's New Focused 2 Platform Strategy

# 2017 – 2021 -- Financial Forecast

GAAP	2017	2018E	2021T	2021T Upside Case with additional ~\$4B spend at 50% Share Repurchase, 50% Acquisitions
Sales	\$15.3	\$17.0 - \$17.3	~\$21+B	~\$22+B ✓
Gross Margin	42.0%	~43.1%	~44%	
EBIT Margin*	16.4%	~16.7%	~19%	~18% ✓
EPS Reported Continuing Ops	\$2.54	\$3.05 - \$3.15	~\$4.50	~\$4.70 ✓
Operating Cash Flow Continuing Ops	\$2.7B	~\$2.9B	~\$3.8B	~\$3.9B ✓
CapEx	\$476M	~\$575M	~\$675M	
<i>% of Sales</i>	3.1%	~3.4%	~3.2%	

## Balance Sheet Leverage Ratios

Operating Cash Flow / Total Debt	58%	~65%	~85%	~50%
Total Debt / EBITDA	1.5x	~1.2x	~0.9x	~1.5X

Note: 2018 Includes 10 months Paradigm, 9 months Cooper Atkins

By 2021, We Plan to Reach ~44% GP Margin, ~19% EBIT\* Margin, and ~\$3.8B Operating Cash Flow for Increased Internal / Acquisition Investment to Drive Sales to ~\$21+B and EPS to ~\$4.50





WE SEE

THE STRENGTH OF ONE EMERSON





WE SEE

THE STRENGTH OF ONE EMERSON



# 2018 Investor Conference Automation Solutions Business Overview

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Mike Train  
Executive President  
February 15, 2018

# **2018 Investor Conference Automation Solutions Business Overview**

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Mike Train  
Executive President  
February 15, 2018

# Automation Solutions

## Key Messages

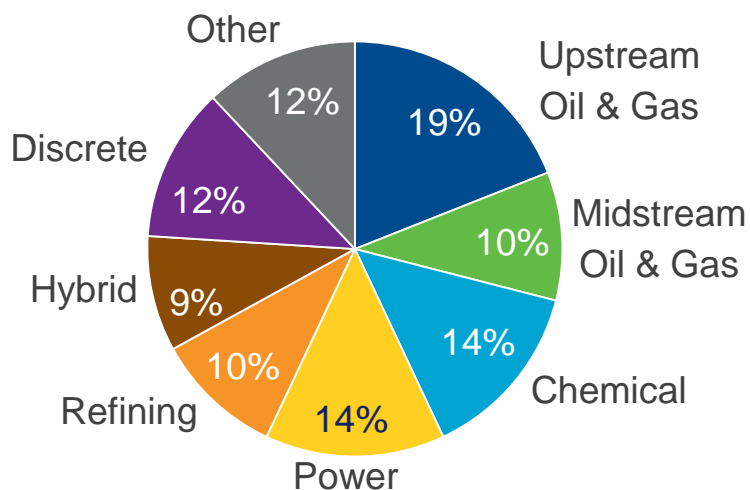
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- **Automation Solutions performed very well in 2017** with strong margin growth in the base business and strategic portfolio expansion with Valves & Controls
- **Our \$204B automation market is growing** with a rebound in Process and continued investment in Hybrid and Discrete industries
- **Automation continues to grow in scope and relevance** as customers look to improve performance and overcome strategic challenges
- **Emerson is uniquely positioned to lead the growth** of automation and IIoT leveraging our complete technology portfolio, industry expertise and customer engagement strategies
- We will continue to focus acquisitions on **elevating our position in Process** and **Hybrid**, while **diversifying within specific Discrete** industries

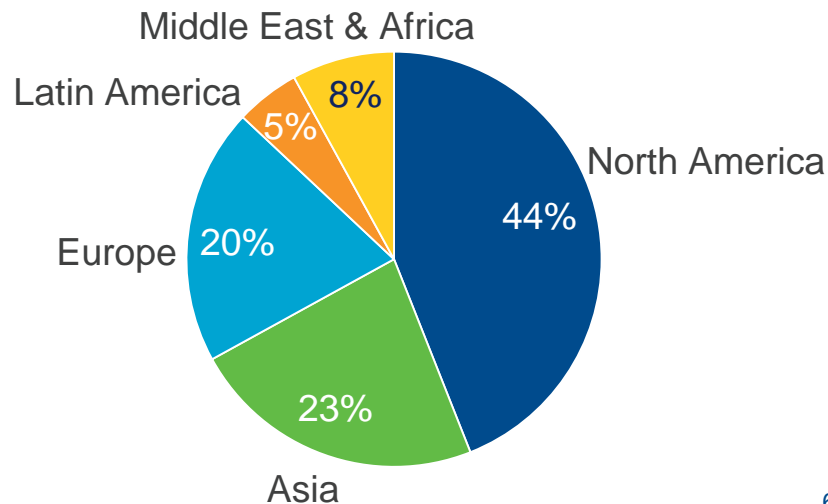
# Automation Solutions 2017 Summary

	<u>2016</u>	<u>2017</u>	<u>2016 – 2017 Change</u>	<u>2016 – 2017 Change</u> Underlying Excl. V&C*
Sales (GAAP)	\$9.0B	\$9.4B	5%	(1%)
EBIT	\$1.5B	\$1.5B	5%	7%
% of Sales	16.2%	16.2%	0 bps	150 bps
ROTC	17%	14%		

## 2017 Major Markets Served

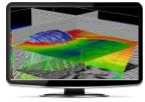


## 2017 Sales by Geography



# Emerson's Strength Is Our Technology, People, and Ability to Create Value for Our Customers

Data Management



Reservoir Modeling



Operations & Alarm Management



Advanced Process Control



Planning & Scheduling



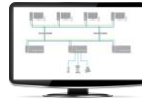
Plant Asset Management



Control Engineering



Training & Simulation



Real-time Optimization



Energy Management



Asset Integrity Management

ENGINEERING & DESIGN

CONTROL SOFTWARE

PRODUCTION MANAGEMENT

ASSET RELIABILITY & PERFORMANCE

Control



CONTROL SYSTEMS



WELLHEAD CONTROL



SAFETY SYSTEMS



MACHINERY HEALTH

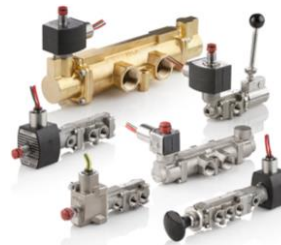
Field Devices



MEASUREMENT



ANALYTICAL



PNEUMATICS & SOLENOIDS



FINAL CONTROL

VALVES & CONTROLS

# Emerson's Strength Is Our Technology, People, and Ability to Create Value for Our Customers

## World-class People and Expertise

**53,500<sup>1</sup>**

Automation Solutions Employees

**3,000+**

Engineering & Development

**11,000+**

Salespeople

**100+**

Industry Consultants

**5,000+**

Project Services Personnel

**3,700+**

Lifecycle Services Professionals

**200+**

Service Centers

<sup>1</sup>Headcount at 9/30/17, inclusive of V&C acquisition

## Solutions Enabling Top Quartile Performance



### Project Certainty

Enable customers to eliminate cost, reduce complexity, and accommodate late changes on capital projects.



### Operational Certainty

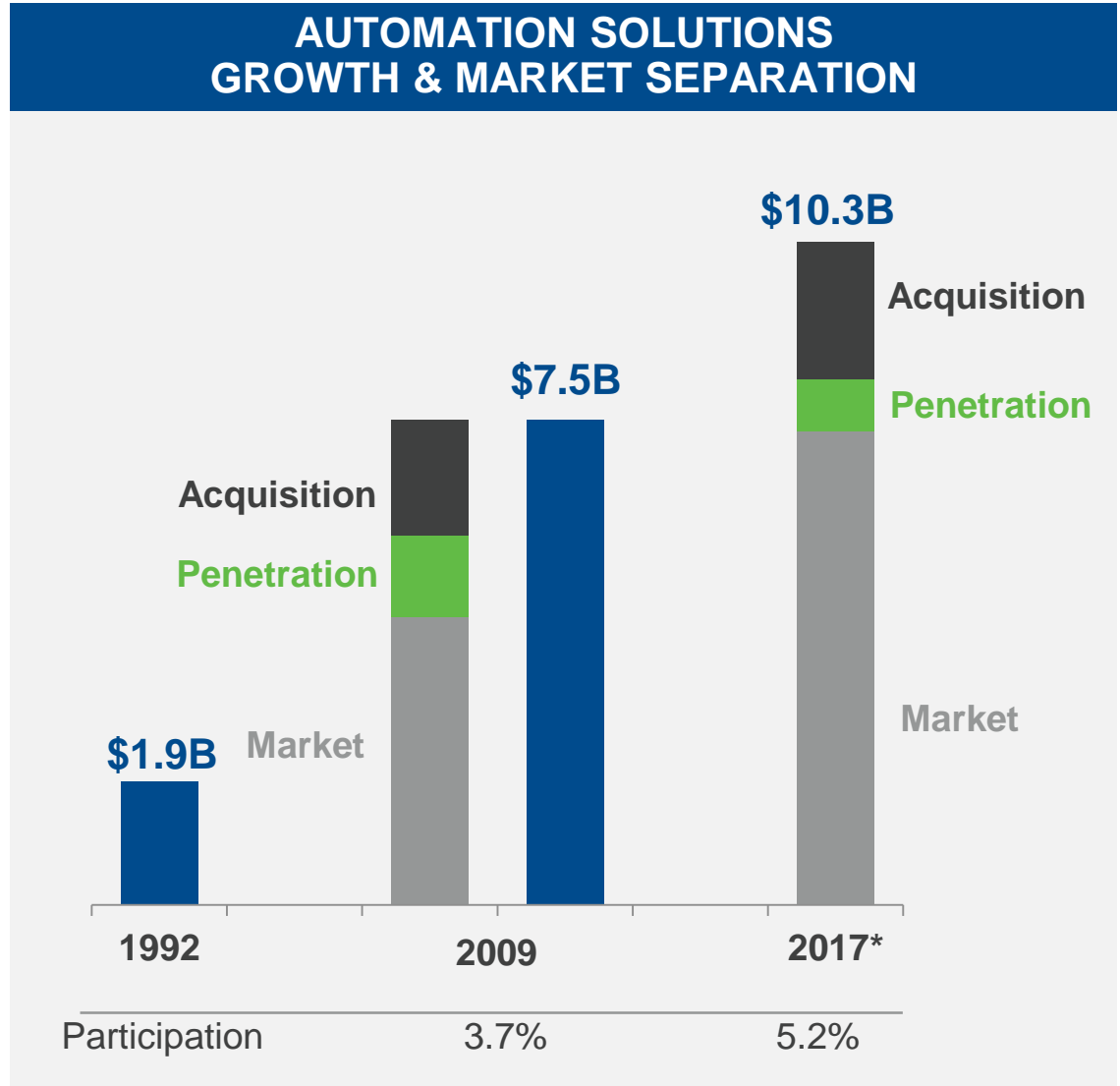
Help customers optimize production, improve reliability, minimize emissions, and ensure safety.

We Have Unique Capabilities to Bring Customers Predictable Success From Project Design Through the Entire Operational Lifecycle



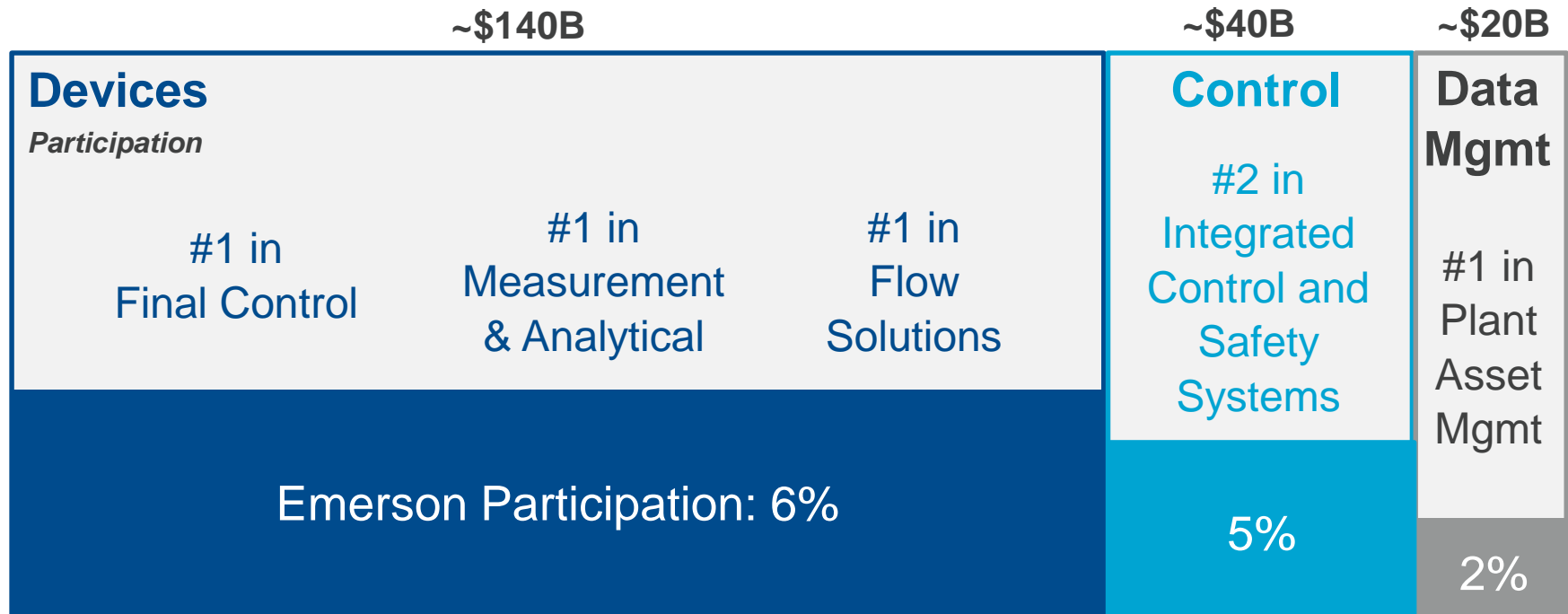
# Have Consistently Outperformed Market and Delivered Transformative Solutions and Approaches

<b>Top Quartile Performance</b>	 <b>PLANTWEB</b> Project Certainty, Operational Certainty
<b>Problem Solving</b>	Industry Solutions, Lifecycle Services, Perfect Execution
<b>Integrated Solutions</b>	Main Automation Contractor Global Reach
<b>Technology Leadership</b>	 Smart Devices
<b>Leading Products</b>	Foundation



\*Includes full year of V&C sales

# Emerson Is a Recognized Leader Across the Total Automation Spectrum



## #1 in 28 Field Device Categories

- |                 |                  |
|-----------------|------------------|
| Pressure        | Control Valves   |
| Temperature     | On/Off Valves    |
| Level           | Valve Actuators  |
| Coriolis Flow   | Liquid Analyzers |
| Ultrasonic Flow | Gas Analyzers    |
| Magnetic Flow   |                  |
| Vortex Flow     |                  |

## #1 Continuous

- #1 Chemicals
- #1 Power
- #1 Oil & Gas
- #1 Life Sciences

## #1 Batch

- #1 Chemicals
- #1 Refining
- #1 Life Sciences

## Software

- #1 Advanced Process Control
- #1 Asset Management Software
- #1 Loop-Tuning
- #1 Simulation

# Emerson Is the Innovation Leader in Control, and We Continue to Grow Our Presence

## Process Control Systems Evolution

	1992-2000	2001-2009	2010-2015	2016
Technology	Provox, RS3, WDPF	DeltaV, Ovation	DeltaV CHARMs, Ovation	
DCS Participation <sup>1</sup>	5%	9%	12%	15%

“Emerson... **overturns 35 years of industry thinking of I/O**”

*Industrial Automation Insider - Oct 2009*

## Control Systems for World's Power

- 1,300 Gigawatts globally, ~20% of the world
- Over 68% of 600MW and 1,000 MW Ultra-supercritical units in China

# 70%

of new systems expand our global presence

45% Greenfield projects

25% Displacing competition

30% Modernizing Emerson systems

Since 2000, we have replaced >3,200 competitive systems

<sup>1</sup>Served Market Participation for DeltaV and Ovation based on ARC, Frost & Sullivan, and Internal Estimates

# 2018 Will Include Emerson's Biggest Control Platform Technology Launches Ever

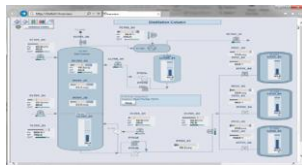
## DeltaV v14

### PK Controller



Powerful Standalone  
Easily Integrated

### DeltaV Live



First Native HTML5  
interface in the World

### Mobile



Know the health of  
operations anywhere

### IIoT



OPC UA  
Communications

### Cybersecurity



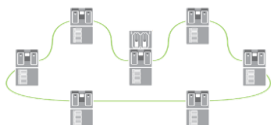
ISASecure SSA  
Level 1 Certification

### Simulation



Operations Confidence

### Distributed CHARMs



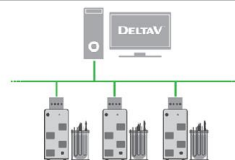
Saves Millions  
on Cabling

### Smart Commissioning



From 140 min. to  
25 min. per device

### DeltaV Discovery



Common platform  
research to production

## Ovation 3.7

### New Data Management Capabilities Built-in

- Integrated Machinery Health Monitoring
- Synchronized predictive simulation



### Extending Industry Leading Controls

- Ovation Compact Controller
- Integrated Generator Excitation Control



## Flow Computers















Next Generation Flow  
Computer, Remote  
Terminal Unit, and  
SCADA for **Oil & Gas  
Control** and  
**Optimization**

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













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# Process Industries Rebounding in 2018 with Strong Growth Dynamics Going Forward

Process Industries	2018 Outlook	2018-21 Outlook	<u>Key Investment Trends:</u>
Oil & Gas – Upstream			NA shale recovery continues; strong project activity in MEA
Oil & Gas – Midstream			LNG and increasing globalization of natural gas; pipeline buildout in emerging markets
Refining			Global increase in coking units led by China; India to double refining capacity
Chemical & Petrochemical			U.S. investment to continue in 18; China to double ethylene over next 5 years
Power			Coal & renewable investment in China and India; gas conversions and new builds in NA
Process Total			

2018 Total Automation Market Up 5% to 7%  
Expecting Sustained Growth Period through 2021

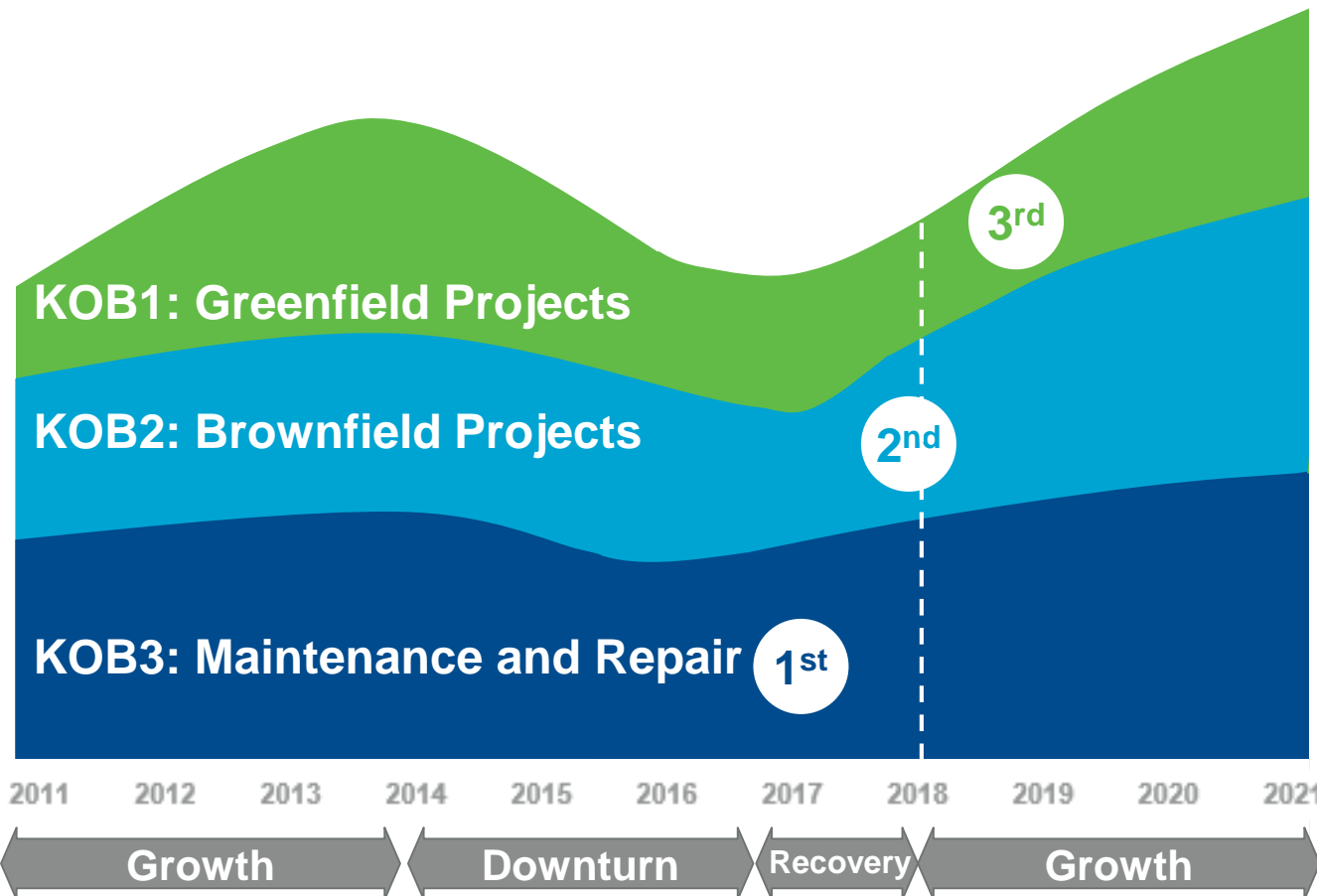
# Hybrid and Discrete Industries Continue To Be Attractive for Growth and Diversification

Hybrid Industries	2018 Outlook	2018-21 Outlook	<u>Key Investment Trends:</u>
Life Sciences			Increased innovation spend in NA and EUR; medicines in emerging markets
Food & Beverage			Global increase in operational improvement and food safety spend
Metals & Mining			Gold and copper recovery spurring project spend in LA and AP
Pulp & Paper			Investment to upgrade assets in pulp; strong packaging demand in AP
Hybrid Total			
Discrete Industries	2018 Outlook	2018-21 Outlook	<u>Key Investment Trends:</u>
Industrial Machinery			Industry 4.0 increasing automation spend in manufacturing
Automotive			Electric vehicle manufacturing capacity globally; Emerging Markets
Packaging			Investment in U.S.; automation of manual process in emerging markets
Discrete Total			



# Accelerated Recovery Period Has Emerson Strongly Positioned to Capture Broad Growth Globally

## Automation Solutions Market by Type of Business



Large project funnel visibility has **more than doubled since Feb. 2017**

**First priority spend** is driving smaller expansion and optimization projects with **faster payback for customers**

Customers are looking for new, and more lifecycle services driving **improved foundational growth**

# Lifecycle Management Initiatives Are Driving Growth in Our KOB3 Business

**Executed >5,000 customer site walk downs** in 2017 to identify opportunities in our installed base and drive new services



**+\$350M,**  
9% YoY  
Growth

**Shutdowns, Turnarounds, & Outages**  
Managing & executing plant turnarounds | **\$75M** YoY Growth

**Connected Services**  
IIoT-enabled services on connected devices | **190+** Active Contracts

**Long-term Service Agreements**  
Partnership agreements across all service levels to support customer operations | **1800+** Customer Contracts

Product

Outcome

Advanced Lifecycle Management programs build greater customer intimacy and drive new demand



Advanced services will help drive **>\$2B KOB3 total growth** by 2021

# Launched Plantweb and Introduced Operational Certainty Consulting to Drive KOB2 Growth

## Identified Market Opportunity

- Top Quartile performance
- KPI's by industry
  - Reliability
  - Performance
  - Safety
  - Energy/Emissions



## Launched Solutions & Services

Plantweb Digital Ecosystem

Operational Certainty Consulting

- 100+ Consulting Leads
- 5000+ Automation Experts

2016

2017

2018

## Mapped Pains to Solutions

- Identified high impact applications
- Prioritized solution opportunities



## Executing Market Engagement

- Plantweb and Top Quartile launch events
  - 8000+ customers reached in 30+ countries
- Top Quartile workshops
  - Link digital strategy to business objectives
  - Incorporate deep domain expertise
  - Identify highest impact opportunities
  - Provide pragmatic business case for investment



Plantweb IIoT Solutions Grew 30+% in 2017, Forecasting \$1B by 2021

# Plantweb Digital Ecosystem: Recognized as Industry's Most Complete and Integrated IIoT Solution



## FOUNDATIONAL SOLUTIONS

## IIoT SOLUTIONS

Services

Project, Lifecycle, and Educational Services

**Consulting**

- Operational & IIoT Strategy
- Analytics & Architecture
- Industry Expertise

**Software as a Service**

**Connected Services**

Microsoft Azure

SaaS

- Digital Twin: Assets & Plant
- Digitized Projects
- Operator Training & Simulation

Analytics

Production Optimization

Operator Performance

Asset Management

Control & Safety Systems

SCADA

**Always Aware**

Mobility

AMS ARES

**Plantweb Insight**

- EMERSON PLANTWEB insight
- EMERSON PLANTWEB insight
- EMERSON PLANTWEB insight
- EMERSON PLANTWEB insight

Steam Traps Pumps Corrosion Heat Exchangers

**Plantweb Advisor**

- EMERSON PLANTWEB advisor
- EMERSON PLANTWEB advisor
- EMERSON PLANTWEB advisor
- EMERSON PLANTWEB advisor

Performance Health Energy Application-Specific

Connectivity

**Secure First Mile**

Secure Data Pathways

Data

**Intelligent Field Devices**

**Pervasive Sensing**

Flow Valve Position Pressure Gauge Radar Level Non-Intrusive Temperature Toxic Gas Electrical Acoustic Vibration Non-Intrusive Corrosion



Plantweb Provides a Scalable Approach to Realize the Promise of IIoT, and Delivers Measurable Business Results

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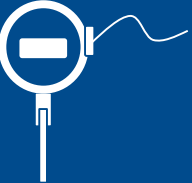

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# Automation Is Growing in Scope and Customer Relevance

 <p><b>Services</b></p>	<p><b>Product maintenance, reactive repair and replacement</b></p>	<p><b>Consulting, connected, outcome-based offerings</b></p> 
 <p><b>Data Management</b></p>	<p><b>On-premise, standalone software packages for operations experts</b></p>	<p><b>Cloud-enabled integrated software platforms for multiple personas</b></p> 
 <p><b>Control</b></p>	<p><b>Large systems running highly secure, industry-based logic for control and safety</b></p>	<p><b>Modular controllers expanding control and optimization of data islands</b></p> 
 <p><b>Device</b></p>	<p><b>Hard-wired, intrusive, highly accurate and reliable sensors generating continuous data</b></p>	<p><b>Wireless, non-intrusive sensors fulfilling new data needs</b></p> 

# Emerson Is Leading the World in New Innovations That Help Customers Transform Their Projects and Operations

**Virtual Project  
& Consulting  
Services**



**Connected Services**  
for remote asset  
monitoring

**Growing  
ecosystem of  
Plantweb  
applications**



**Simulation and  
synchronization:  
Digital Twins**



**Modular  
Controllers**



**SCADA,  
Flow Computers  
and RTUs with  
Edge Applications  
for Oil & Gas**

**32,000 Networks  
146 countries  
>10B operating hours**



**Expanding portfolio of  
non-intrusive sensors**





# Emerson's Capabilities Span the Full Oil & Gas Value Chain

## Upstream

## Midstream

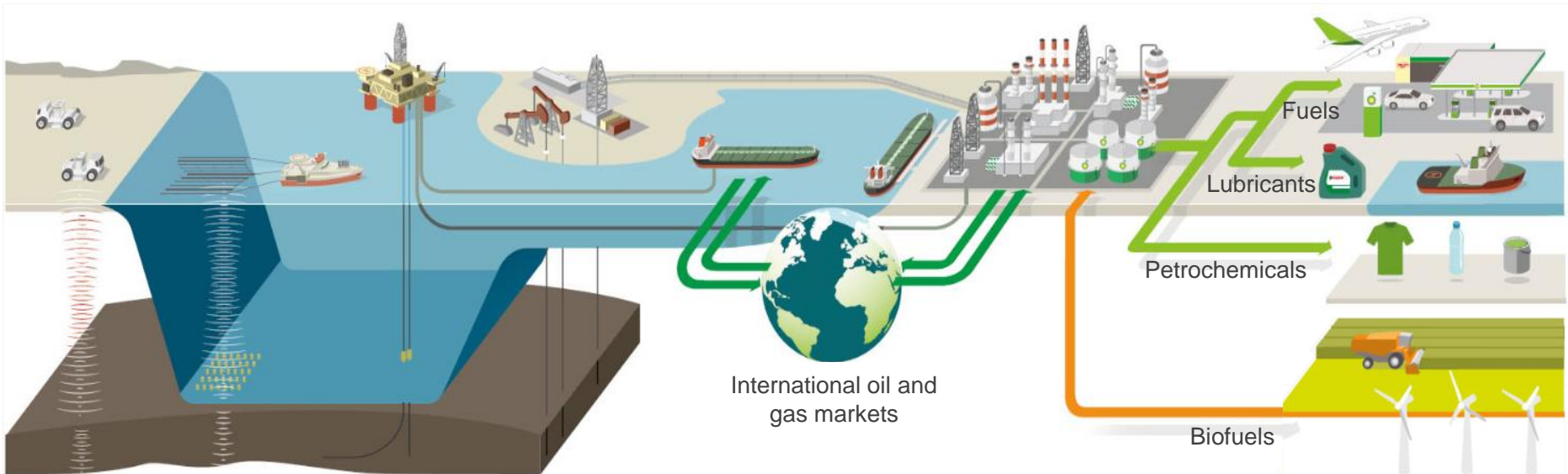
## Downstream

*Exploration*

*Development & Production*

*Transportation & Trade*

*Refining, Processing, Blending & Distribution*



**Maximize asset utilization due to low oil prices**

- ▶ *Production Optimization*
- ▶ *Structural Cost Reductions*



**Aging infrastructure and expertise**

- ▶ *Leak Detection*
- ▶ *Digitization of Operations*



**Increased importance of asset integrity**

- ▶ *Corrosion Detection*
- ▶ *Predictive Maintenance*


# Transforming Upstream Oil & Gas From Reservoir to Well Pad

**\$21B**  
Upstream  
Installed Base

## Paradigm + Roxar

Subsurface Modeling  
& Simulation

Subsurface Knowledge



## Production Automation

Top-side Production &  
Equipment Data

Operational Intelligence



Enables dynamic optimization of new and existing reservoirs

### Well Pad of the Past



### Multiphase Flowmeter



### Well Pad of Today



**\$9B**  
Midstream  
Installed Base

# Digitizing Midstream Operations

**Pipeline  
Asset Data**



Pipeline Automation

**Scheduling,  
operations, and  
commercial  
management**



ESI

**Pipeline Integrity,  
risk analysis,  
and visualization**



GeoFields



**Real-time  
pipeline integrity  
insight and  
optimization**

**SCADA, Flow Computers,  
and RTUs**, enable greater  
fleet management and  
optimization for operators  
in the field -- **deliver key  
requirements for  
digitizing operations**



**Security and Mobility**



**Low Maintenance**



**Guided Workflows**



**Simple Configuration  
Verification**

# Expanding High Value Solutions Portfolio at Every Level for Downstream Facilities

\$25B  
Downstream  
Installed Base

Digitally-empowered **turnaround services** enable **shorter shutdowns, faster startup, and improved confidence** in operations



Mynah & ProSys acquisitions and AspenTech alliance add new integrated software solutions



Dynamic  
Simulation



Alarm  
Management



Advanced Control  
& Optimization

## DeltaV V14 extends control and IIoT leadership

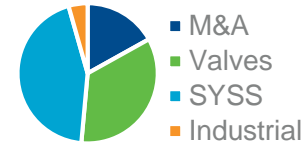
- Cybersecurity
- Mobility
- Integration by Design
- Modularity
- Virtualization
- Efficiency



## Non-Intrusive Wireless Corrosion Monitoring

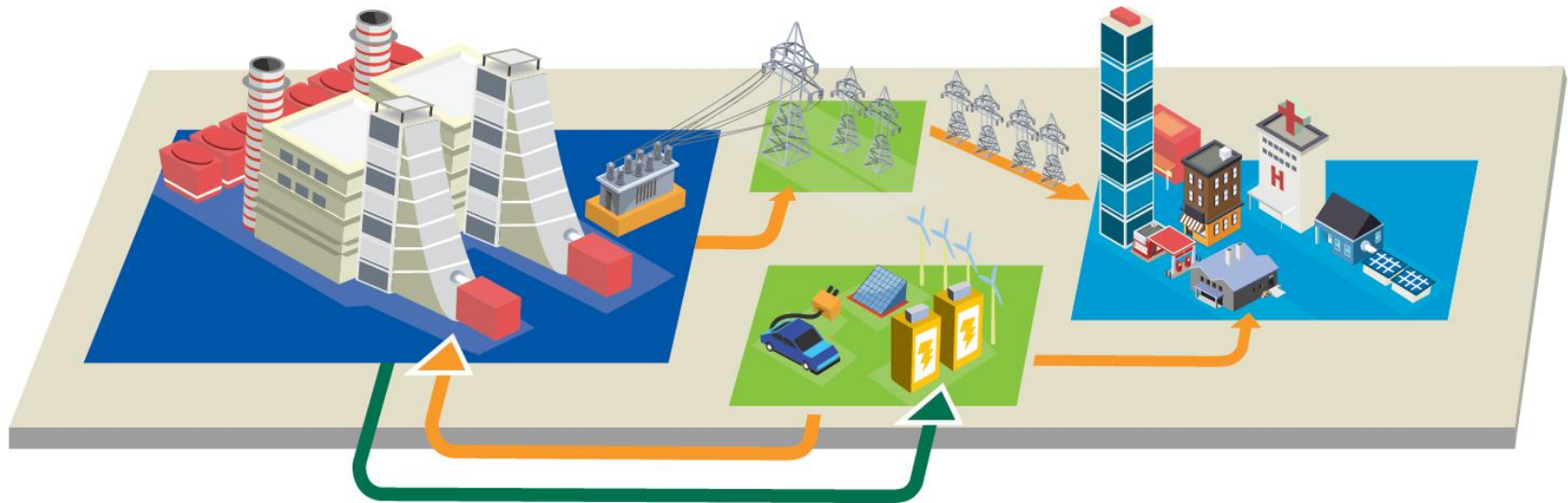
Corrosion is the **industry's #1 maintenance problem**

- **Easily deploy** corrosion monitoring anywhere
- **Automate manual, intrusive inspections** with real-time data



# Leveraging Our Leadership in Power Generation to Help Customers Evolve in This New Market

## Traditional Generation | Microgrids | Distributed Generation



Renewable Generation adds new demand for control and challenges traditional generators

- ▶ *Distributed Generation*
- ▶ *Reliability, Flexibility, and Performance*



Focus on Security due to increased prevalence of malware and hacker attacks

- ▶ *Compliance and incident response services*
- ▶ *Certified technologies*

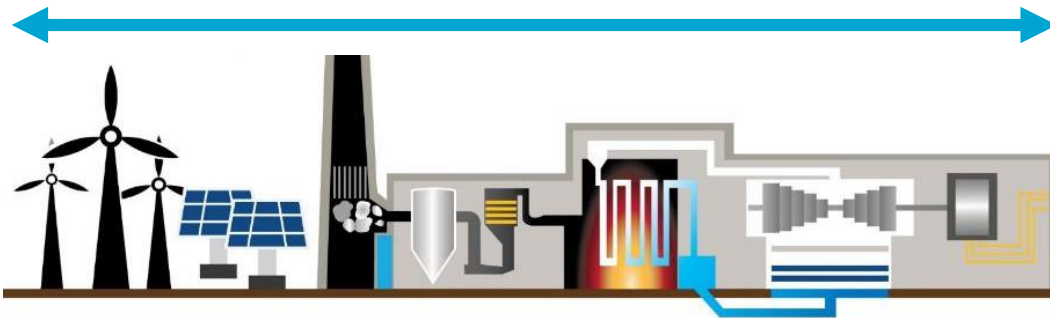
# Extending Reach of Control and Digital Services for the Power Industry

\$14B  
Power  
Installed Base



Emerson offers complete **Cybersecurity services** supported by **Qualified Anti-Terrorism Technology (QATT)** designated by US Department of Homeland Security

New Ovation Compact Controller **extends control** to new applications in plant and beyond

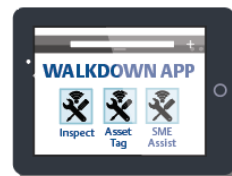


**High fidelity embedded simulation** for complete **plant optimization**



New Final Control capabilities extend **connected services** and **predictive maintenance strategies** to **every valve** in a plant

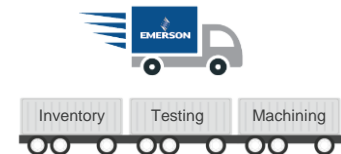
## Digital Walk Down



## Connected Services

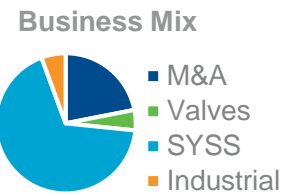


## Mobile Service Center





# Helping Life Sciences Customers Stay Ahead of New Market Trends



## Development

*Process Development & Clinical*

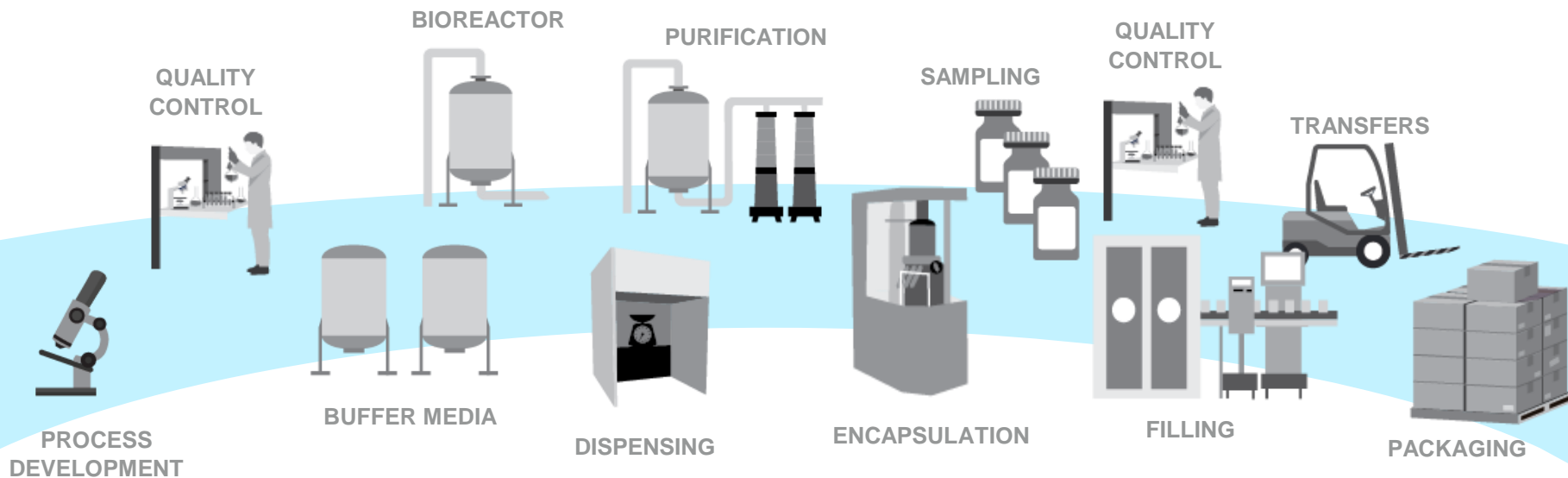
## Drug Substance

*Primary*

## Drug Product

*Secondary*

*Packaging*



**Time to market pressure in biosimilars and generics**

► *Technology Transfer*



**Demand for smaller batches and modular production**

► *Single-Use Processing & Instrumentation*



**Growing number and complexity of regulations**

► *Regulatory Approval & Traceability*

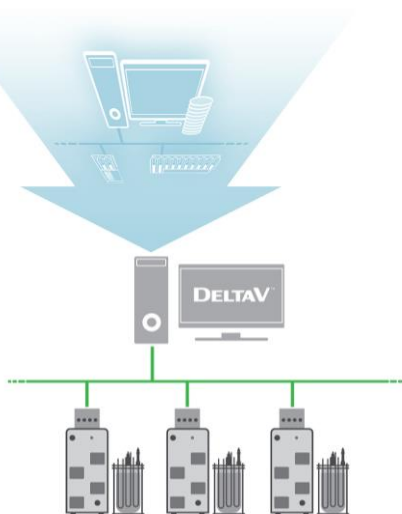
# Delivering Innovative Sensors, Connected Controllers, and Consulting Services

**\$2B**  
Life Sciences  
Installed Base

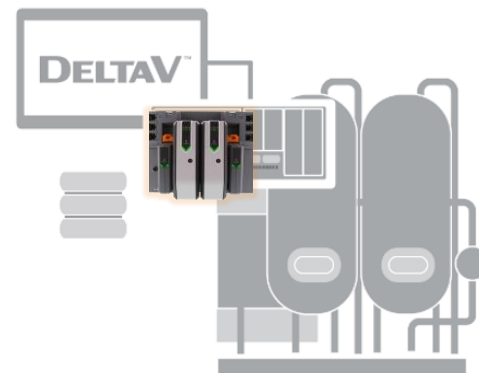


Full Life Science operations consulting services to **ensure Operational Excellence** and **expedite FDA validation**

**DeltaV Discovery connects R&D to production**, speeding up technology transfer and manufacturing scale up



PK Controller **connects modular operations** for advanced control



## Growing World-Class Hygienic Portfolio

Expanding hygienic instrument portfolio and launching new line of **single-use sensors for next-gen biologics** manufacturing



# Helping Packaging Customers Increase Speed and Systems Integration

Processing

Packaging

Logistics



**Increased risk due to speed of operations**

- ▶ *Real-Time Insights*
- ▶ *Faster restarts*



**Excess waste impacting production costs**

- ▶ *Precise filling*
- ▶ *Effective sealing*

**\$17B**  
Discrete  
Installed Base

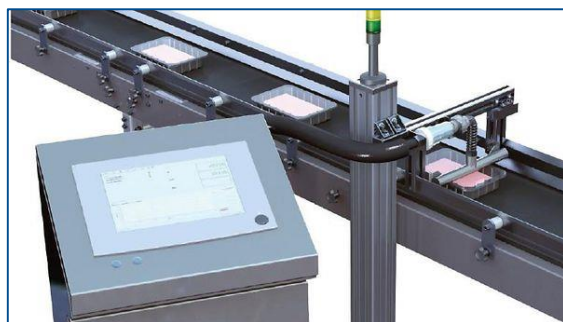
# Discrete Innovations Extend Our Portfolio of Intelligent Devices and Controls



ASCO G3 Fieldbus and 580 CHARMs seamlessly integrate pneumatic control -- **simplifying commissioning**, improving **visual status** and enhancing **diagnostics**



**G3 Gateway**



**Quantum Cascade Laser** quickly **detects leaks** and rejects products with **100% accuracy** at 600 packages per minute, **3x faster** than previous solutions

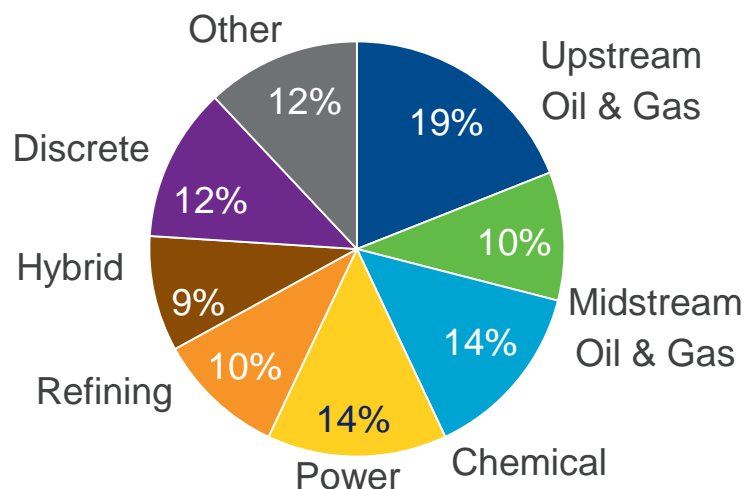
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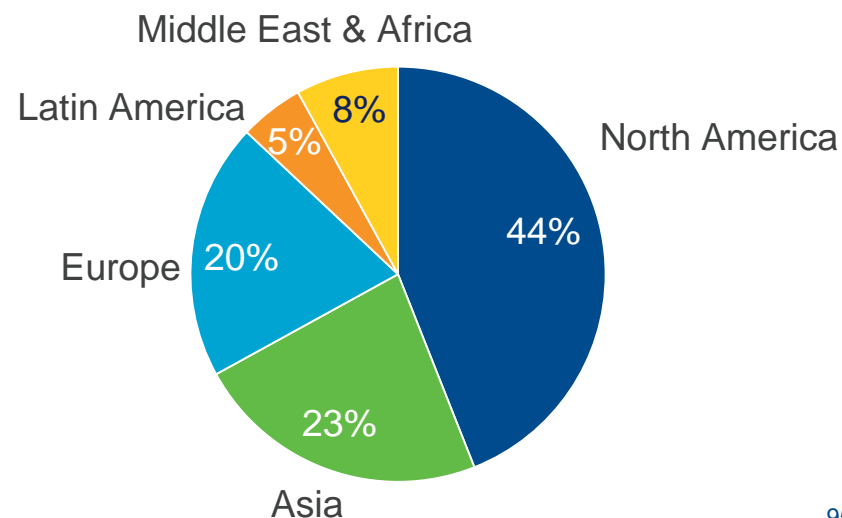
# Automation Solutions 2017 Summary & 2018 Guidance

	<u>2016</u>	<u>2017</u>	<u>2018E</u>
Sales (GAAP)	\$9.0B	\$9.4B	18 – 20%
Underlying*			6 – 8%
EBIT	\$1.5B	\$1.5B	
% of Sales	16.2%	16.2%	16-17%
ROTC	17%	14%	

## 2017 Major Markets Served



## 2017 Sales by Geography



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WE SEE

THE STRENGTH OF ONE EMERSON



# **2018 Investor Conference Final Control and V&C Integration Update**

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Ed Monser

President

February 15, 2018

# 2018 Investor Conference Final Control and V&C Integration Update

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Ed Monser

President

February 15, 2018

# Final Control -- Key Messages

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- Acquisition of Valves & Controls transforms Final Control into the biggest / broadest solutions provider and strengthens Automation Solutions
- Integration activities progressing to plan and building strong momentum
- Focused, early concentration on customer engagement resulting in accelerating order activity with many 'combined portfolio' wins
- Transitions to the Single Integrated Channel have been timely and seamless
- Manufacturing facility consolidation and restructuring programs underway, targeting 10 plant closures by the end of 2018
- \$17+M of negotiated supply chain savings finalized in the first 180 days
- Product rationalization and positioning direction has been set; execution of the plan is underway -- excellent progress
- Operating Model Transformation (OMT) realignment completed in February 2018 -- 2<sup>nd</sup> quarter will be key

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# Portfolio and Market Diversification With Valves & Controls Strengthens our Global Presence

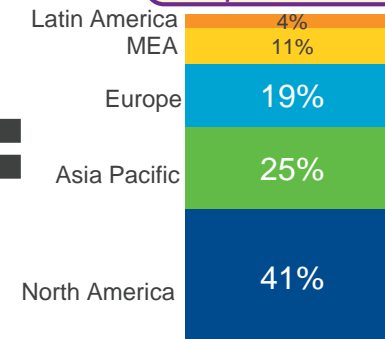
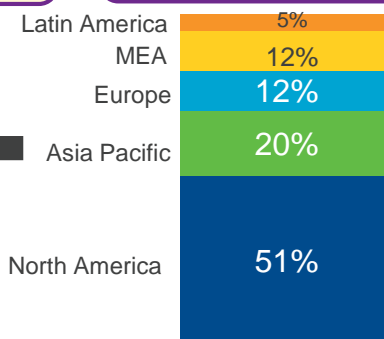
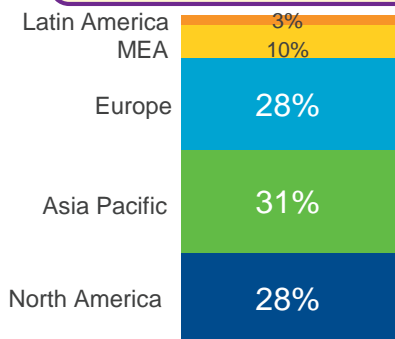
## 2017 Sales

## Valves & Controls \$1.4B

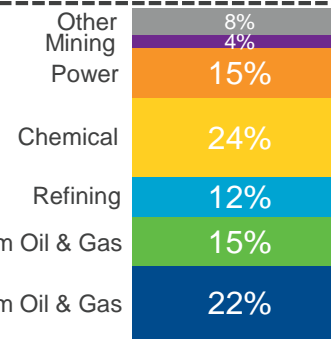
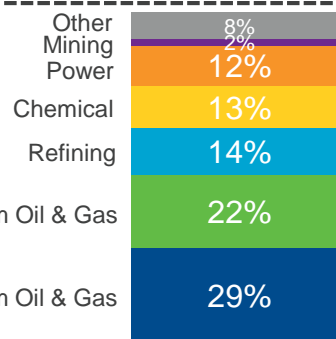
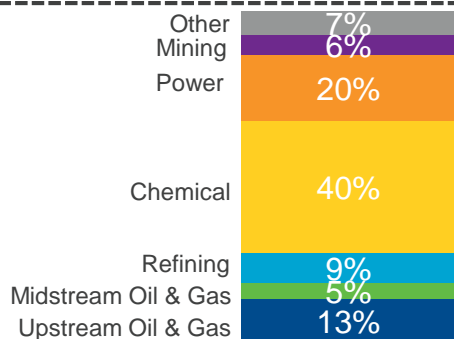
## Final Control \$2.1B

## Combined \$3.5B

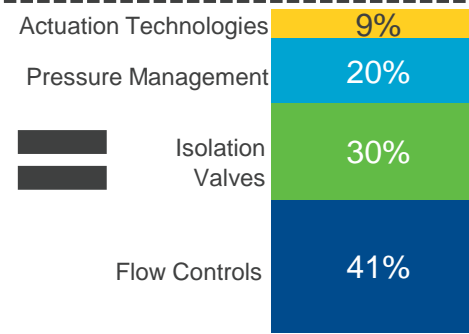
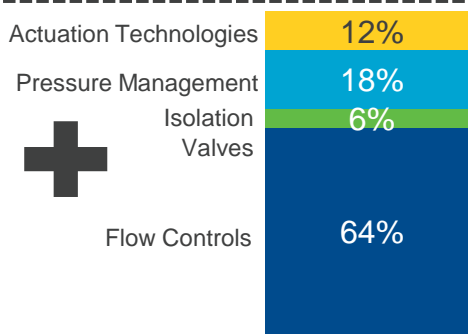
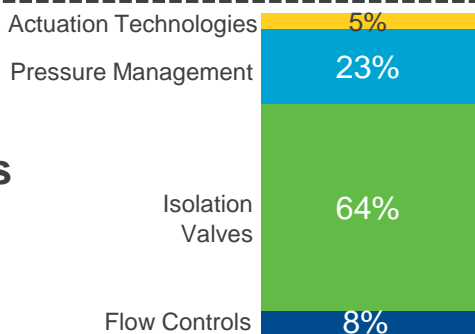
### Geography



### Industry



### Business



Note: 2017 includes full year Valves & Controls impact.

# The New Final Control Business Has a Significant Global Footprint --- **Best in the Industry...**

## North America

**\$1.4B** 2017 Sales

**66** Service Locations

**5,300** Employees

**11** Manufacturing Locations

## Europe

**\$0.7B** 2017 Sales

**23** Service Locations

**5,000** Employees

**18** Manufacturing Locations

## Asia Pacific

**\$0.9B** 2017 Sales

**40** Service Locations

**5,500** Employees

**24** Manufacturing Locations

## Latin America

**\$0.2B** 2017 Sales

**6** Service Locations

**400** Employees

**4** Manufacturing Locations

## Middle East & Africa

**\$0.3B** 2017 Sales

**14** Service Locations

**1,100** Employees

**4** Manufacturing Locations

## Global

**\$3.5B\*** 2017 Sales

**~150** Service Locations

**~17,300** Employees

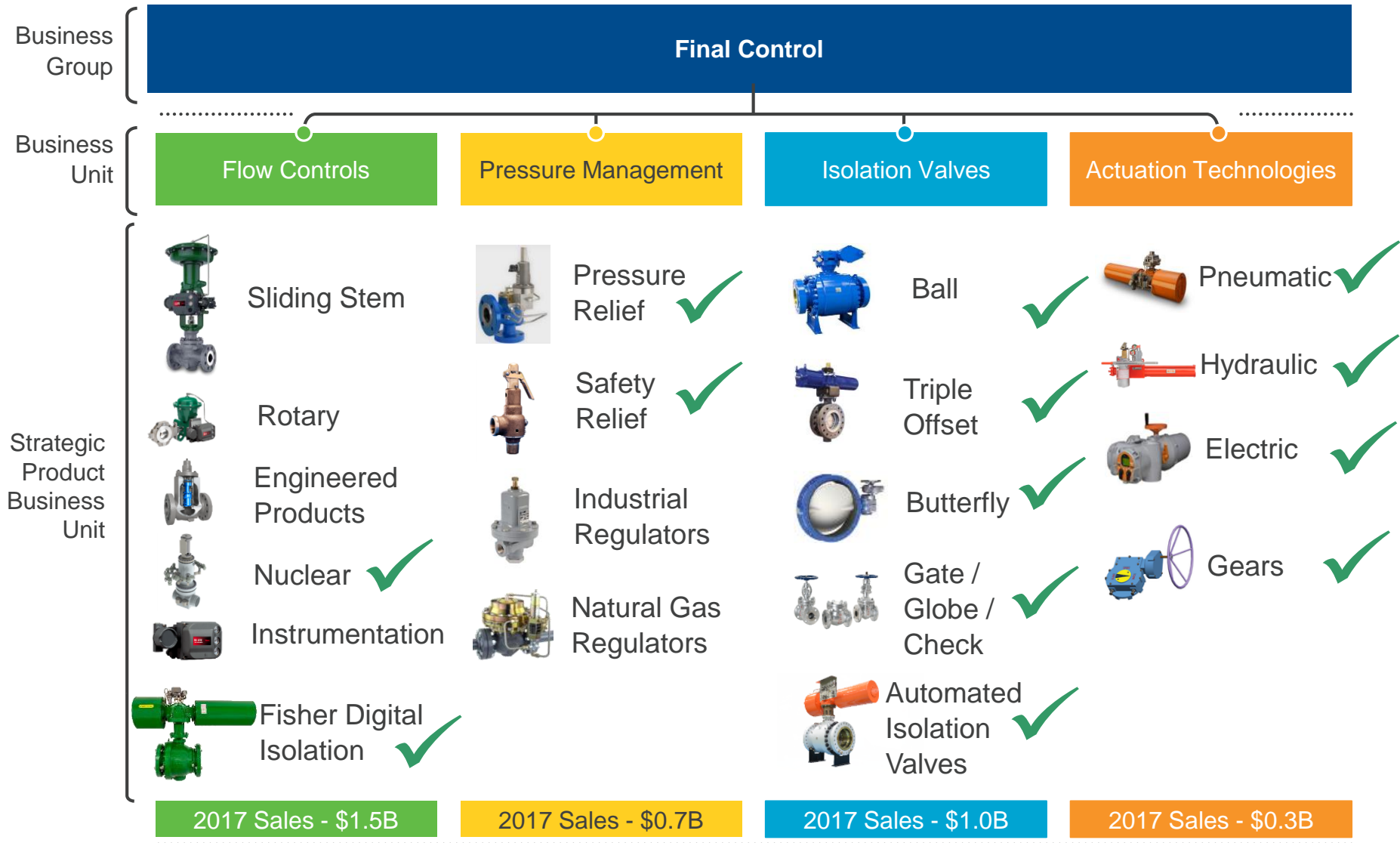
**61** Manufacturing Locations

\*2017 V&C sales included on a pro forma basis

... to Serve Customers With Local Expertise, Manufacturing, Project Engineering, After-Market Services, and Speed

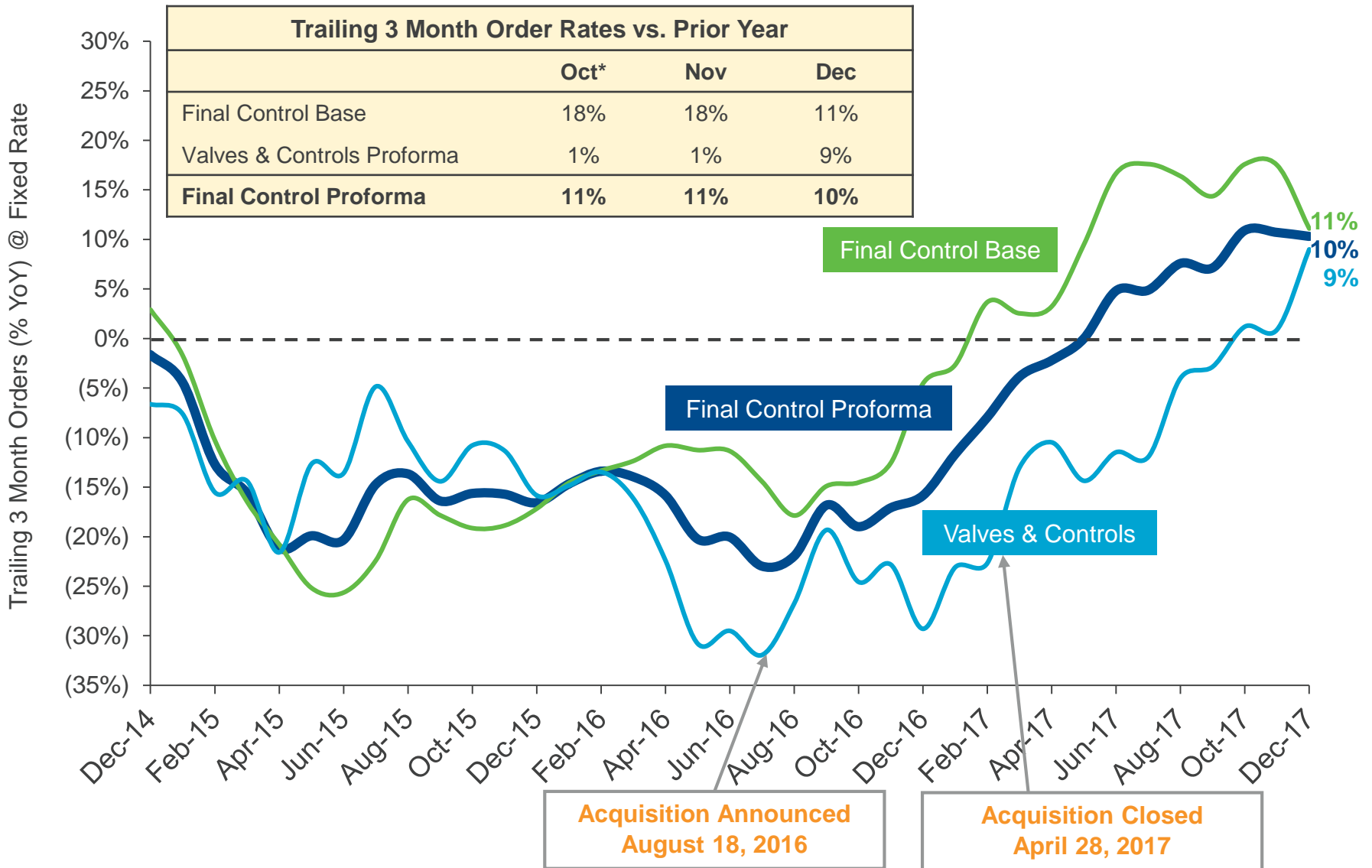
# New Final Control Business Group Management Structure

Impacted by V&C 



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# Focused and Early Concentration on Customer Engagement Resulting in Accelerating Order Activity



\*Note: Adjusted to exclude impact of sales channel returns

# Key Growth Programs Will Drive \$200M in Incremental Growth by 2020; \$70M+ Will Be Realized in 2018

## Strategic Accounts

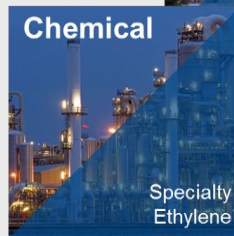
Emerson



Valves & Controls



## Industry Focus



## Automated Valves

- Fully Engineered & Integrated
- Factory Configured and Tested



Fisher Digital Isolation™



Automated Isolation Valves

## Lifecycle Services



\$40B Installed Base

North America \$16B

Asia \$10B

Europe \$7B

Middle East & Africa \$4B

Latin America \$3B

# Early Project Engagement as Main Valve Partner Is Delivering Schedule & Cost Improvements for Customers



## PEMEX

### Abkatun-A2 Offshore Platform

  
 Mexico

# \$9M

  
 Emerson Value

  
 Upstream O&G

**Challenge**





- Complex project with expedited delivery schedule

**Solution**

- Engaged at Front-End Engineering & Design as Main Instrument Vendor
- Applied unrivalled application expertise for critical valve specification and design



### Final Control Portfolio Participation

Control Valves		✓	Isolation Valves		✓
Pressure Relief		✓	Actuators		✓

## Hengli Group

### Hengli Refinery and Ethylene Project

  
 China

# \$18M

  
 Emerson Value


  
 Refining Petrochemical

**Challenge**





- Customer needed strong technical and engineering support for large, complex project

**Solution**

- Cross-functional teams utilized to closely engage with customer
- Full Final Control engagement to shorten decision process



### Final Control Portfolio Participation

Control Valves		✓	Isolation Valves		✓
Pressure Relief		✓	Actuators		✓

# Final Control Expertise as an Operational Partner Is Delivering Lower Total Cost of Ownership & Improved Productivity



## Combined Cycle Power Plant Asheville Project



USA

**\$6M**

Emerson Value



Power

### Challenge

- Extreme conditions and specialized applications for a plant expansion

### Solution

- Offered unparalleled portfolio
- Applied unrivalled application expertise for critical valve specification and design



### Final Control Portfolio Participation

Control Valves



Isolation Valves



Turbine Bypass



Actuators



## Petrochemical Customer Jubail Chemical Plant



Saudi Arabia

**\$2M**

Emerson Value



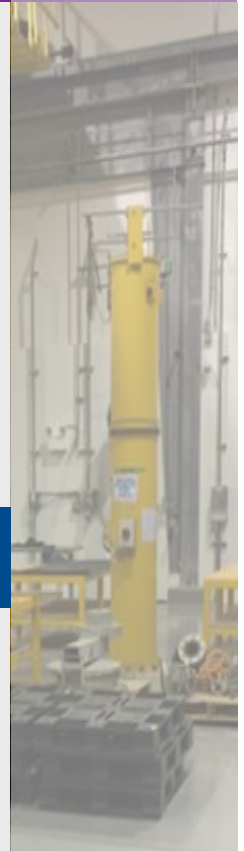
Chemical

### Challenge

- Reduce costs and procurement complexity, and simplify maintenance for improved operating performance

### Solution

- Broad portfolio of service offerings with embedded service personnel and local presence



### Final Control Portfolio Participation



Service Agreement



Connected Services



QuickShip



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# Supply Chain Programs Will Deliver \$30M in Cost Savings by 2020

## Before Deal Closure...

**420** Projects Identified

**60** Global Leaders Trained

**\$12M-\$20M**  
Savings Potential Identified

**400+**  
Supplier  
Negotiations in  
First 180 Days

**\$17+M**  
Savings Realized

**95+%**  
Supply Chain  
Regionalization by  
2020

**4,600+ (25%)**  
Suppliers  
Reduced  
by 2020

**\$30M**

in Net Material Inflation by 2020

## Castings

Regional foundry development and 3D printed sand molds for D-part castings

## Machined Parts

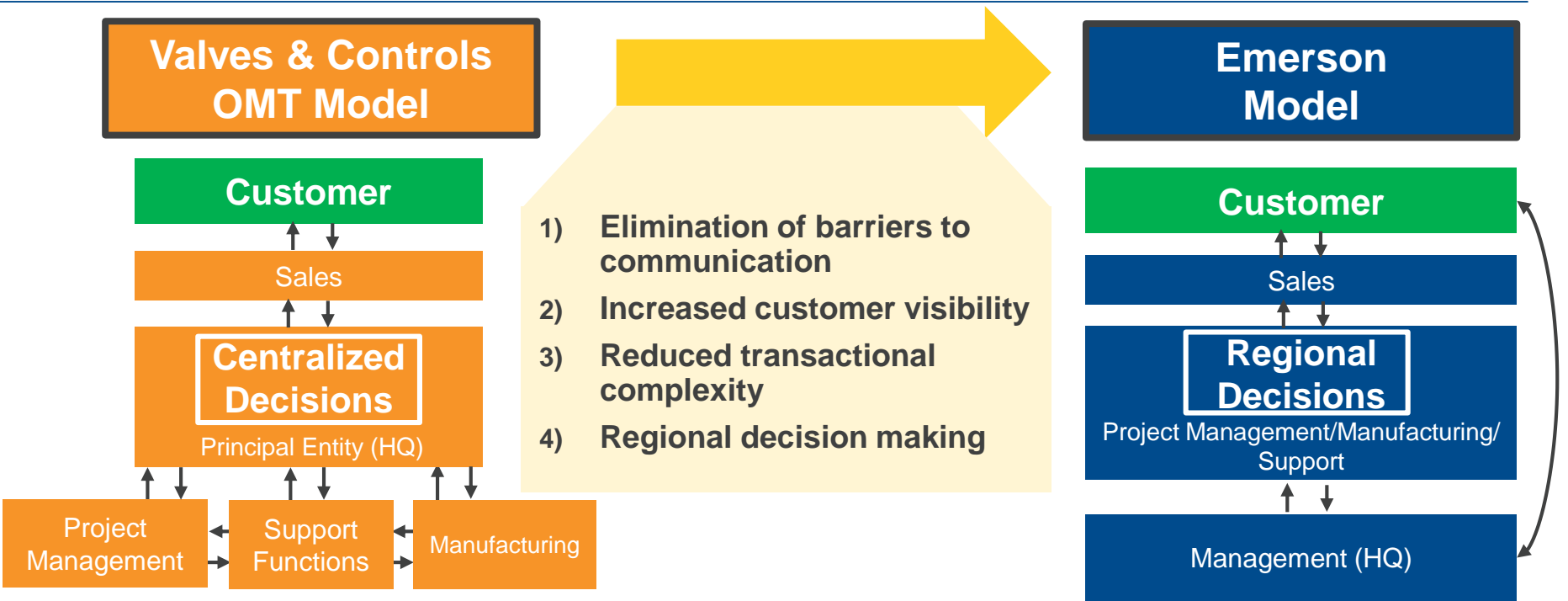
Expanding capacity in Toluca, Mexico to support North America plants on machined parts

## Indirect

Implementing spend visibility tools to accelerate cross-BU tensioning

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# OMT<sup>1</sup> Realignment Will Drive Service Level Improvements While Reducing Inventory



OMT Performance Metrics	
RDSL <sup>2</sup>	~65%
Inventory Turnover	~1.9
Past-Due Receivables	~38%

Emerson Target Metrics	
RDSL <sup>2</sup>	>95%
Inventory Turnover	>5.0
Past-Due Receivables	<15%

<sup>1</sup> Operating Model Transformation

<sup>2</sup> On-Time to Request Date Service Levels

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# Final Control -- Summary

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- Acquisition of Valves & Controls **transforms Final Control** and **broadens Automation Solutions**
  - One global manufacturer supplying and servicing all valves everywhere;
  - Global #1 player, with 16%+ served market participation and **\$5B in sales by 2022**
- Rapid organic growth driven by enhancing our **relevance – Connecting To Customers to capture investment waves**
  - Strategic direction focused on **Problem Solving** enabling customers to achieve **Top Quartile Performance** in both operational and project environments
  - Simplifying and elevating customer interactions through a **Single Integrated Channel**
- **Technology Leadership** position to **separate from the competition**
  - **Electric actuation** remains a priority for accelerated investment
- **Lifecycle Management** of the \$40B global installed base to **build loyalty and drive sustained growth** through traditional and outcome-based service models
- **Perfect Execution** focus to drive **regionalization** and **supply chain speed** resulting in superior **operating margin** and **cash flow generation**

Final Control Will Drive **Value Creation** for Our Global Customers

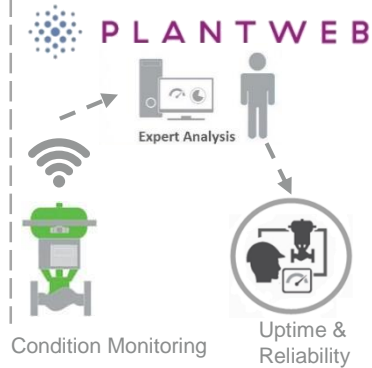
# We Are the Main Valve Partner Helping Customers Achieve Top Quartile Performance

## Category Leading Products

Brand, Breadth, and Service



## Technology Leadership



## Trusted Advisor

Main Valve Partner

- Build in Optimized Solutions at Front-End Engineering & Design
- Project Execution Expertise
- Single Partner Accountability

## Top Quartile Performance

Problem Solving

- Project Certainty
- Operational Certainty

New Final Control







WE SEE

THE STRENGTH OF ONE EMERSON





WE SEE

THE STRENGTH OF ONE EMERSON



# **2018 Investor Conference Commercial & Residential Solutions Business Overview**

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Bob Sharp  
Executive President  
February 15, 2018

# **2018 Investor Conference Commercial & Residential Solutions Business Overview**

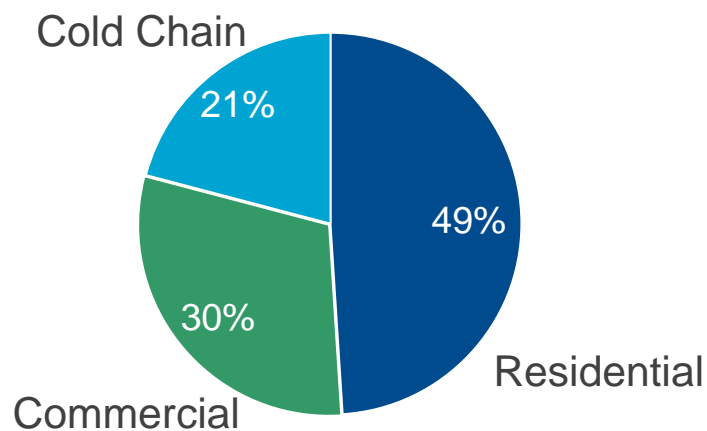
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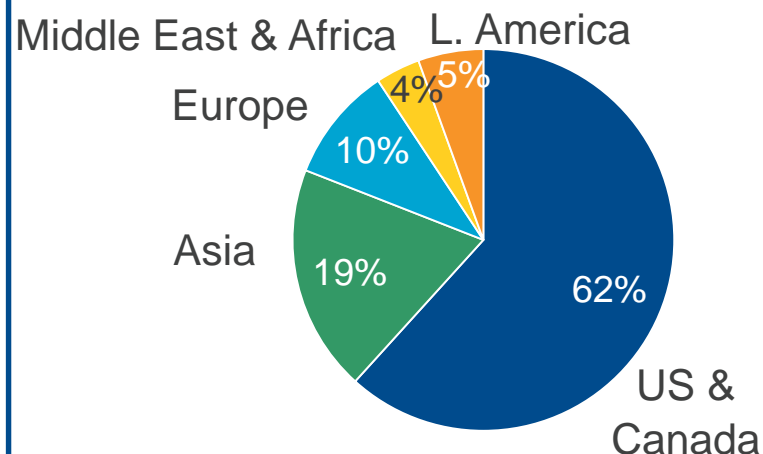
# Commercial & Residential Solutions 2017 Summary

	<u>2016</u>	<u>2017</u>	<u>2016 – 2017 Change</u>
Sales	\$5.2B	\$5.6B	6%
EBIT	\$1.3B	\$1.3B	7%
% of Sales	24.0%	24.2%	+20 bps
ROTC	48%	52%	

2017 Sales by Market



2017 Sales by Geography



# Commercial & Residential Solutions

## Key Messages

---

- Commercial & Residential Solutions is **uniquely positioned in an attractive market** that consistently delivers ~3% underlying through-the-cycle growth
- Our platform is built upon **franchise businesses** that serve as **industry stewards**, essential attributes that have enabled a **long-term proven record of value creation**
- Our significant **market positions get challenged, but we have managed these challenges** for decades. In addition, **several major new programs provide the foundation for incremental above-market growth and value creation.**
- New areas of focus **have expanded our addressable market by \$8B, to \$39B.** And we are working **additional internal and acquisition opportunities in Electronics and Professional Tools** areas to further increase our served space.
- With our **broad product portfolio**, we have a **differentiated position from which to deliver solutions** and act as a **technology partner to our customers**
- **Traction over the past ~18 months has been very solid:** We achieved **6.1% underlying sales\* growth in 2017, and expect 4-6% growth in 2018**

We Are Committed to Delivering Sustained Above-Market Sales Growth  
While Maintaining Record Profit Margins and Asset Management for  
Continued Value Creation

# Served Market Showing Steady Growth, With Attractive Market Drivers to Leverage

## Cold Chain

2018



2018-2021



## Residential

2018



2018-2021



## Commercial

2018



2018-2021



## Market Drivers

**Commercial Refrigeration**

DOE & EPA regulations drive redesigns & food monitoring, Cold Chain expansion

**Food Retail**

Energy reduction, food quality, new formats

**Transport**

Asia rail, truck & trailer, container recovery

**Residential AC**

Solid fundamentals; summer weather key

**Home Improvements**

Consumer confidence, equipment investment, improvement & repair projects

**Residential Construction**

New construction & private spending

**Commercial AC**

New efficiency standards

**Global Heating**

China coal to heat pump conversion

**Non-Residential Construction**

Non residential fixed investment & growth in strategic building segments

Expect 2018 Total Commercial & Residential Global Market up 3% to 5% -- Commercial & Residential Solutions Underlying Sales\* Expected To Be up 4% to 6%

# Several Key Programs to Address Our Core Opportunities

## Protecting Food Quality & Sustainability

Keeping food fresh across the cold chain while lowering cost and improving customer experience

### Key Programs

- ✓ Temperature Management
- ✓ Facility/Asset Monitoring
- ✓ Integrated Solutions

## Ensuring Human Comfort & Health

Transforming homes with comfort, efficiency and connectivity solutions

- ✓ Heat Pumps Solutions
- ✓ Sensi Thermostats
- ✓ Sensi Monitoring

## Advancing Energy Efficiency

Enabling high-performance, comfortable and controllable workplace environments

- ✓ Modulation & Control
- ✓ Dehumidification
- ✓ Building Management

## Creating Sustainable Infrastructure

Food waste management solutions for home, businesses and communities

- ✓ Disposer Adoption
- ✓ Grind2Energy

COPELAND™

PROACT™

sen | si

RIDGID®

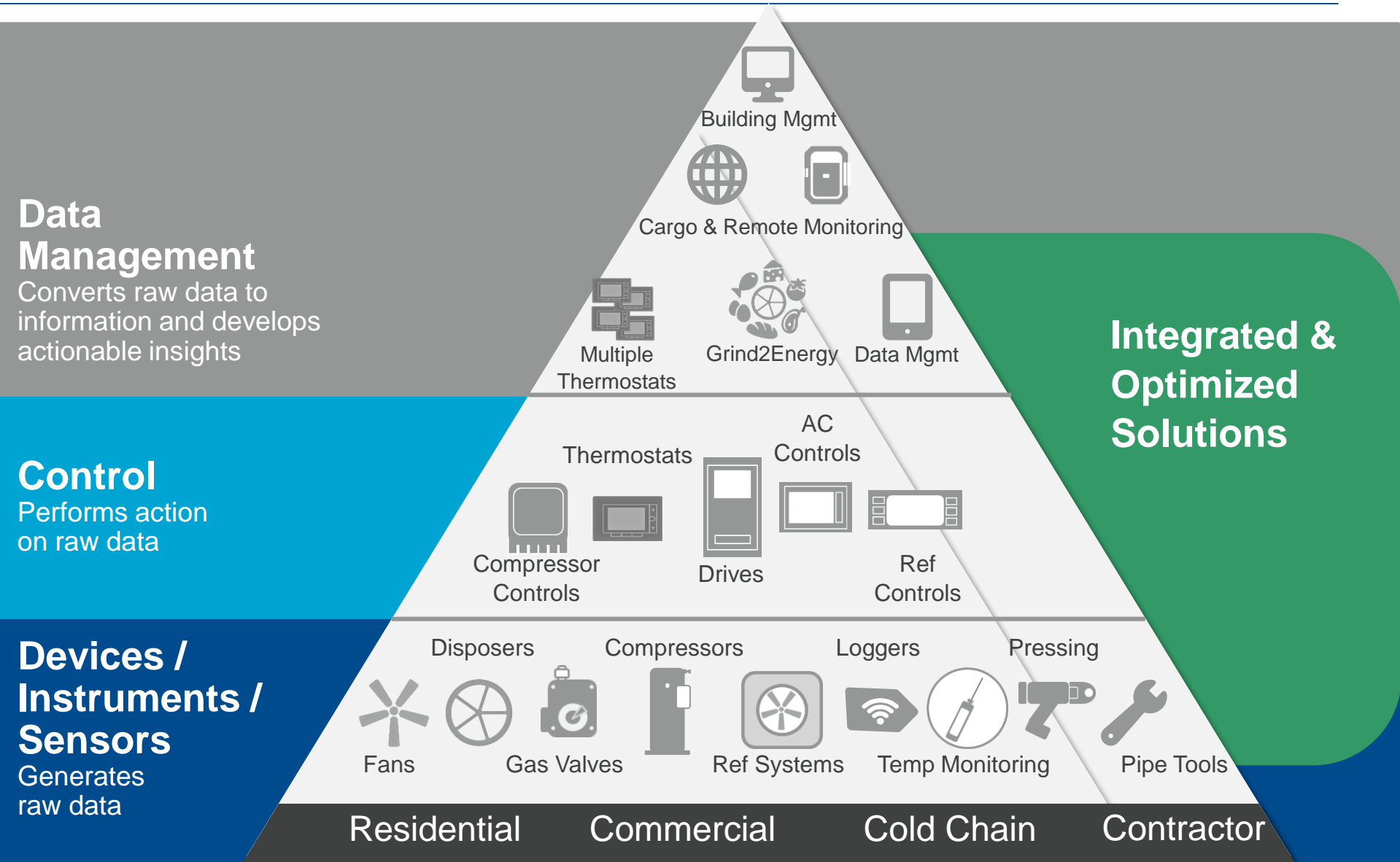
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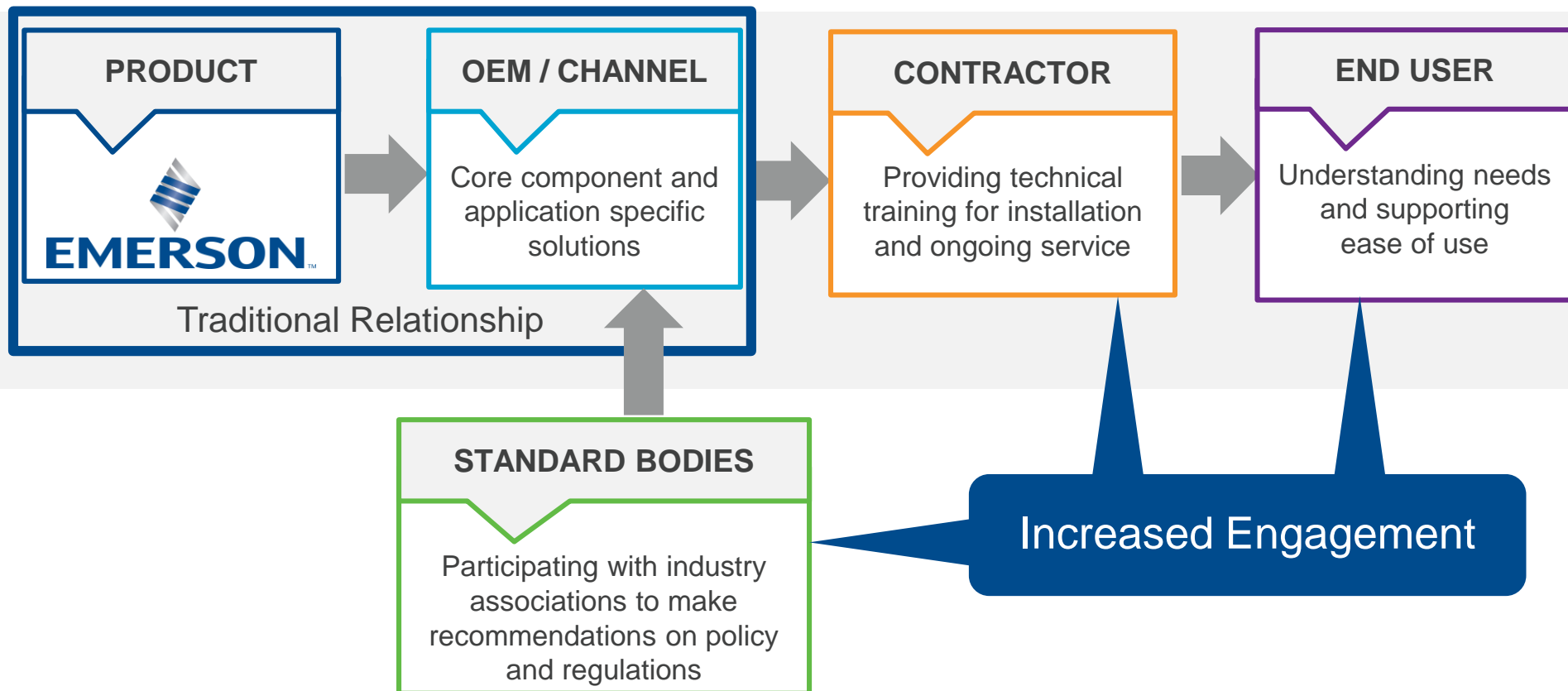
# Moving Up the Technology Pyramid Utilizing Intelligent Devices, Controls and Software Across the Platform



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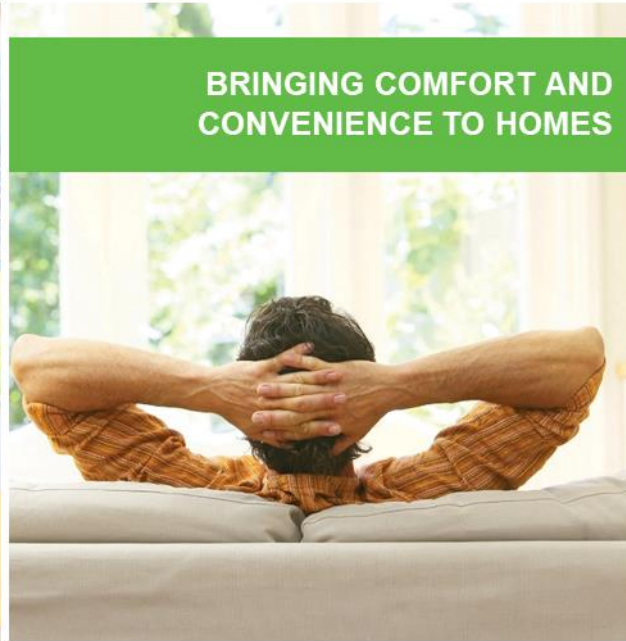
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# Our Domain Knowledge, Product Strength and Solutions Capability Enable Us to Serve as an Industry Steward



We Are Leveraging Expertise, Relationships, and Capabilities for Solutions, Even in the Most Competitive Global Markets

# COMPREHENSIVE RANGE OF TECHNOLOGIES AND SOLUTIONS



# HELPING CUSTOMERS, CONTRACTORS AND END USERS NAVIGATE CHANGE

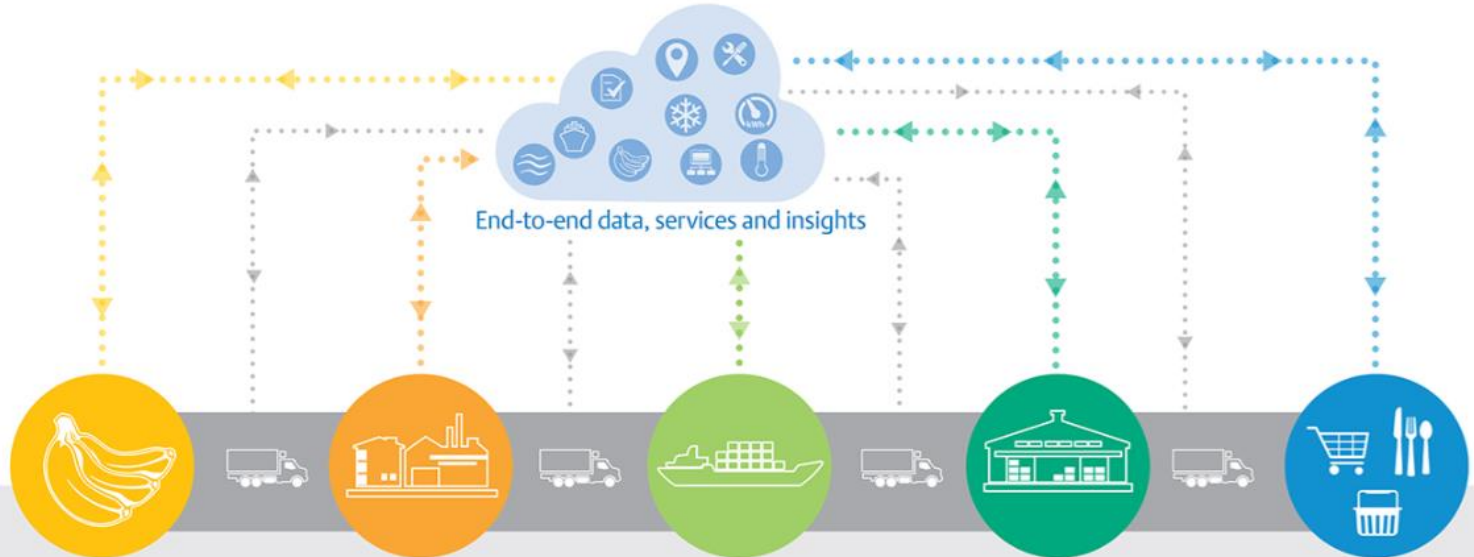
# Keeping Food Fresh Throughout the Cold Chain

## Food Quality and Safety Solutions Across the Cold Chain





# End-to-End Cold Chain Solutions Offer a Significant Opportunity to Protect Food Quality & Safety



	Harvest	Processing	Transportation	Distribution	End-Users
Compressors & Refrigeration Systems	●	●	●	●	●
Industrial Refrigeration	●	●		●	
Controls	●	●	●	●	●
Loggers & Trackers	●	●	●	●	●
Temperature Management	●	●	●	●	●
ProAct Services			●	●	●
Project Management				●	●

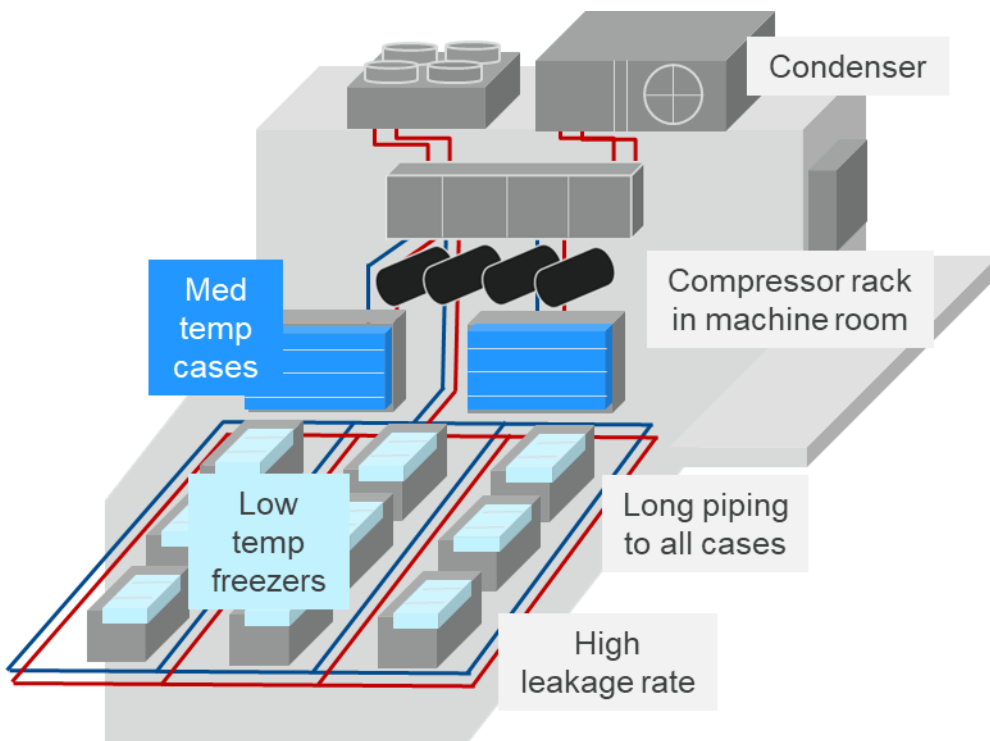
# We Are Focused on Integrated Solutions at Each Node and Across the Cold Chain

Harvest	Processing	Transportation	Distribution	End-Users
<b>Pre-cool products prior to shipment</b>	<b>Production of food products</b>	<b>Reduce product loss &amp; monitor food safety</b>	<b>Ensure food quality &amp; maintain freshness</b>	<b>Deliver fresh products &amp; energy savings</b>
Refrigeration for storage facilities & warehouses	Refrigeration for food process cooling & cold storage	Refrigeration & monitoring for containers & trailers	Refrigeration for cold rooms & warehouses	Refrigeration for point of sale providers
Fixed monitoring on-site	Fixed monitoring with data analytics & recording keeping	Container fleet asset management & maintenance	Fixed monitoring with data analytics	Fixed & remote monitoring with data analytics & record keeping, predictive maintenance
Mobile monitoring for cargo from field forward	HVAC solutions	Mobile monitoring for cargo through the supply chain	HVAC solutions	

Cold Chain Teams Organized Around Food Retail, Food Service, Industrial, Transportation and Distribution. 2x Larger Than Next Participant in an \$8B Served Portion of Global Market With Several Opportunities to Expand.

# The Food Retail Market Is Going Through a Major Upheaval With Shifting Architecture & Market Trends

## Traditional Supermarket Architecture



Shift to small footprint stores

- Need for flexibility
- Optimize space
- Reduce operating expense

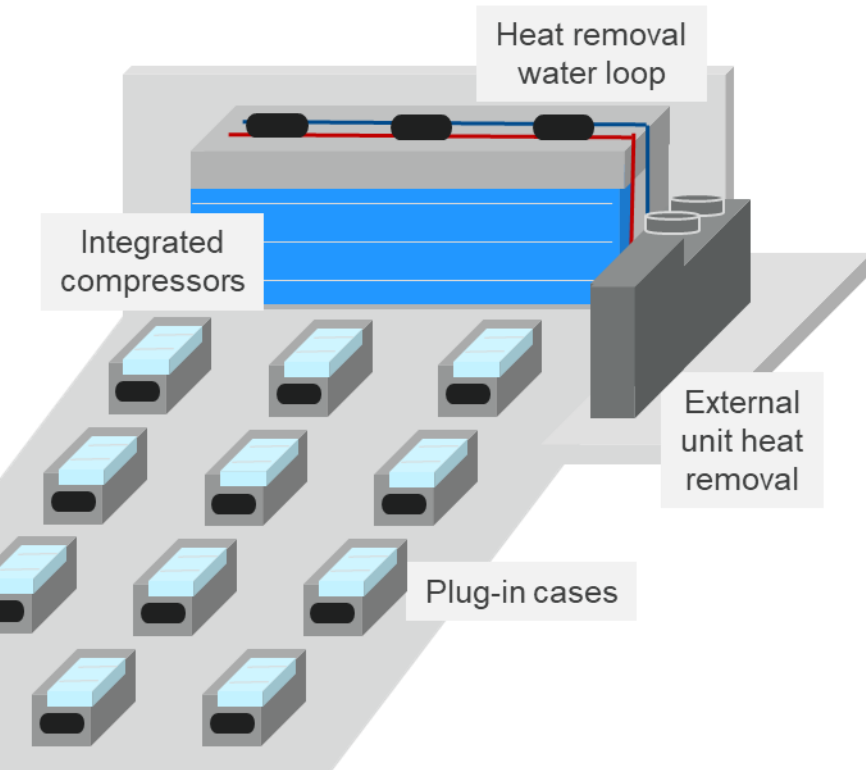
Increasing home delivery growth by e-tailers & traditional supermarkets

- Shifting to large scale perishable food delivery
- New architectures shift away from retail food display
- Cold storage distribution centers growing to support trend

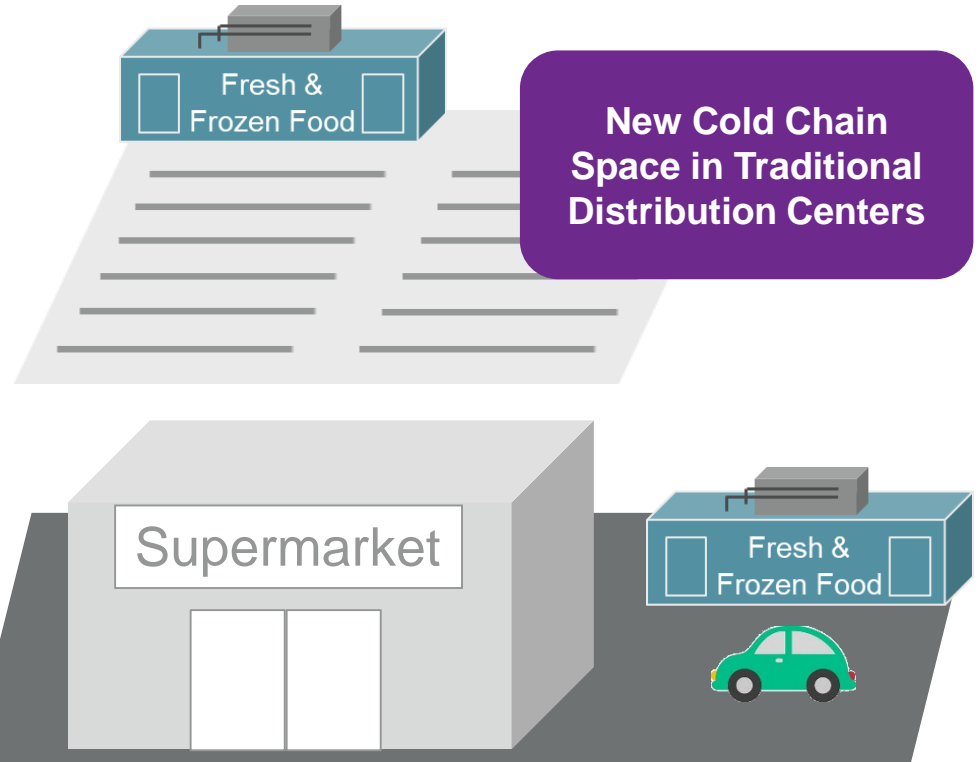
Retailers Focused on Improving Operational Cost Through Energy Efficient Infrastructure Designs

# We Have Solutions to Support New Food Retail Architectures and Business Models

## Small-Format Architecture



## E-Commerce Models



**Integrated Solutions for Refrigeration Case Manufacturers**

**New Staging Infrastructure for Click & Collect**

# Convenience Stores & Restaurants Continue to Expand Fresh Food Offering, Requiring New Solutions



Sensi



Transformative Wave

HVAC



Packaged Controls

Food Service



Temperature Monitoring



Building Controls

Building Management Systems

**PROACT™**

ProAct Software Services, Solutions



Cargo Solutions

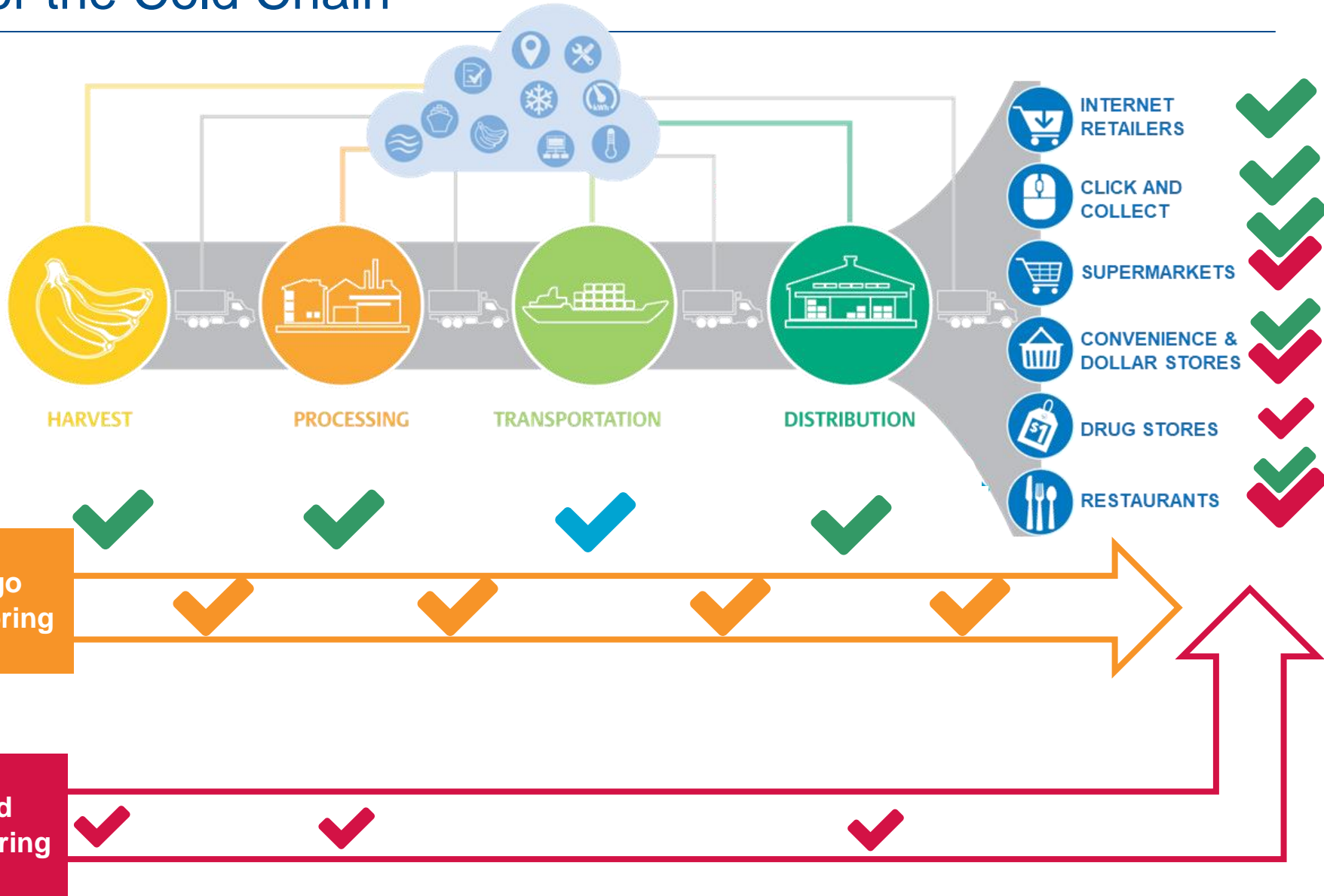
Cargo Monitoring



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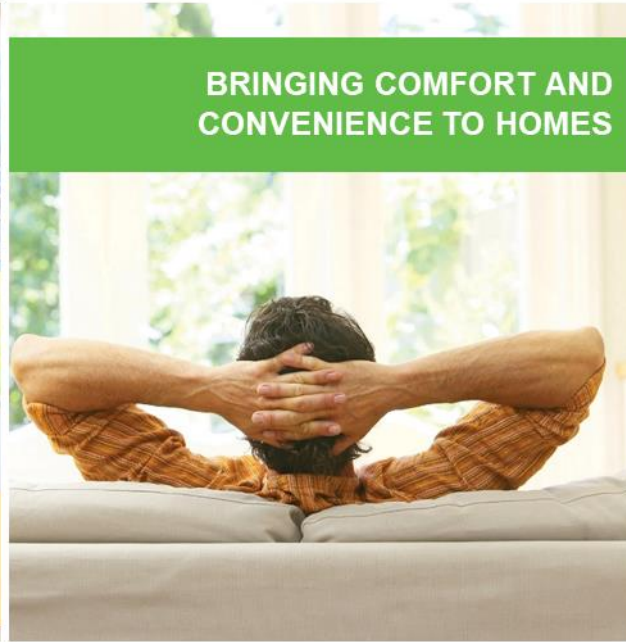
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# Cooper-Atkins Further Expands Our Connected Solutions for the Cold Chain





# COMPREHENSIVE RANGE OF TECHNOLOGIES AND SOLUTIONS



# HELPING CUSTOMERS, CONTRACTORS AND END USERS NAVIGATE CHANGE

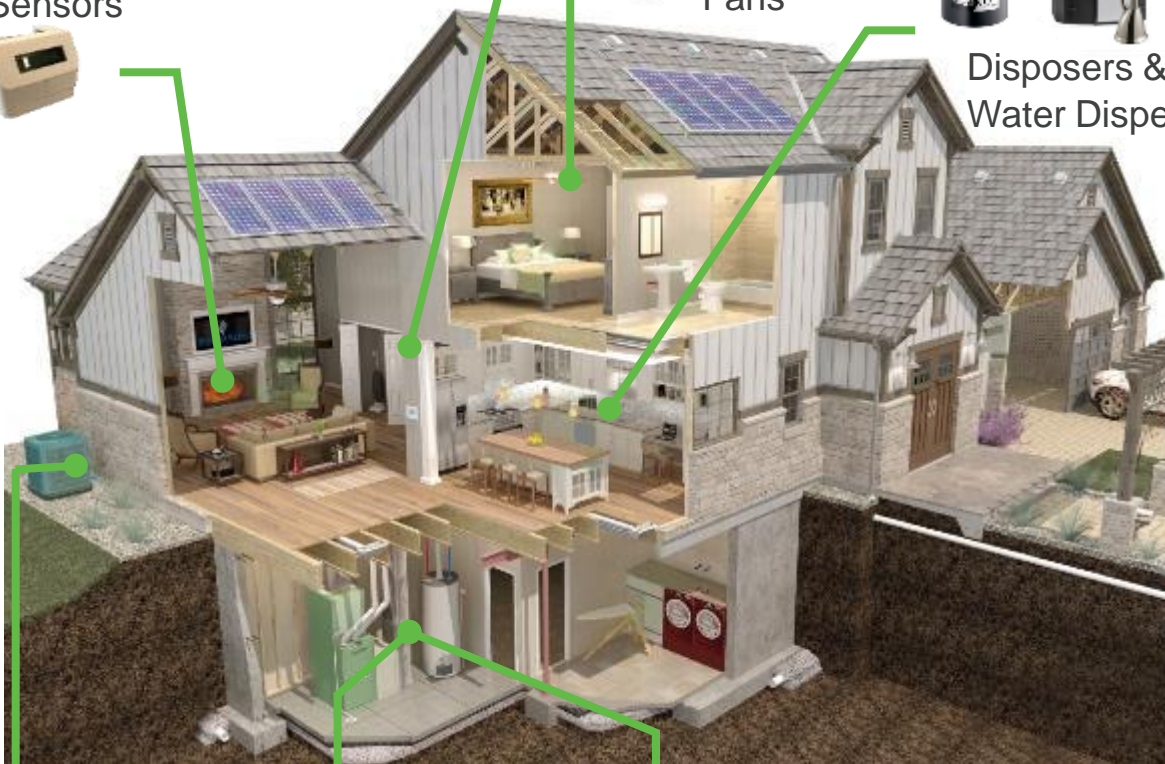
# Bringing Comfort And Convenience to Homes as Part of The Critical Infrastructure

Smart Thermostats



Disposers & Hot Water Dispensers

Air Quality Sensors



Compressors, Drives & Controls



Gas Valves & Heating Controls



Sensi Monitoring

**58%**  
**HOME ENERGY**  
CONSUMED BY HVACR & WATER HEATER

**\$21 BILLION**  
HOME AUTOMATION MARKET BY 2020

CHINA 1<sup>st</sup>  
US 2<sup>nd</sup>  
FOOD WASTE 3<sup>rd</sup>  
**GREENHOUSE GAS PRODUCER**

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# Variable Speed Market Dynamics Vary by Region, and We Address With Local Presence



Compressor



Drive

## Asia

Delivering integrated variable speed solutions to strategic and small OEMs  
Differentiation for specialty applications

## Europe

Variable speed key for penetrating the heat pump space due to efficiency requirements  
Emerson heating & electronic solutions differentiate

## North America

Delivering variable speed solutions to multiple OEMs  
Continues to be a niche market due to contractor reluctance & price level

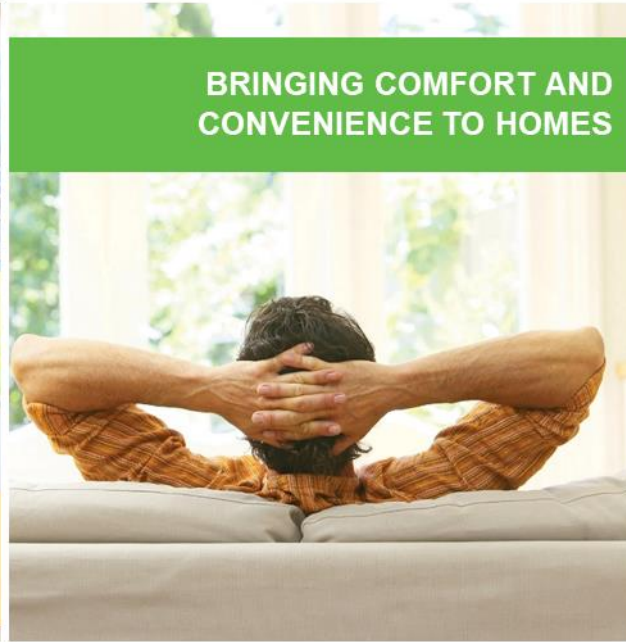
Competitive Variable Speed Offering in All Regions

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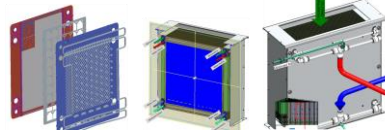
# COMPREHENSIVE RANGE OF TECHNOLOGIES AND SOLUTIONS



# HELPING CUSTOMERS, CONTRACTORS AND END USERS NAVIGATE CHANGE

# Enabling High Performance Commercial Buildings as Part of the Critical Infrastructure

Compressors & Controls




Dehumidification



Rooftop Unit Drives

  
CONSTRUCTION  
OF ZERO ENERGY BUILDINGS  
**DOUBLED**  
SINCE 2012

**\$4**   
**BILLION**  
PRIVATE SECTOR  
INVESTMENT IN CLEAN  
ENERGY INNOVATION

**36%**   
ENERGY CONSUMPTION  
HVACR SYSTEMS &  
25% FROM LIGHTING

Multiple  
Thermostat  
Manager



HVAC  
Monitoring &  
Diagnostics



# Integrated HVAC Solutions Deliver Additional Value & Efficiency to Commercial Buildings

Technology Integration

## System Level Solution



## Integrated Solution



## Compressor + Drive



## Compressor



## Building Solution



Building Management & System Supervisor

End User Value

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# Multiple Thermostat Manager Software Aggregates Sensi Thermostats for Easy Commercial Application

## Sensi Multiple Thermostat Manager Portal



**Centralized Monitoring & Control**  
multi thermostat dashboard



**Smart Schedule**  
scheduling special events



**Multi User Controls**  
with administrator functionality



**Solution Cost**  
Sensi Thermostat +  
\$1/month/thermostat

**Launched in November**

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# China Heat Pump Offering Now Includes Commercial Applications, a Significant Market Expansion

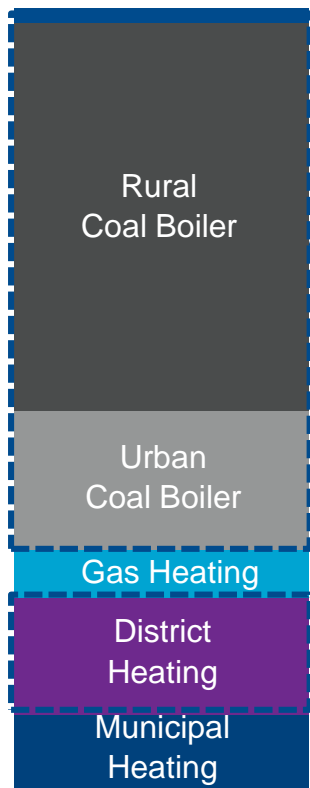
## Residential & District Heating

## Additional Heating Applications

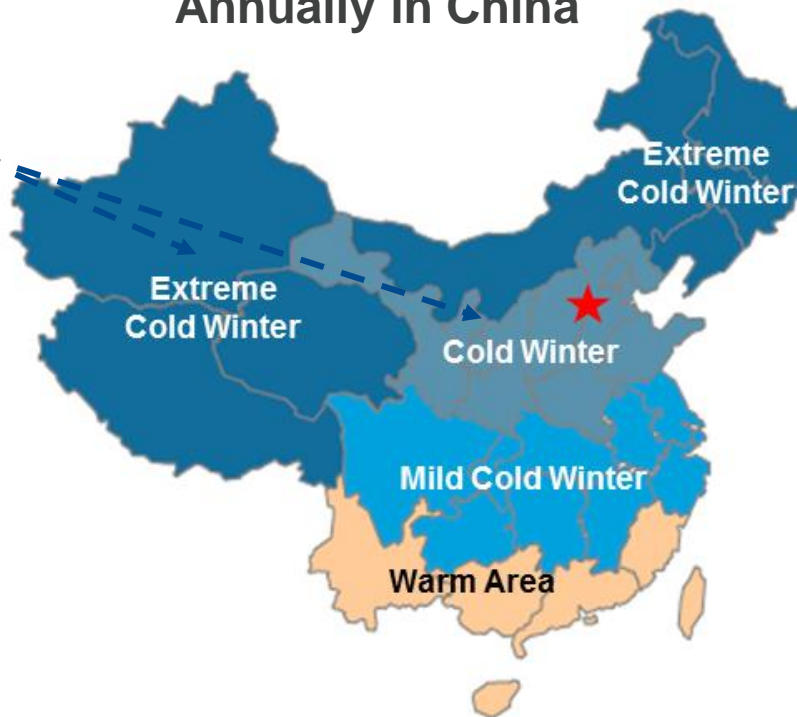
### Residential Heating



### District Heating



1M Heat Pumps Installed Annually in China



### Industrial Heating



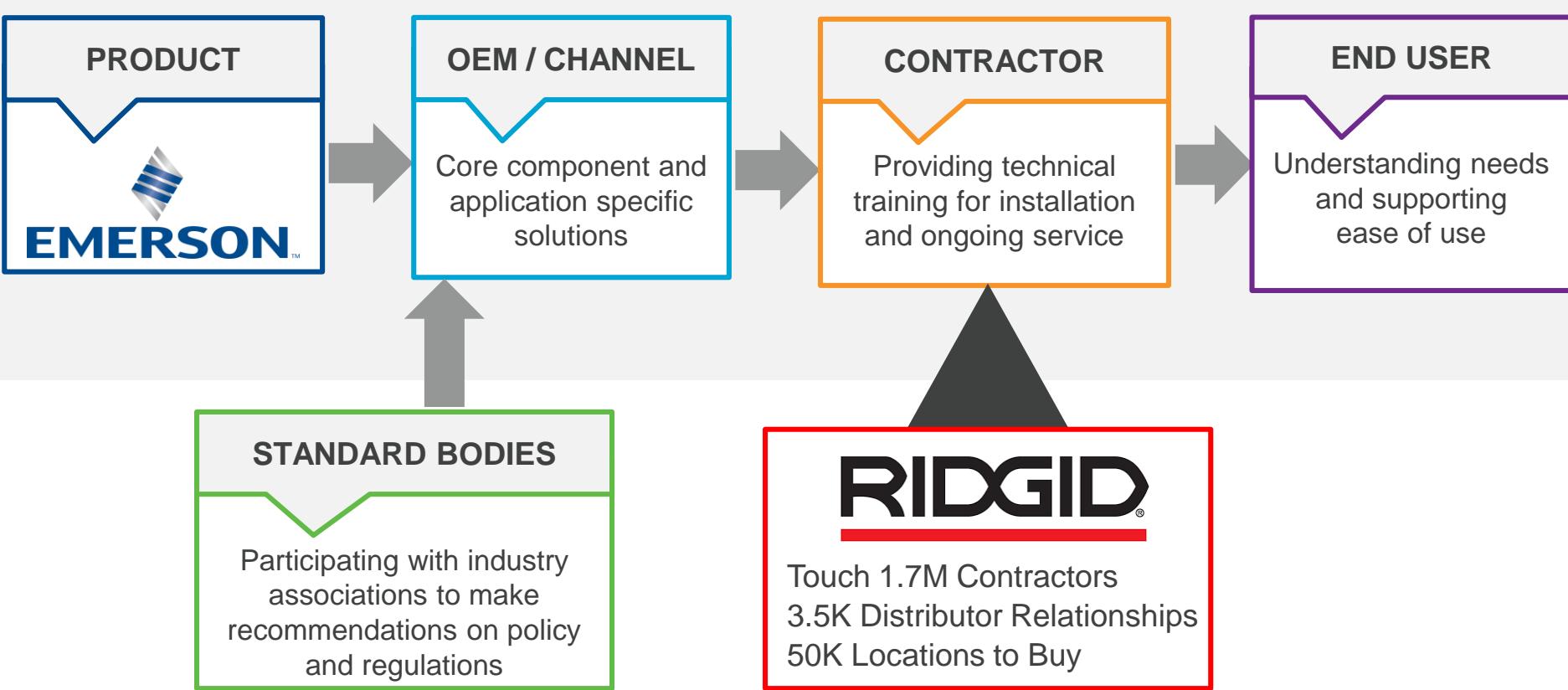
### Sanitary Heating



District, Industrial and Sanitary Heating Market Will Continue to Drive China Heating



# Our Connection With Contractors Extends Into Professional Tools



Professional Contractor Relationships Are a Key Driver of Brand Strength, Helping Balance Relationships With OEMs and Retail Channel Partners

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# Business Development Focus Areas Across Our End Markets





## Residential Home Comfort



## Energy Efficient Commercial Buildings



## Food Quality & Safety Across the Cold Chain





## Efficient Contractors

From 2017


- Home HVAC and Critical Infrastructure Monitoring 
- Smart Fans 
- Indoor Air Quality 
- Modulating Compressors 


- Liquid Desiccant Dehumidification 
- Transformative Wave 
- Small & Medium BMS 
- New Compression 


- Grind2Energy 
- Industrial Refrigeration Solutions 
- Expanded Cold Chain Services 
- Non-food Cold Chain Solutions 


- Test & Measurement Solutions 
- RIDGID Connect 
- Contractor Tools and Enriched Data 
- E-Commerce 

Plus

- Asia & Europe Heat Pumps 

- Modulating and Variable Speed Compressors 

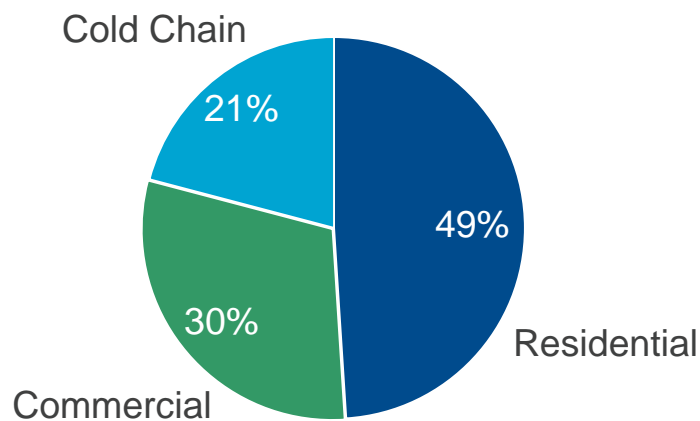
- Portable Temperature Monitoring 

- Refrigeration Joining 

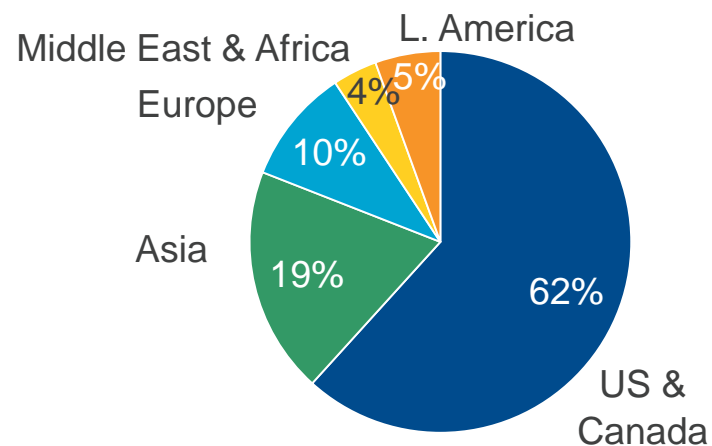
# Commercial & Residential Solutions 2017 Summary & 2018 Guidance

	<u>2016</u>	<u>2017</u>	<u>2018E</u>
Sales	\$5.2B	\$5.6B	4% - 6%
EBIT	\$1.3B	\$1.3B	
% of Sales	24.0%	24.2%	~24%
ROTC	48%	52%	

2017 Sales by Market



2017 Sales by Geography



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WE SEE

THE STRENGTH OF ONE EMERSON





WE SEE

THE STRENGTH OF ONE EMERSON





# Reconciliation of Non-GAAP Measures

In this presentation non-GAAP measures (denoted with an \*) are used when talking about the Company's performance, and a reconciliation of those measures to the most comparable GAAP measures is contained below.

(\$ in billions, except per share amounts or where noted)

## Sales % chg. vs. PY

Sales change (GAAP)  
Acq/Div/FX  
Underlying\*

2016				
Q1	Q2	Q3	Q4	FY
(17)%	(9)%	(10)%	(6)%	(11)%
7%	4%	2%	1%	4%
(10)%	(5)%	(8)%	(5)%	(7)%

## Sales % chg. vs. PY

Sales change (GAAP)  
Acq/Div/FX  
Underlying\*

2017				
Q1	Q2	Q3	Q4	FY
(4)%	0%	10%	13%	5%
1%	-	(6)%	(10)%	(4)%
(3)%	0%	4%	3%	1%

## Sales % chg. vs. PY

Sales change (GAAP)  
Acq/Div/FX  
Underlying\*

2017E Guidance
(3)-(1)%
~1%
(2)-0%

## Sales % chg. vs. PY

Sales change (GAAP)  
FX  
Acq/Div  
Underlying\*

2018	2018E			
Q1	Q2	Q3	Q4	FY
19%	~18%	~10%	~6%	11 - 13%
(3)%	~(3)%	~(3)%	~(1)%	~(2)%
(9)%	~(8)%	~(1)%	~1%	~(4)%
7%	~7%	~6%	~6%	5 - 7%

# Reconciliation of Non-GAAP Measures

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## Sales % chg. vs. PY

Mature market sales change (GAAP)

Acq/Div/FX

Mature market underlying\*

2018E
FY
~9+%
~(4)%
~5+%

## Sales % chg. vs. PY

Emerging market sales change (GAAP)

Acq/Div/FX

Emerging market underlying\*

2018E
FY
14 - 15%
~(8)%
6 - 7%

## Sales % chg. vs. PY

Sales change (GAAP)

FX

Acq/Div

Underlying\*

Auto Sols	Comm & Res Sols
2018E	2018E
FY	FY
18 - 20%	1-3%
~(3)%	~(2)%
~(9)%	~5%
6 - 8%	4 - 6%

# Reconciliation of Non-GAAP Measures

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## **Sales CAGR**

Sales CAGR (GAAP)

Acq/Div/FX

Sales underlying CAGR\*

2016-2021T	2017-2021T
~8%	~8.5%
~(3)%	~(3)%
~5%	~5.5%

## **Mature Market Sales CAGR**

Sales CAGR (GAAP)

Acq/Div/FX

Sales underlying CAGR\*

2002-2007	2007-2012	2012-2017	2017-2021T
4.0%	-	(2.0)%	~6+%
0.5%	1.0%	2.5%	~(1)%
4.5%	1.0%	0.5%	~5+%

## **Emerging Market Sales CAGR**

Sales CAGR (GAAP)

Acq/Div/FX

Sales underlying CAGR\*

2002-2007	2007-2012	2012-2017	2017-2021T
20.5%	8.0%	(4.0)%	8 - 9%
(5.5)%	-	5.0%	~(2)%
15.0%	8.0%	1.0%	6 - 7%

## **Automation Solutions Sales CAGRs**

Sales CAGR (GAAP)

Acq/Div/FX

Underlying sales CAGR\*

2005-2016	2016-2021T	2017-2021T
~5.0%	9 - 10%	9.5 - 10.5%
~(1.0)%	~(4)%	~(2.5)%
~4.0%	5 - 6%	7.0 - 8.0%

## **Comm & Res Sols Excluding ClosetMaid Sales CAGRs**

Sales CAGR (GAAP)

Acq/Div/FX

Underlying sales excluding ClosetMaid CAGR\*

2005-2016	2016-2021T	2017-2021T
~2.0%	3 - 4%	2.5 - 3.5%
~.5%	~1%	~1.0%
~2.5%	4 - 5%	3.5 - 4.5%

# Reconciliation of Non-GAAP Measures

In this presentation non-GAAP measures (denoted with an \*) are used when talking about the Company's performance, and a reconciliation of those measures to the most comparable GAAP measures is contained below.

(\$ in billions, except per share amounts or where noted)

## EBIT Margin

	2017	2018E	2021T	2017 vs 2018E
Pretax margin (GAAP)	15.3%	~15.8%	~18%	~50 bps
Interest expense, net	1.1%	~0.9%	~1%	~(20) bps
EBIT margin*	16.4%	~16.7%	~19%	~30 bps
Additional \$4B spend			~(1)%	
EBIT with additional spend*			~18%	

## Earnings Per Share

	2015
Diluted earnings per share (GAAP)	\$ 3.99
Repositioning items and divestiture gains	(0.82)
Adjusted diluted earnings per share*	\$ 3.17

## Earnings Per Share

	2017
Earnings per share from continuing operations (GAAP)	\$ 2.54
Valves & Controls first year acquisition accounting charges	0.10
Earnings per share from continuing operations, excluding Valves & Controls first year acquisition accounting charges*	2.64
Valves & Controls operations	0.05
Earnings per share excluding Valves & Controls*	\$ 2.69

# Reconciliation of Non-GAAP Measures

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(\$ in billions, except per share amounts or where noted)

## Free Cash Flow

	2013	2014	2015	2016	2017	2018E	2021T	2021T Prior Year Guidance
Operating cash flow (GAAP)	\$ 3.6	3.7	2.5	2.9	2.7	~2.9	~3.8	~3.3
Impact of taxes on divestiture gains and repositioning items	-	-	0.5	0.2	-	-	-	-
Operating cash flow adjusted*	3.6	3.7	3.0	3.1	2.7	~2.9	~3.8	~3.3
Capital expenditures	(0.6)	(0.8)	(0.7)	(0.6)	(0.5)	~(0.6)	~(0.7)	~(0.6)
Free cash flow*	\$ 3.0	2.9	2.3	2.5	2.2	~2.3	~3.1	~2.7
Impact of tax reform							~(0.2)	
Free cash flow excluding tax reform*							~2.9	

## Free Cash Flow % of Sales

	2013	2014	2015	2016	2017	2018E
Operating cash flow as a % of sales (GAAP)	14.8%	15.0%	11.3%	14.2%	17.6%	~16.8%
Taxes paid on divestiture gains and repositioning items	-	-	1.9%	0.9%	-	-
Operating cash flow as a % of sales adjusted*	14.8%	15.0%	13.2%	15.1%	17.6%	~16.8%
Capital expenditures	(2.8)%	(3.1)%	(3.0)%	(2.6)%	(3.1)%	~(3.3)%
Free cash flow as a % of sales*	12.0%	11.9%	10.2%	12.5%	14.5%	~13.5%

## Free Cash Flow to Net Earnings Common Stockholders

	2013	2014	2015	2016	2017	2018E
Operating cash flow to net earnings (GAAP)	182%	172%	93%	176%	164%	~150%
Capital expenditures & impact of divestiture gains (& taxes paid), repositioning items & impairments	(66)%	(62)%	12%	(45)%	(29)%	~(30)%
Free cash flow to net earnings adjusted*	116%	110%	105%	131%	135%	~120%

## Dividend To Free Cash Flow

	2013	2014	2015	2016	2017	2017E Prior Year Guidance	2018E	2019T	2020T	2021T
Dividends to operating cash flow (GAAP)	32%	33%	50%	43%	46%	~49%	~42%	~39%	~36%	~35%
Capital expenditures & impact of taxes on divestiture gains & repositioning	8%	8%	6%	5%	10%	~13%	~11%	~10%	~9%	~8%
Dividends to free cash flow*	40%	41%	56%	48%	56%	~62%	~53%	~49%	~45%	~43%

# Reconciliation of Non-GAAP Measures

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(\$ in billions, except per share amounts or where noted)

<b>Sales</b>	<b>2017</b>		
Sales (GAAP)	\$ 15.3		
Valves & Controls impact	(0.6)		
Sales excluding Valves & Controls*	\$ 14.7		
<b>Gross Profit Margin</b>	<b>2017</b>		
Gross profit margin (GAAP)	42.0%		
Valves & Controls impact	1.2%		
Gross profit margin excluding Valves & Controls*	43.2%		
<b>EBIT Margin</b>	<b>2017</b>		
Pretax margin (GAAP)	15.3%		
Interest expense, net	1.1%		
EBIT margin*	16.4%		
Valves & Controls impact	1.5%		
EBIT margin excluding Valves & Controls*	17.9%		
<b>Total Debt / EBITDA</b>	<b>2017</b>	<b>2018E</b>	<b>2021T</b>
Total debt / pretax earnings (GAAP)	2.0x	~1.6x	~1.1x
Interest, taxes, depreciation, amortization	(.5)	~(.4)	~(.2)
Total debt / EBITDA*	1.5x	~1.2x	~0.9x
Additional \$4B spend			~.6
Total debt / EBITDA with additional spend*			~1.5x

# Reconciliation of Non-GAAP Measures

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(\$ in billions, except per share amounts or where noted)

## Free Cash Flow (\$ in millions)

	2016
Operating cash flow (GAAP)	\$ 2,881
Impact of repositioning items	179
Operating cash flow adjusted*	3,060
Capital expenditures including discontinued operations	(523)
Free cash flow*	2,537
Impact of discontinued operations	(485)
Free cash flow continuing operations*	\$ 2,052

## EPS Growth

	2016-2021T	2017-2021T
EPS growth with tax reform (GAAP)	~13%	~15.5%
Tax reform impact	~(2)%	~(4.0)%
EPS growth without tax reform*	~11%	~11.5%

## Automation Solutions Underlying Sales Growth

	2017
Automation Solutions Sales Growth Reported (GAAP)	5%
Acquisitions/FX	(6)%
Automation Solutions underlying sales growth*	(1)%

# Reconciliation of Non-GAAP Measures

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(\$ in billions, except per share amounts or where noted)

## Automation Solutions EBIT Excluding Valves & Controls

Automation Solutions EBIT (GAAP)

Valves & Controls

Automation Solutions EBIT excluding Valves & Controls\*

	2016	2017	2016 vs 2017
Automation Solutions EBIT (GAAP)	\$ 1.5	\$ 1.5	5%
Valves & Controls	-	0.1	2%
Automation Solutions EBIT excluding Valves & Controls*	\$ 1.5	\$ 1.6	7%

## Automation Solutions EBIT Margin Excluding Valves & Controls

Automation Solutions EBIT Margin (GAAP)

Valves & Controls

Automation Solutions EBIT Margin excluding Valves & Controls\*

	2016	2017	2016 vs 2017
Automation Solutions EBIT Margin (GAAP)	16.2%	16.2%	-
Valves & Controls	0%	1.5%	150 bps
Automation Solutions EBIT Margin excluding Valves & Controls*	16.2%	17.7%	150 bps

## Automation Solutions Pro Forma Sales

Automation Solutions Reported (GAAP)

Valves & Controls

Automation Solutions pro forma sales\*

2017 PF	
Automation Solutions Reported (GAAP)	\$ 9.4
Valves & Controls	0.9
Automation Solutions pro forma sales*	\$ 10.3

## Valves & Controls EBIT Margin

EBIT (GAAP)

Other income (deductions)

Operating margin\*

	2018E	Q4 2018E
EBIT (GAAP)	~(1)%	~3%
Other income (deductions)	~8%	~7%
Operating margin*	~7%	~10%

## Final Control Pro Forma Sales

Final Control (GAAP)

Valves & Controls impact

Final Control pro forma\*

2017PF	
Final Control (GAAP)	\$ 2.7
Valves & Controls impact	0.8
Final Control pro forma*	\$ 3.5



# Reconciliation of Non-GAAP Measures

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(\$ in billions, except per share amounts or where noted)

## Commercial & Residential Sales

	2016	2017	2016 vs 2017
Sales (GAAP)	\$ 5.6	\$ 5.9	5%
ClosetMaid impact	(0.4)	(0.3)	1%
Sales excluding ClosetMaid*	\$ 5.2	\$ 5.6	6%

## Commercial & Residential EBIT

	2016	2017	2016 vs 2017
Commercial & Residential EBIT (GAAP)	\$ 1.3	\$ 1.4	6%
ClosetMaid impact	-	(0.1)	1%
Commercial & Residential EBIT excluding ClosetMaid*	\$ 1.3	\$ 1.3	7%

## Commercial & Residential EBIT Margin

	2016	2017	2016 vs 2017
Commercial & Residential EBIT margin (GAAP)	23.2%	23.2%	0 bps
ClosetMaid impact	0.8%	1.0%	20 bps
Commercial & Residential EBIT margin excluding ClosetMaid*	24.0%	24.2%	20 bps

## Commercial & Residential Return on Total Capital (ROTC)

	2016	2017
Commercial & Residential ROTC (GAAP)	45.0%	48.0%
ClosetMaid impact	3.0%	4.0%
Commercial & Residential ROTC excluding ClosetMaid*	48.0%	52.0%

## FY17 Comm & Residential Sales by Geography

	US & CAD	ASIA	EUR	MEA	LAM
Sales by Geography (GAAP)	64%	18%	9%	4%	5%
ClosetMaid impact	(2)%	1%	1%	-	-
Commercial & Residential Sales by Geography excluding ClosetMaid*	62%	19%	10%	4%	5%

# Trademark Ownership Statement

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Amazon, Amazon Echo, Comcast, Apple, Samsung, Samsung SmartThings, Alarm.com, ADT, Vivint, Nest, Honeywell, Ecobee, USA Today, Homekit, Wink, GoogleHome, Goodman, Johnson Controls, Siemens, Schneider Electric, Viega, Shell, Chevron, Pemex, Saudi Aramco, BASF, Dow, bhpbilliton, Bayer, and their related designs and logotypes used within this presentation are the trademarks, service marks and/or trade names of their respective owners, and are not owned by or affiliated with Emerson.