# MULTIPLYING OUR MOMENTUM

2021 Investor Day



March 25, 2021

#### Disclosures

#### Forward-Looking Statements

This presentation contains "forward-looking statements," which include information concerning the Company's plans, objectives, goals, strategies, future revenu other information that is not historical information. All forward-looking statements are based upon current expectations and beliefs and various assumptions. Th expectations or that these beliefs will prove correct. There are a number of risks and uncertainties that could cause actual results to differ materially from the re contained in this presentation. These risks and uncertainties include, among other things: the extent to which the COVID-19 pandemic continues to adversely imp well as the pace of any economic recovery; changes in general economic, business, political and regulatory conditions in the countries or regions in which we operate the countries of the countries or regions in which we operate the countries of the countries or regions in which we operate the countries of the countries or regions in which we operate the countries of the coun particularly in the automotive, electrical, mobility, textiles, medical, electronics and construction industries; changes in the price and availability of raw materials ethylene, methanol, natural gas, wood pulp and fuel oil and the prices for electricity and other energy sources; the ability to pass increases in raw material prices the ability to maintain plant utilization rates and to implement planned capacity additions and expansions; the ability to reduce or maintain current levels of produce and to implement planned capacity additions and expansions; the ability to reduce or maintain current levels of produce and to implement planned capacity additions and expansions; the ability to reduce or maintain current levels of produce and to implement planned capacity additions and expansions; the ability to reduce or maintain current levels of produce and to implement planned capacity additions and expansions; the ability to reduce or maintain current levels of produce and the produce are also as a second capacity additions and expansions. improvements to existing plants; the ability to identify desirable potential acquisition targets and to complete acquisition or investment transactions consistent w attractive investment opportunities towards which to deploy capital; increased price competition and the introduction of competing products by other companies; costs and potential disruption or interruption of production or operations due to accidents, interruptions in sources of raw materials, cyber security incidents, ter to, the COVID-19 pandemic); other unforeseen events or delays in construction or operation of facilities, including as a result of geopolitical conditions, the occurr natural disasters or other crises including public health crises; the ability to obtain governmental approvals and to construct facilities on terms and schedules ac and other legal protection afforded to our products or technologies, or the theft of such intellectual property; potential liability for remedial actions and increased regulations, including those relating to climate change; potential liability resulting from pending or future litigation, or from changes in the laws, regulations or p in which we operate; changes in currency exchange rates and interest rates; our level of indebtedness, which could diminish our ability to raise additional capital to fund or the chemicals industry; tax rates and changes thereto; our ability to obtain regulatory approval for, and satisfy closing conditions to, any transactions described Company's filings with the Securities and Exchange Commission. Any forward-looking statement speaks only as of the date on which it is made, and the Company reflect events or circumstances after the date on which it is made or to reflect the occurrence of anticipated or unanticipated events or circumstances.

#### **Results Unaudited**

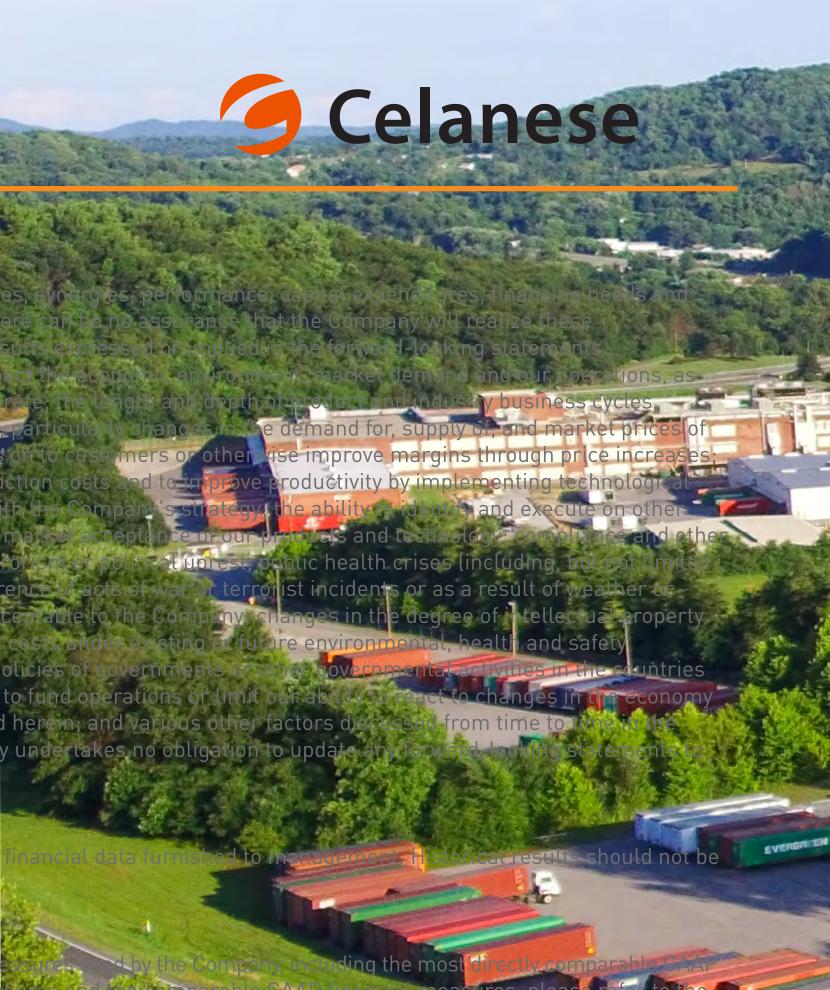
The results in this document, together with the adjustments made to present the results on a comparable basis, have not been audited and are based on internal taken as an indication of the results of operations to be reported for any future period.

#### Non-GAAP Financial Measures

This presentation, and statements made in connection with this presentation, refer to non-GAAP financial measures. For more information on the non-GAAP financial measures used, including definitions and reconciliations of the differences between such non-GAAP financial measures used, including definitions and reconciliations of the differences between such non-GAAP financial measures and Supplemental Information document available on our website, investors.celanese.com, under Financial Information/Non-GAAP Financial Measures.

#### Market / Industry Information and Management Estimates

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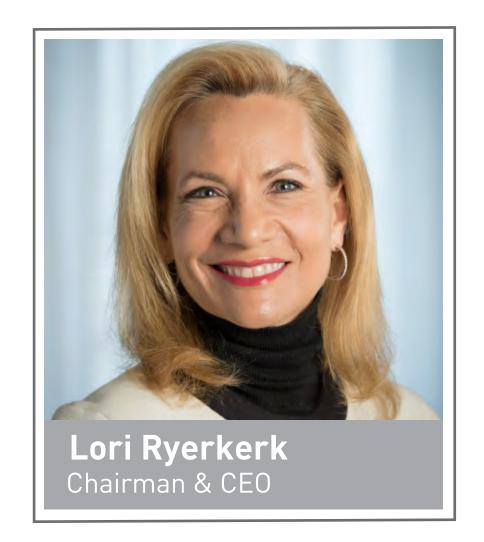
# Welcome

Lori Ryerkerk

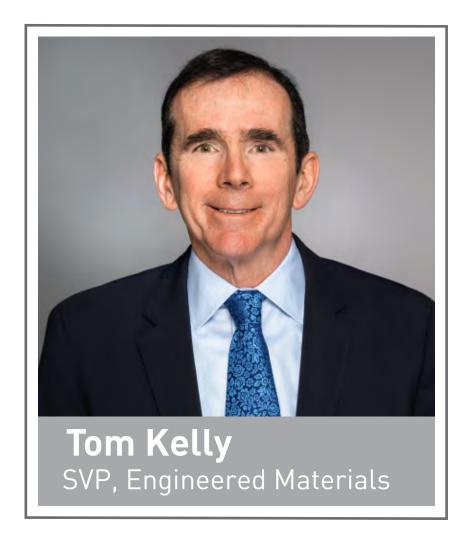


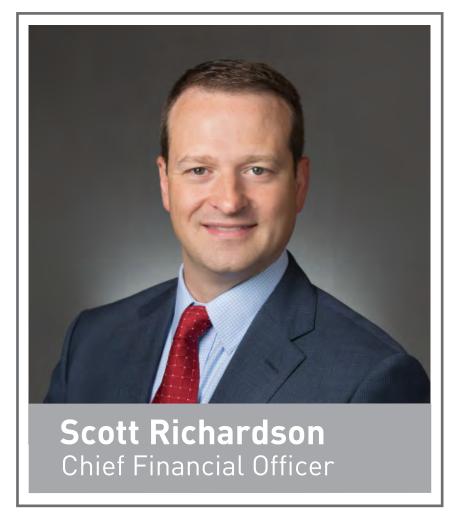
## Agenda











Welcome & Introduction	Lori		
Acetyl Chain (AC)	John		
Engineered Materials (EM)	Tom		
Break			
Acetate Tow (AT)	Lori		
Sustainability	Lori		
Financial Excellence	Scott		
Wrap Up	Lori		
Break			
Question & Answer Session			

#### Everything we do starts with our people...



#### Celanese Values













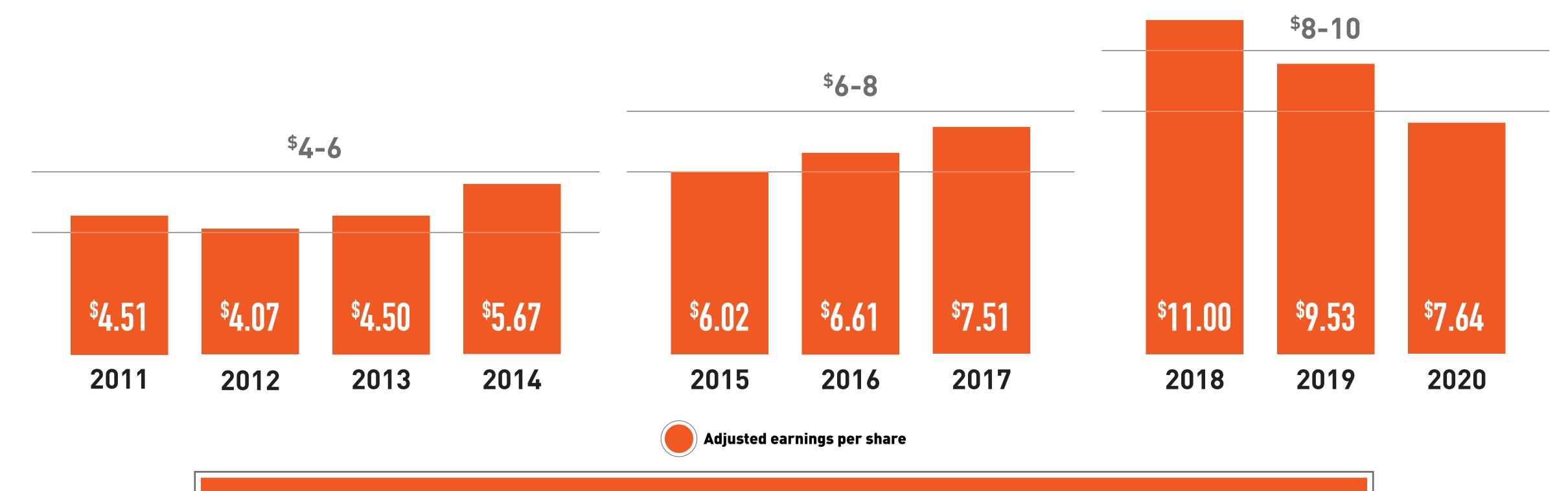
...collectively focused on delivering value for shareholders

#### We have been on a path this decade...





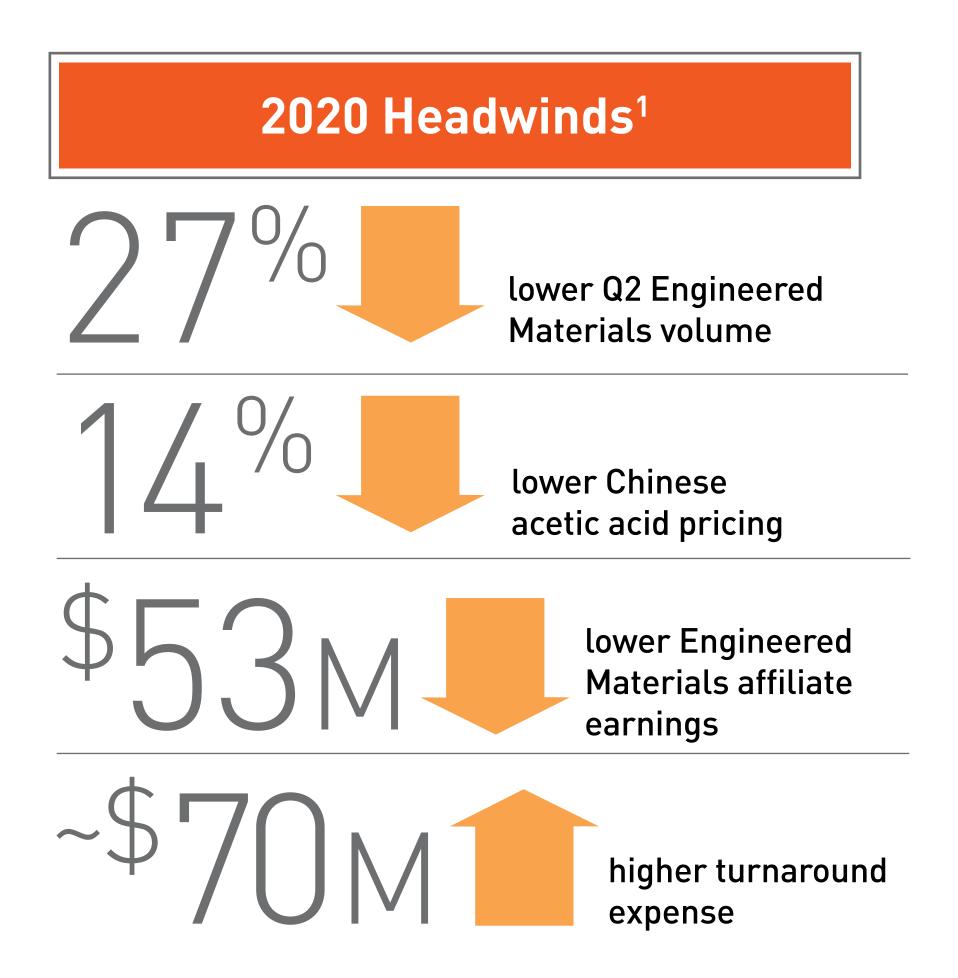
Differentiated Business Models Implemented Commercial Excellence Enhanced



... to sustainably lift the foundational earnings power of Celanese

#### Decisive actions amid 2020 pandemic...





#### 2020 Actions

- \$214 million in productivity
- \$1.575 billion monetization of Polyplastics
- Elotex acquired and integrated
- Favorable long-term raw material agreements
- KEPCO JV restructuring commenced
- Acetic acid reconfiguration project improvements
- Accelerated turnarounds prior to recovery

... proved the resiliency of our earnings power and positioned us for recovery



## Performance has delivered leading total shareholder return





Positioned to drive continued shareholder value

# MULTIPLYING OUR MOMENTUM



#### FOCUSING OUR UNIQUE BUSINESS MODELS TO WIN IN KEY END MARKETS...

**ENGINEERED MATERIALS** 

**ACETYL CHAIN** 

**ACETATE TOW** 



Dedicated growth programs



Subsegments with differentiated growth



Alternative uses for acetate flake



Aligning early with industry winners



Driving differentiation in downstream products



Sustainability solutions

...to drive GDP+ growth in Engineered Materials and the Acetyl Chain

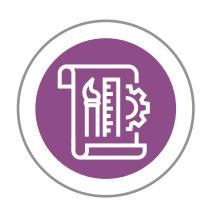


#### TRANSFORMING OUR APPROACH TO PRODUCTIVITY ...

**PROCESS AUTOMATION** 

**DATA & ANALYTICS** 

**SUPPLY CHAIN NETWORK** 



Supply chain optimization tools



**Analytics & predictive forecasting** 



Regional production localization



**Customer experience** solutions



Artificial intelligence for business decisions



Scheduling upgrades

...to drive continued lift in fundamental profitability



3

#### DRIVING GREATER SUSTAINABILITY...

**ENVIRONMENTAL** 

**SOCIETAL** 

COMMERCIAL



**Energy & resource efficiency** 



Diversity, equity & inclusion



**Sustainable feedstocks** 



Climate change



**Community** partnerships



**End-of-life product solutions** 

...consistent with our values and top tier shareholder value generation





#### ENHANCING OUR CASH GENERATION AND CAPITAL DEPLOYMENT...

**ORGANIC INVESTMENT** 

**INORGANIC INVESTMENT** 

**CASH TO SHAREHOLDERS** 



High-return, capital-efficient expansions



Attractive M&A opportunity sets



**Dividend growth** 



Productivity enhancing projects



Joint venture optimization



Steady & opportunistic share repurchases

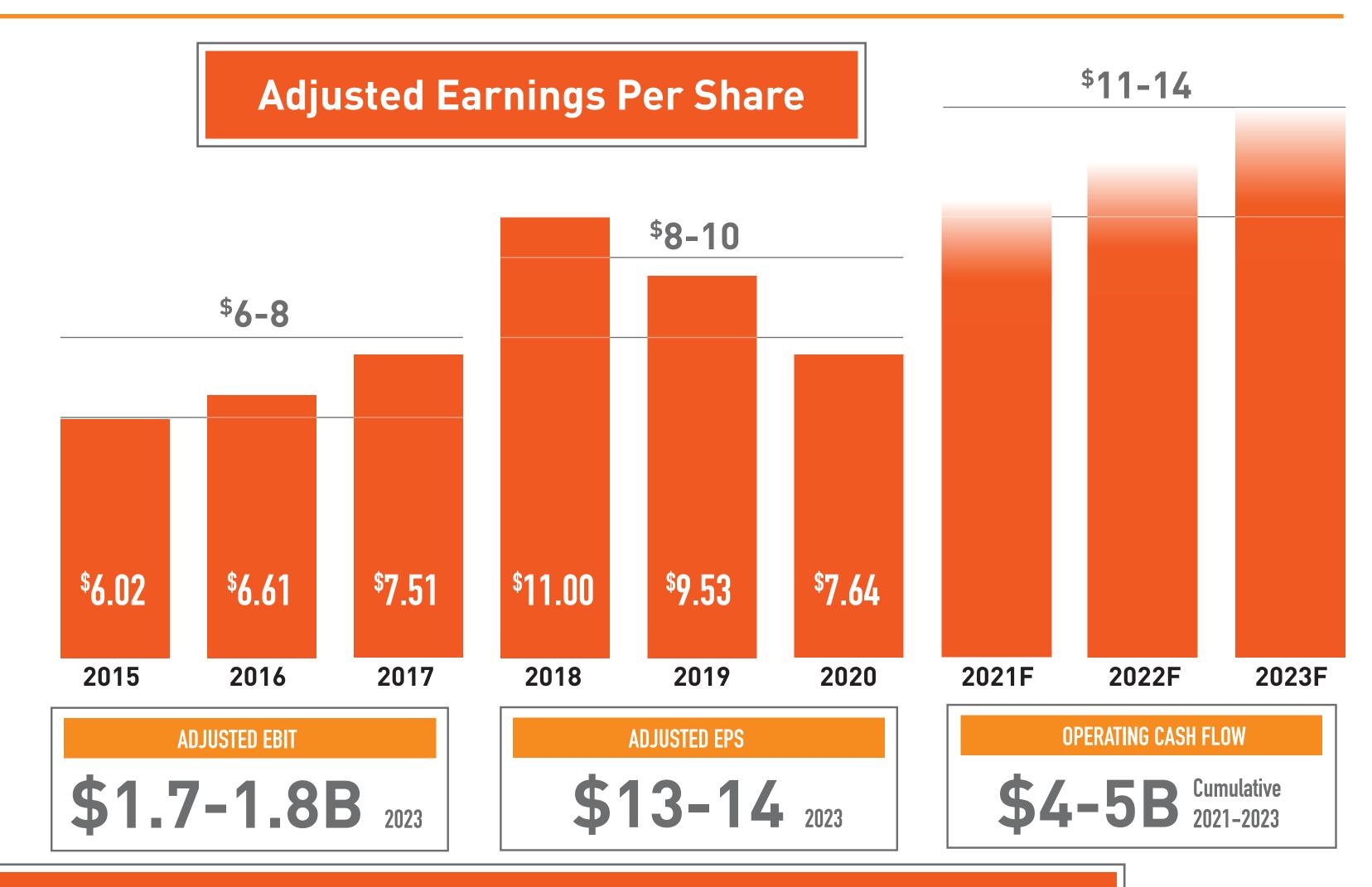
...while maintaining industry leading returns

#### Multiplying our momentum...





- Winning in key end markets
- Transforming our productivity
- Driving greater sustainability
- Enhancing our capital deployment



...to deliver double-digit earnings per share growth annually





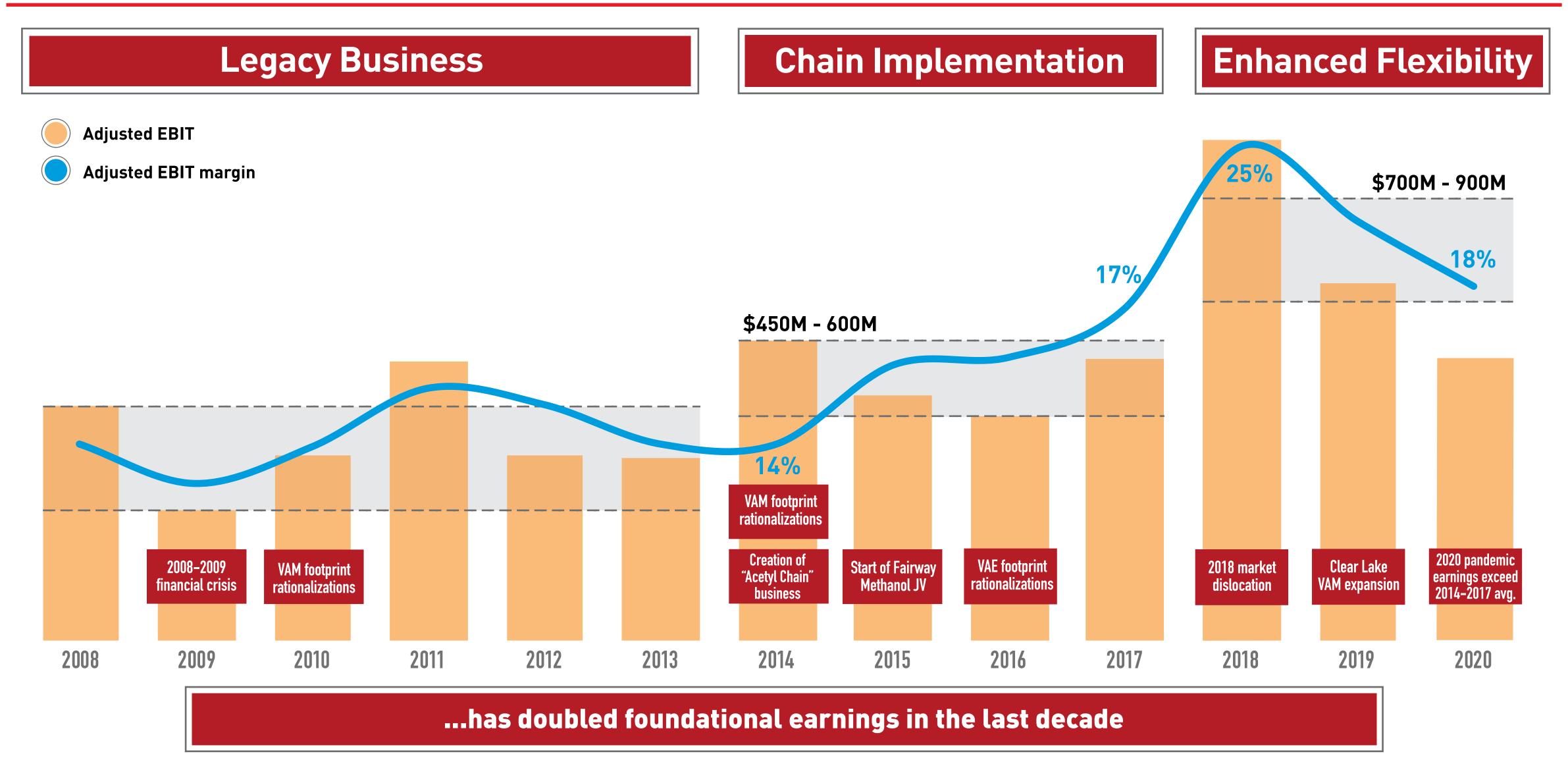
## Acetyl Chain

John Fotheringham

MULTIPLYING OUR MOMENTUM

#### MULTIPLYING OUR MOMENTUM

#### Evolution of the Acetyl Chain business model...





GLOBAL MANUFACTURING FOOTPRINT SERVICING A WIDE RANGE OF RESILIENT END USES

UNMATCHED VALUE CHAIN OPTIONALITY SUPPORTED BY LOW COST TECHNOLOGY

HEALTHY INDUSTRY DYNAMICS WITH STRONG DEMAND GROWTH

TARGETED CAPITAL INVESTMENT SUPPORTING GROWING AND SUSTAINABLE END USES

#### Acetyls chemistry supports every day life



## Food & Agriculture

- Food additives
- Thickening agents
- Crop protection
- Dust control



## Building & Construction

- Paints & coatings
- Cement additives
- Waterproofing
- External insulation

## Medical & Pharmaceutical

- Medicine production
- Disinfection & sterilization
- Cosmetics
- Hygiene



## Automotive & Industrials

- Safety glass
- Inks & solvents
- Solar PV¹ cells
- Glassfiber

## Packaging & Paper

- Adhesives
- Coatings
- Food packaging
- Surface protection



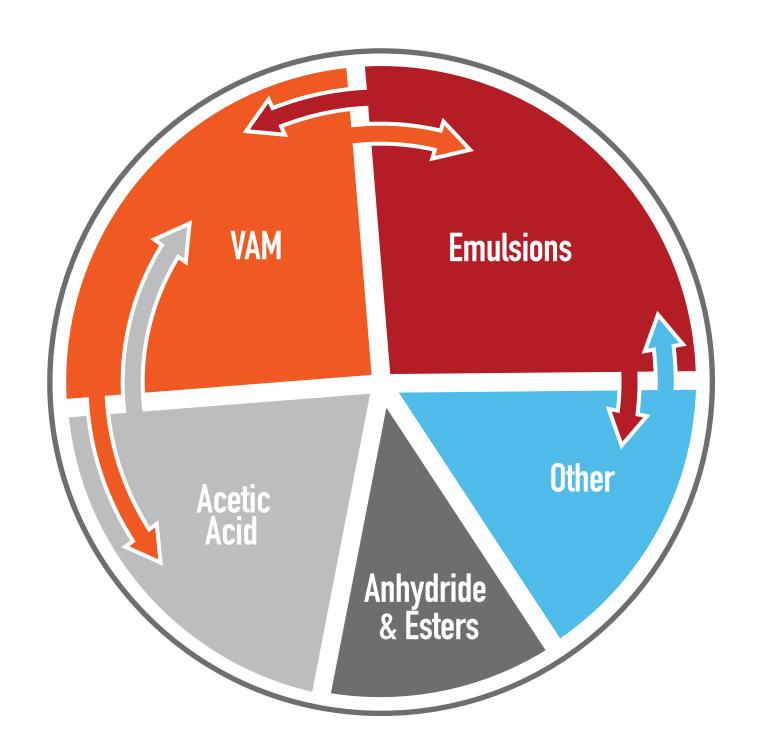




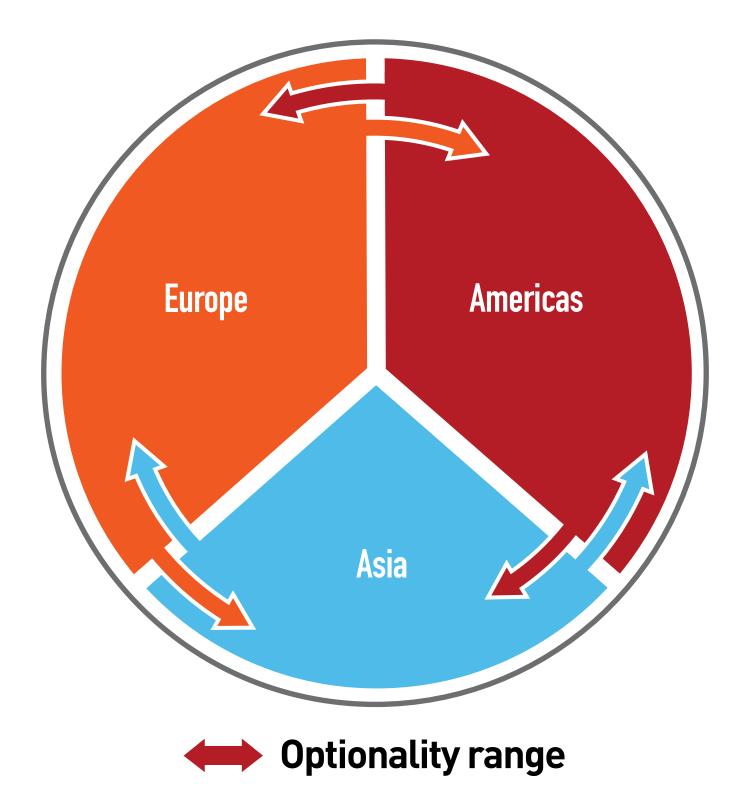
# Industry-leading commercial diversity and flexibility... MOMENTUM

2018-2020 Average Net Sales: \$3.5B

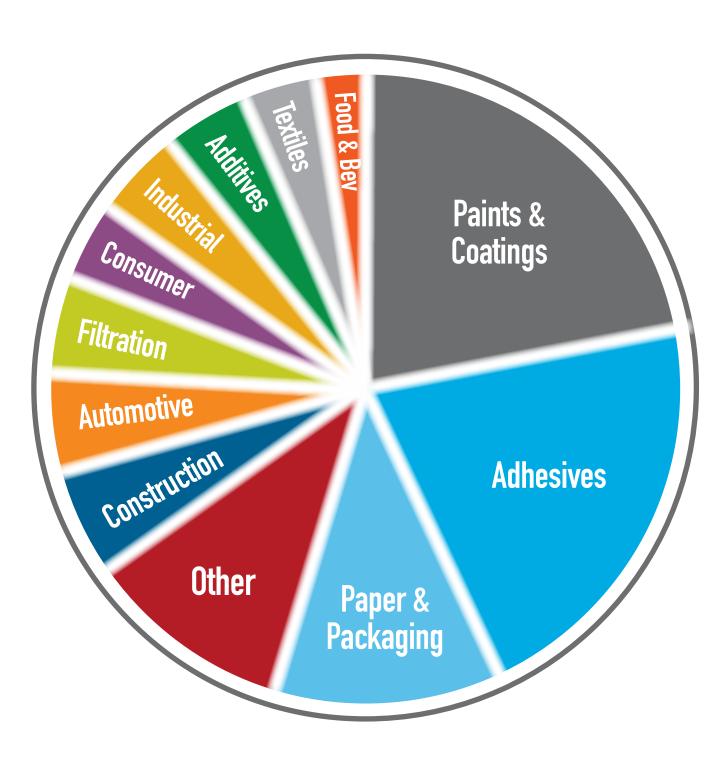
#### **BY PRODUCT**



#### **BY REGION**



#### **BY END USE**



...results in margins similar or higher than specialty materials

## Globally integrated acetyls leader...



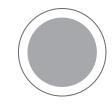
	CARBON MONOXIDE	METHANOL	ACETIC VAM ACID		EMULSIONS	POWDERS
Celanese						

Competitor 1			
Competitor 2			
Competitor 3			
Competitor 4			
Competitor 5			
Competitor 6			
Competitor 7			







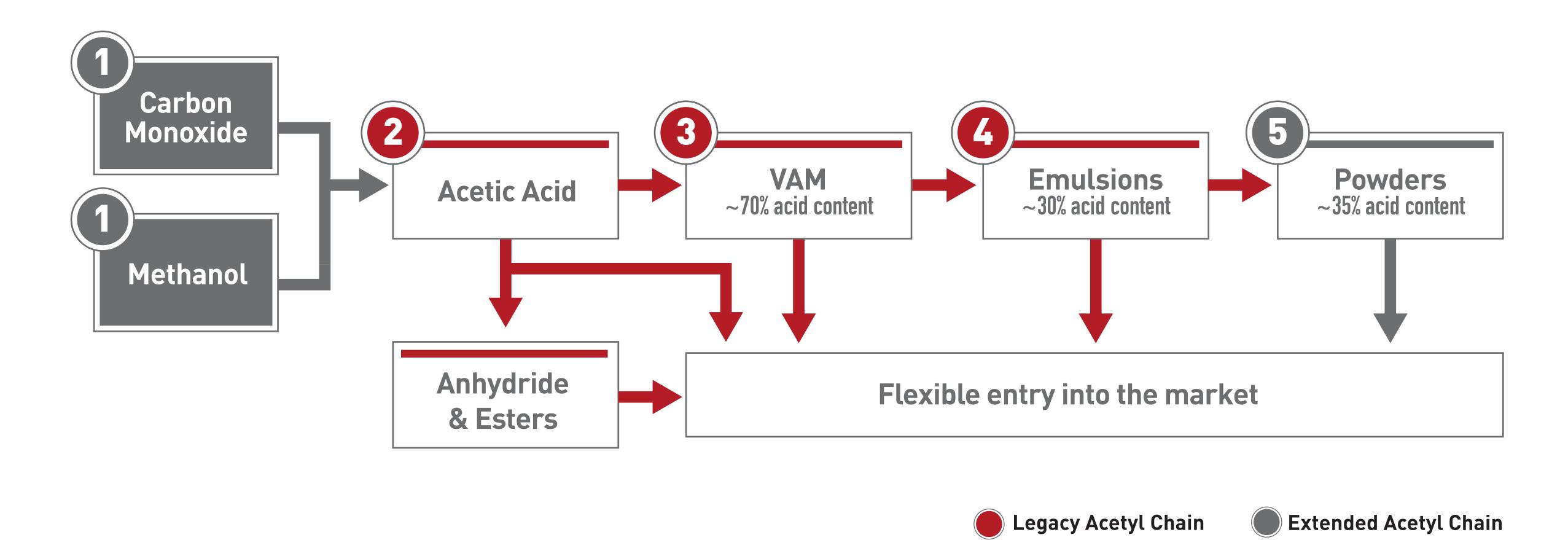


ASIA

...creates unequaled market knowledge and optionality

#### Unique value chain...





...enables flexible product placement and value optimization

# Value creation through advantaged technology...



State-of-the-art process technology and intellectual property

Low capital intensity for world-scale production facilities

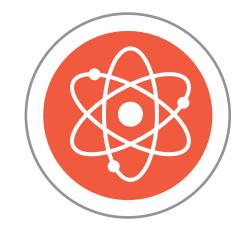
Proprietary catalyst technology for maximum yield and low metals usage



 Leading technologies with high efficiencies and flexibility



- Continued growth across global footprint
- Low-capital expansion options



- Global catalyst and metals management program
- R&D partnerships continue catalyst advancement

50% Increase in VAM capacity per plant

90%

Increase in acid capacity per plant

40%

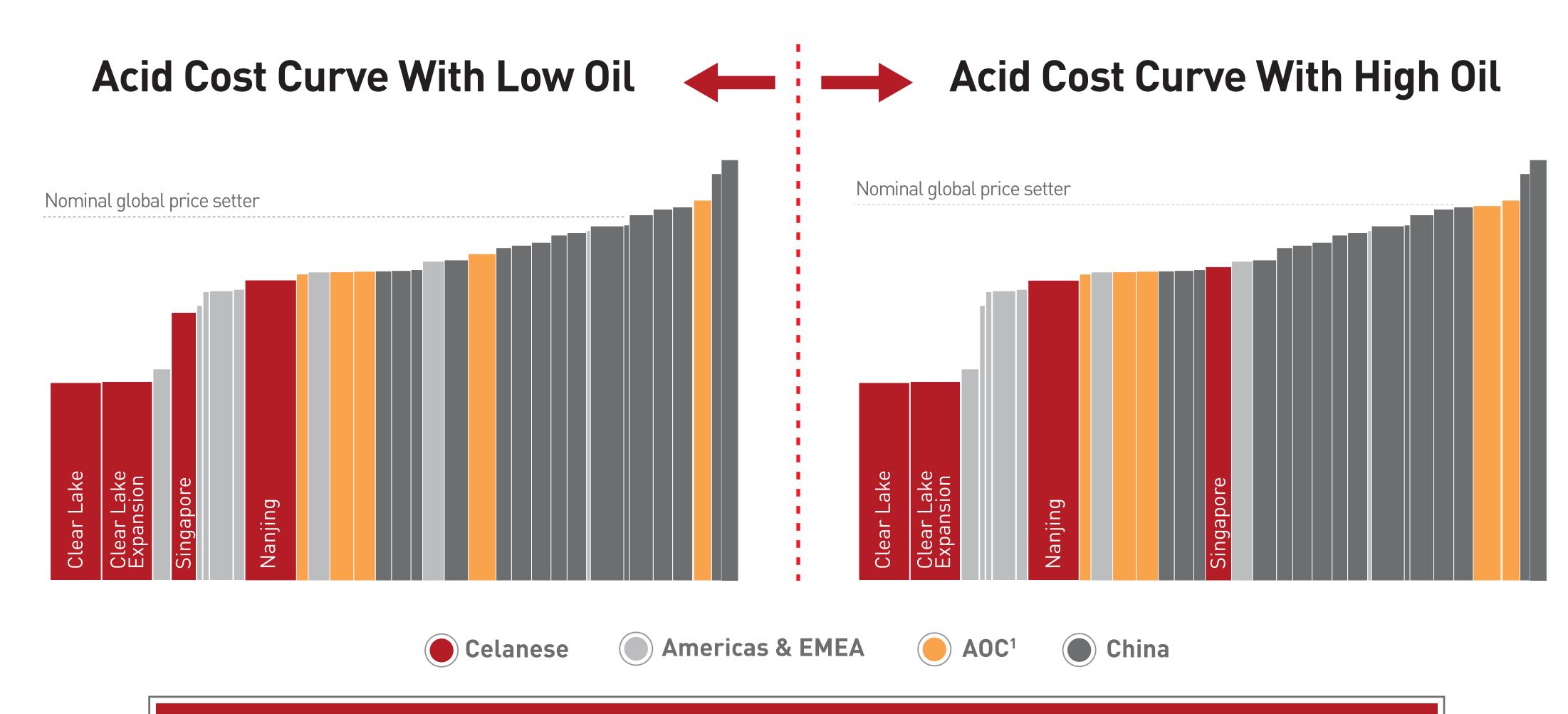
Better expansion capital efficiency vs. brownfield

since 2005

...enables capital efficiency and lowest cost to supply

#### Cost leadership in all scenarios...



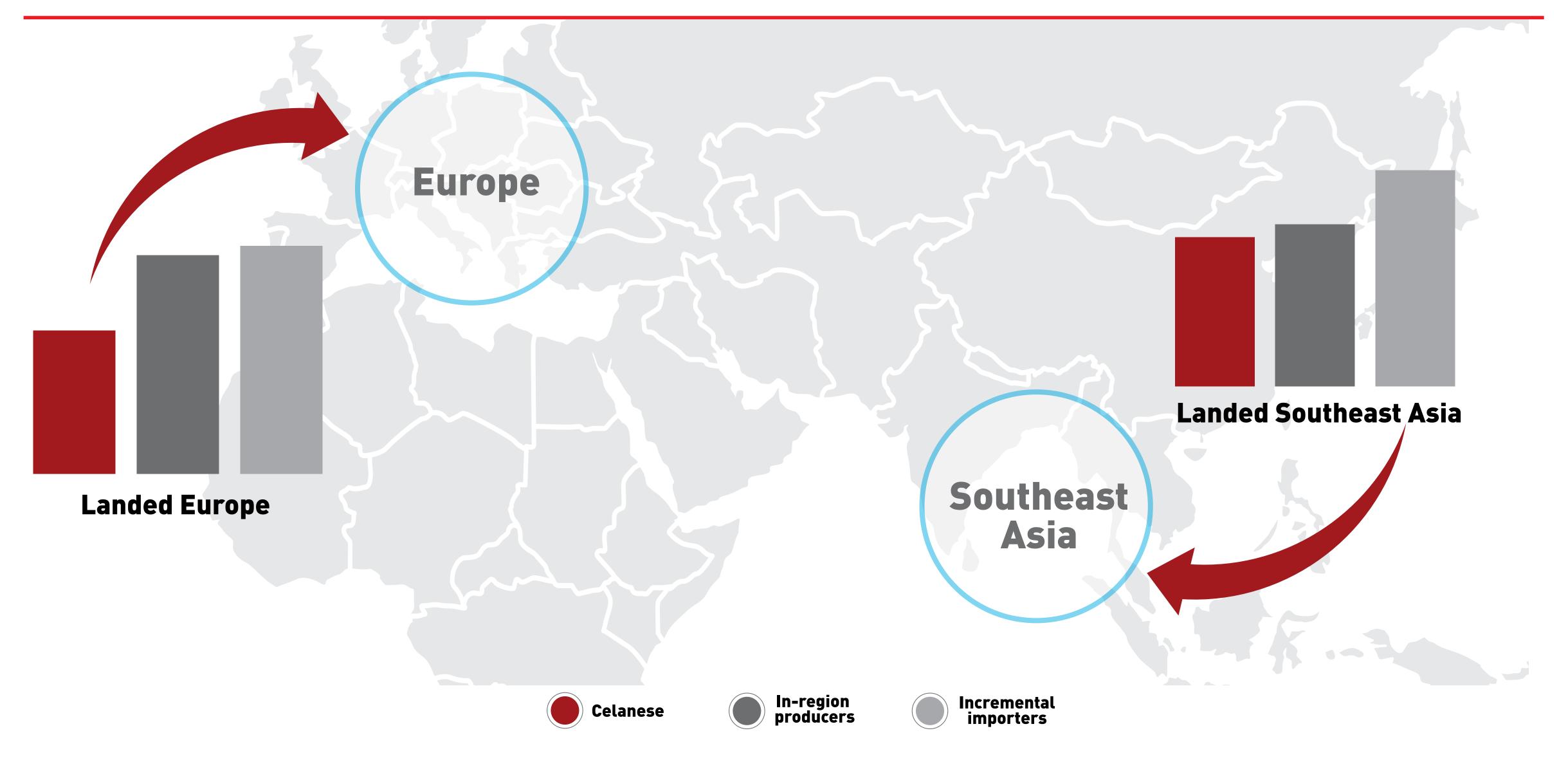


...driven by feedstock optionality, scale and advantaged technology



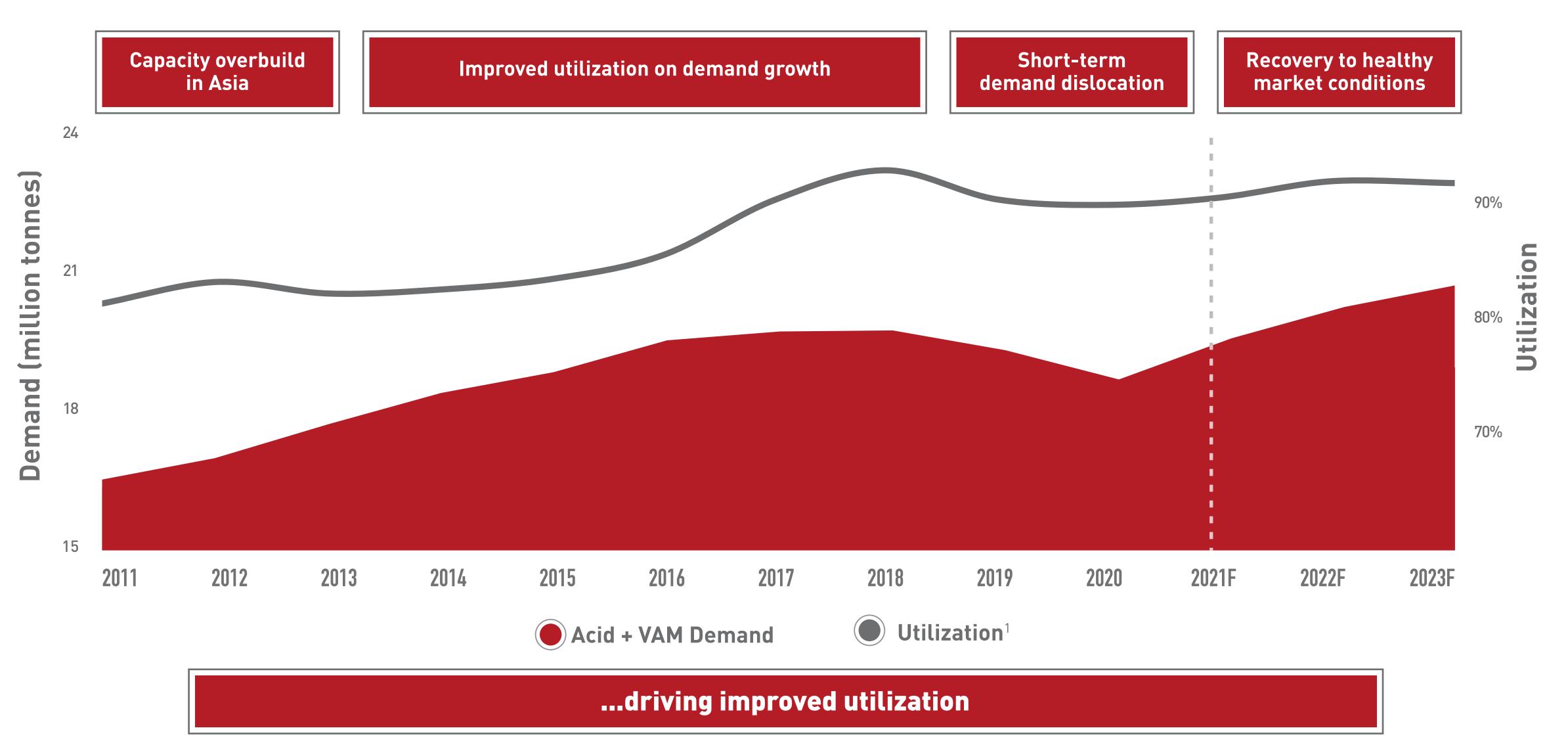
## Leading cost positions in import markets





#### Strong demand recovery...





## Enhanced building and construction portfolio



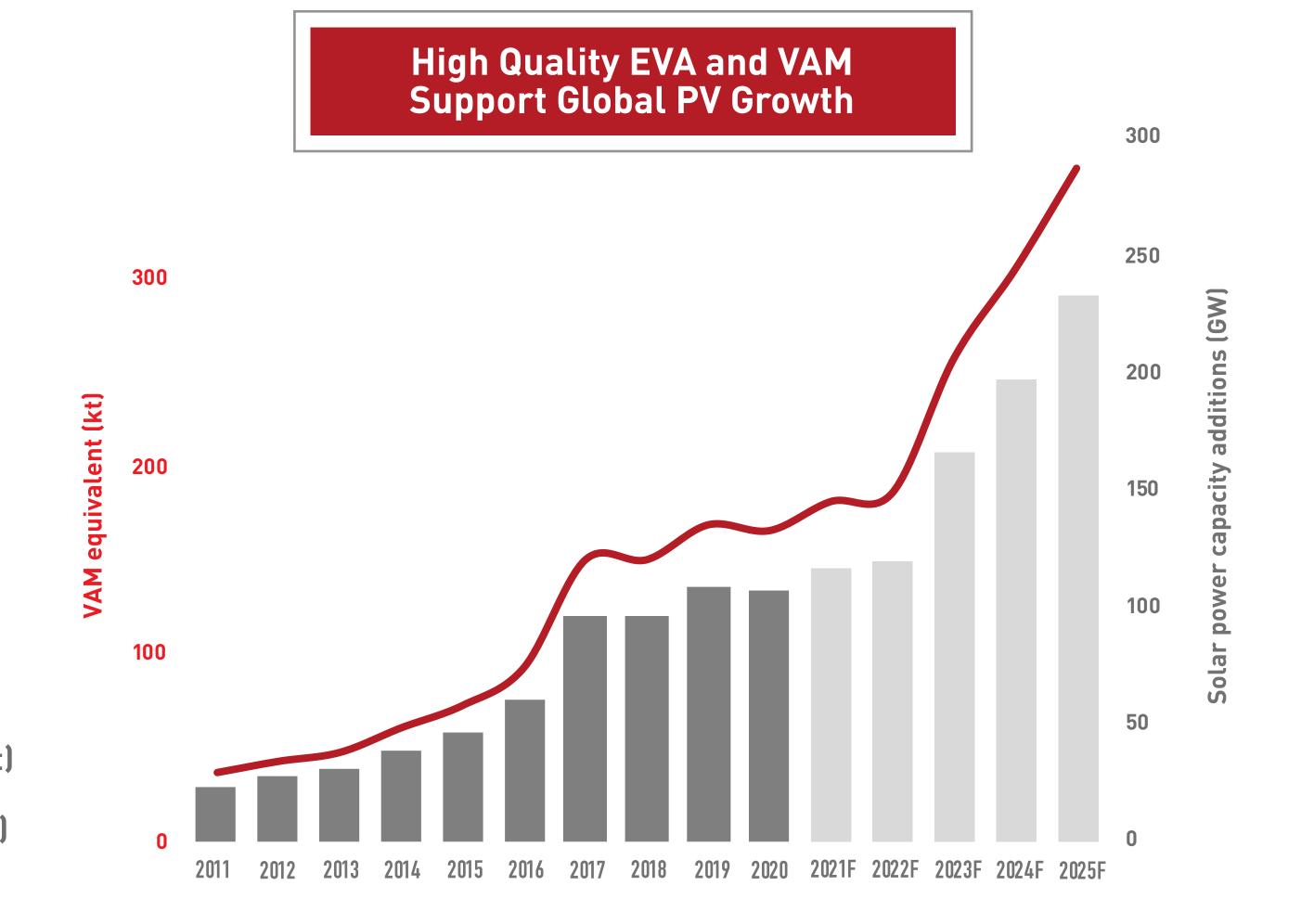


### Solar power accelerates Asia vinyls demand



- Solar PV cells require high quality EVA
- 15% solar CAGR from 2019 to 2030
- Celanese can supply additional high quality VAM capacity at lowest capital requirements

- **VAM** equivalent for solar capacity (kt)
- Solar power capacity additions (GW)



By 2023, annual solar capacity additions expected to consume 250 kt of VAM

## Investing in high return projects...



	ANNOUNCED	ONLINE	PRODUCTIVITY	DERIVITIZATION	GROWTH	SUSTAINABILITY
GLOBAL ACID RECONFIGURATION: New Build at Clear Lake	Q1 2019	2023				
METHANOL EXPANSION: Debottleneck at Clear Lake	Q1 2021	2023				
VAM EXPANSION: Debottleneck at Nanjing	Q1 2021	2022-2023				
VAE EMULSION EXPANSION: Debottleneck & New Build at Nanjing and Frankfurt	Q1 2020	2023				
POWDERS DEBOTTLENECKS: Debottlenecks of European Powders	Q1 2021	2021-2022				
ACETIC ACID 5% - 35% expanded capacity	VAM ~10% expanded capacity			EMULSIONS ~20% expanded capacity		
1,300 kt  3,300 kt  4,600 kt	1,575 kt	90 kt 100 kt	1,765 kt	710 kt	) kt 45 kt	65 kt 840 kt
Current Clear Lake Produce to Capacity Expansion Demand Target Optionality	Current	Nanjing Technology Expansion Debottlenecks	Future	Current Eur	rope Frankfurt Elenecks Expansion E	Nanjing Future Expansion Capacity

...to increase base earnings, lower volatility and enable upside capture

## Enhanced acetic acid project positions for growth...



## Enhanced Asia flexibility with new supply contracts

Clear Lake capital efficiency and productivity

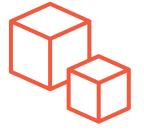
Retention of project value and supply optionality



Lowered cost position relative to coal and oil



Project extension enabled capital savings



Unparalleled capacity and raw material optionality



Enhanced offtake flexibility improves global optionality



World-scale capacity with operating cost productivity



~\$100M average earnings lift per year across project cycle



Wide operating range to match market demand

ANNUALIZED AVERAGE VALUE

~\$100<sub>M</sub>

INCREMENTAL CAPACITY

1,300kt

CAPITAL EXPENDITURE

~\$350м

MANUFACTURING FLEXIBILITY

1,000kt

# Vinyls expansion program creates additional flexibility...



## VAM Expansion Nanjing

**VAE Expansions**Nanjing & Frankfurt

Powders Growth
Europe & Asia



Solar PV driving acute Asia growth in vinyls chain



Higher building standards, performance and sustainability



Growing polymer powders penetration into mortar formulations





Proven record of capital efficient and technology-driven expansions



Expanding existing global emulsions infrastructure



Utilizing spare capacity to accelerate downstream growth



 $90_{kt}$ 



 $110_{kt}$ 

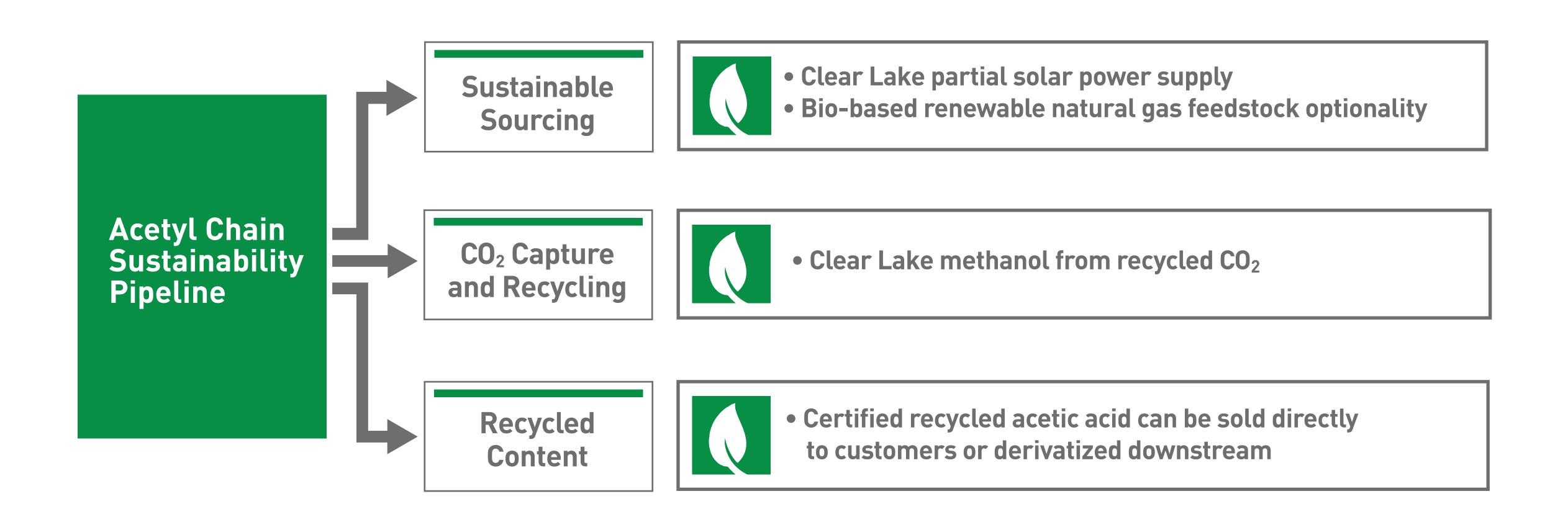
NEW EMULSIONS CAPACITY

40<sub>kt</sub>

POWDERS
UTILIZATION
GROWTH

## Focused on driving greater sustainability...





...within the Acetyl Chain and for our customers

#### Acetyl Chain financial outlook



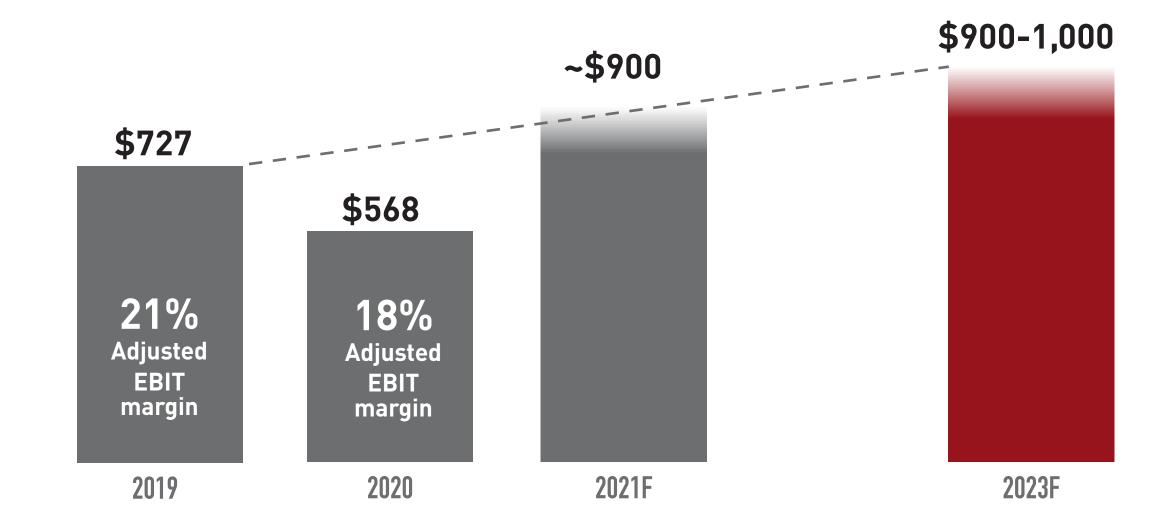
Resilient Global Markets

Unmatched Value Chain Optionality

Healthy Industry Dynamics

Targeted Capital Investment

Adjusted EBIT (in millions)



NET SALES CAGR

5-6% 2019-2023

ADJUSTED EBIT CAGR

5-8% 2019-2023

ADJUSTED EBIT MARGIN

> 2 2 % 2021-2023

OPERATING EBITDA MARGIN

> 25% 2021-2023



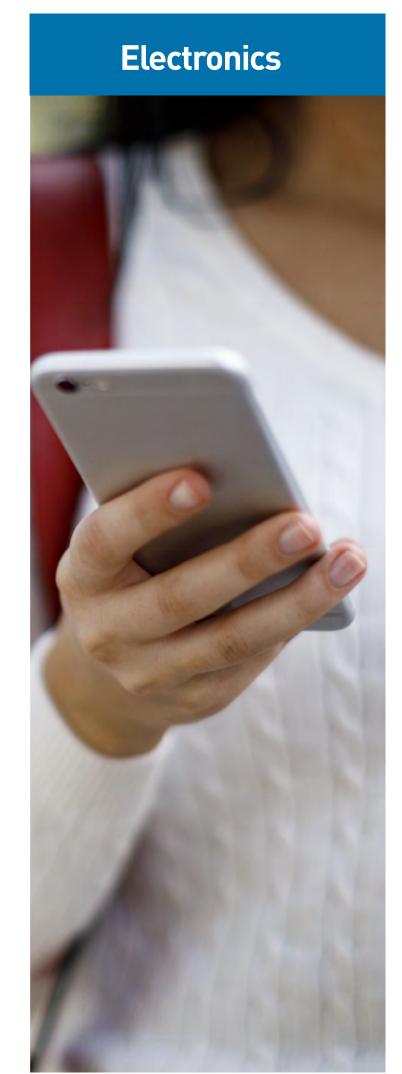
## Engineered Materials

Tom Kelly

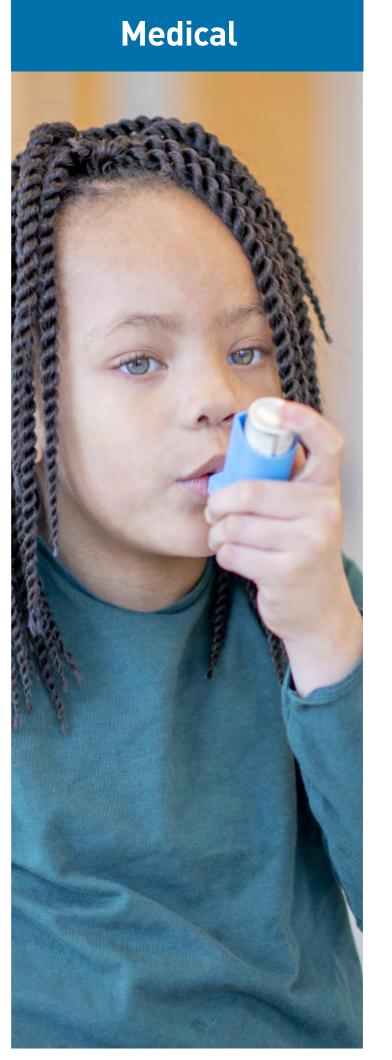


#### Improving the world and everyday life

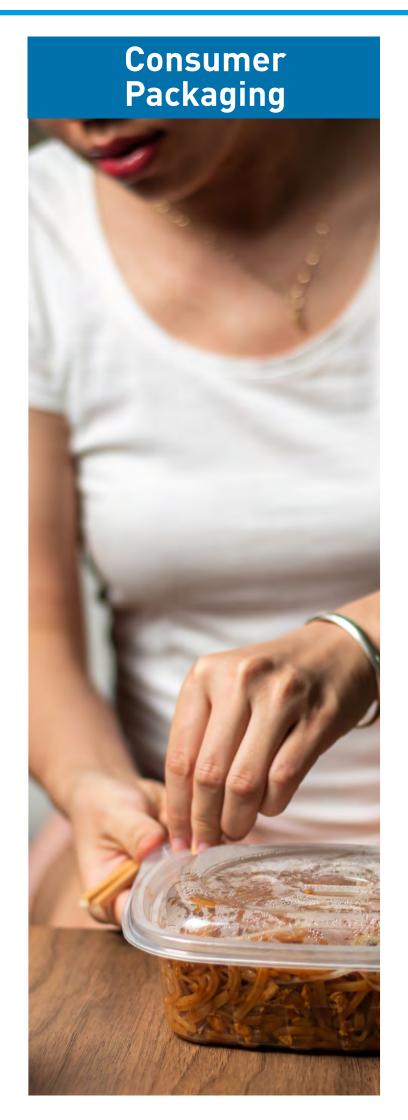
















PROJECT PIPELINE MODEL CONTINUES TO DIFFERENTIATE EM; DIGITALIZATION STRENGTHENS THE MODEL BY INCREASING SCALABILITY, PREDICTABILITY

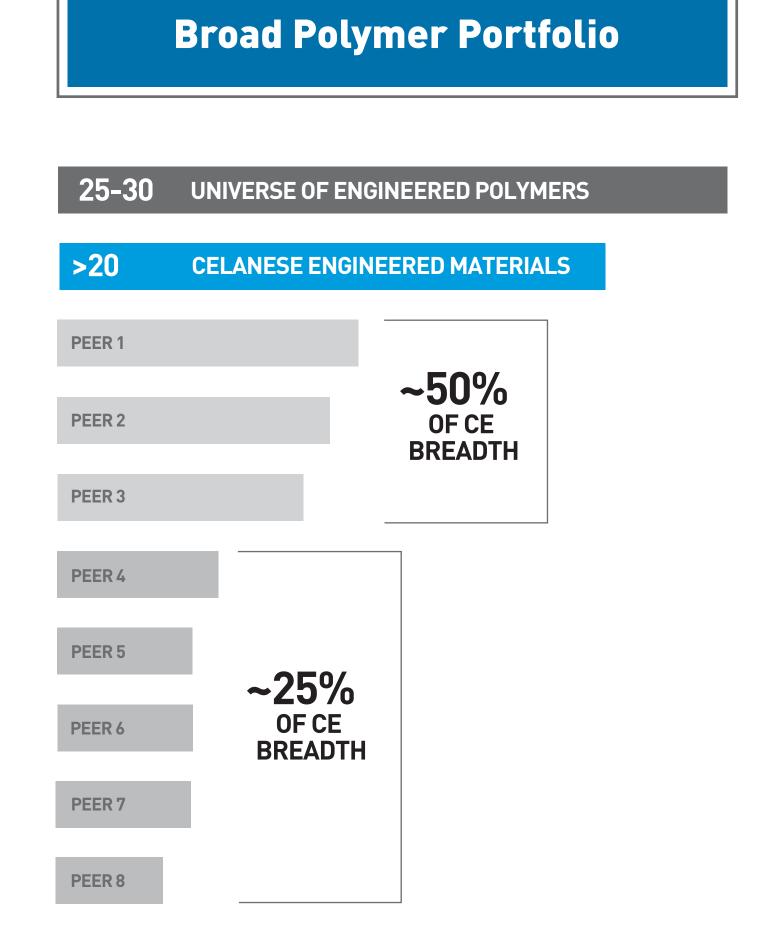
GROWTH FOCUSED PROGRAMS IN FUTURE MOBILITY, MEDICAL AND CONNECTIVITY POSITION EM FOR OUTSIZED GROWTH

INVESTMENTS IN LOCALIZATION WILL CONTINUE TO SUPPORT DOUBLE-DIGIT GROWTH IN ASIA

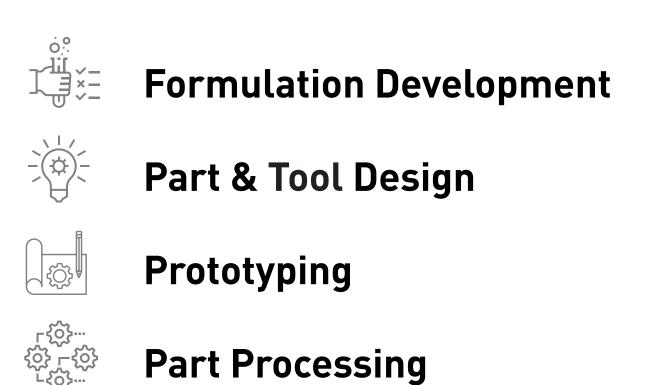
AN EXPANDED PORTFOLIO OF SUSTAINABLE OFFERINGS ENABLES GROWTH IN EXISTING AND NEW END MARKETS

#### A broad portfolio and application expertise...





Industry Leading Technical Competencies









Automotive

Electrical & Electronics

Industrial

Consumer

Medical

Food & Beverage

**Other** 

2020 Net Sales

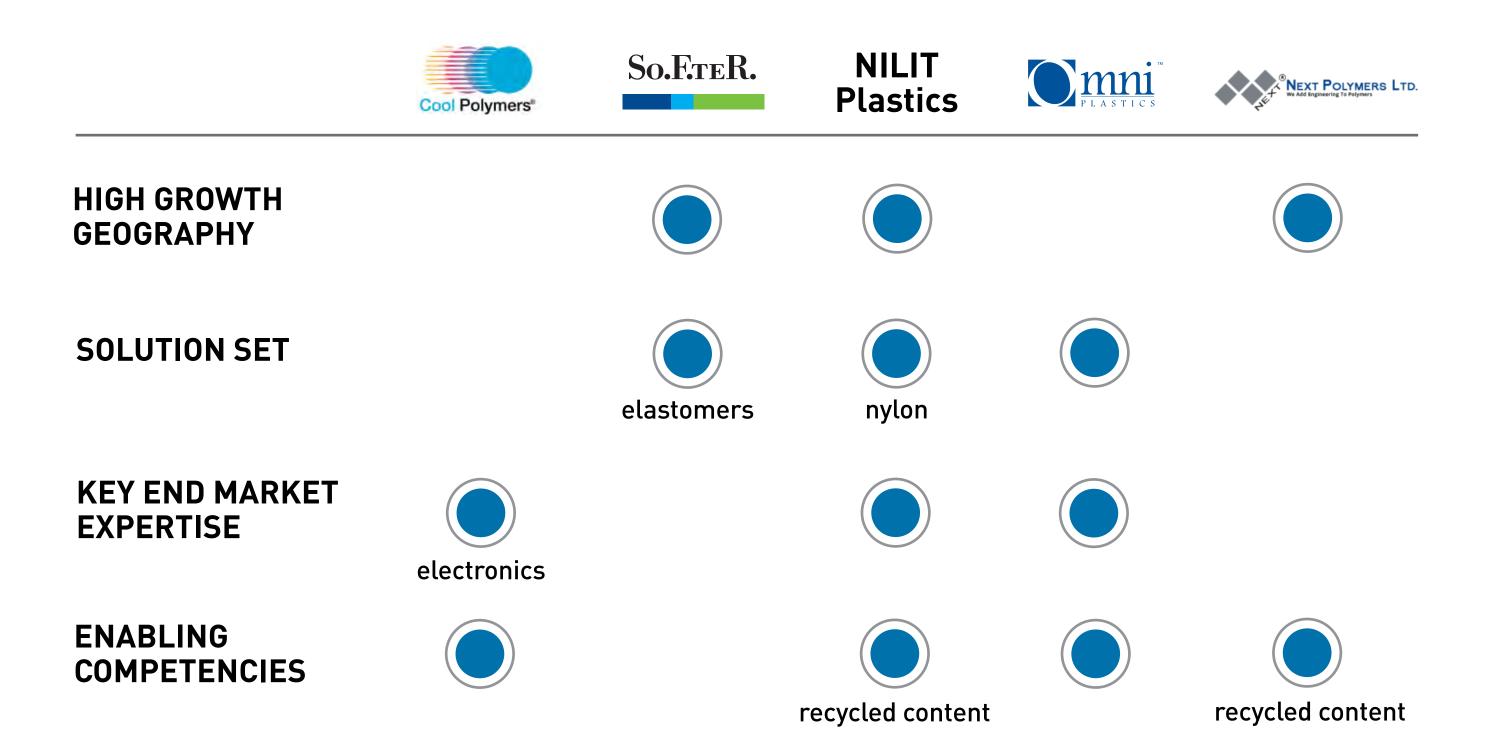
...drive outsized, innovation-led growth



### Strategic acquisitions and JV actions...



#### Bolstered solution offering and global reach



Reduced EM adjusted EBIT from affiliate earnings by half to ~15%



Monetized passive investment for \$1.6B



Agreement to restructure as manufacturing JV; 70 kt of POM offtake

#### Ibn Sina

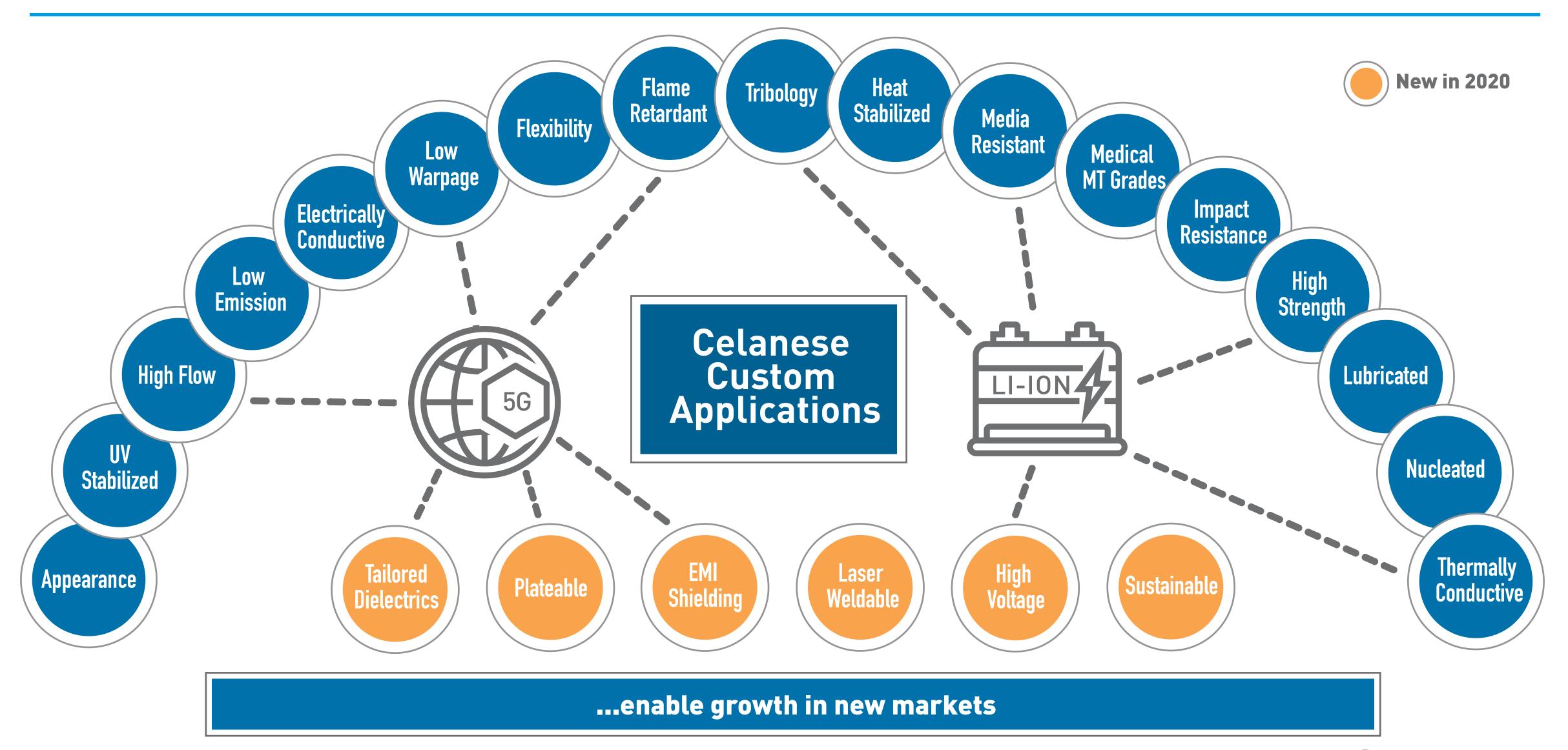
Increased CE's economic interest to 32.5%; EM markets Ibn Sina POM post-expansion

...add to capabilities set and maximize shareholder value



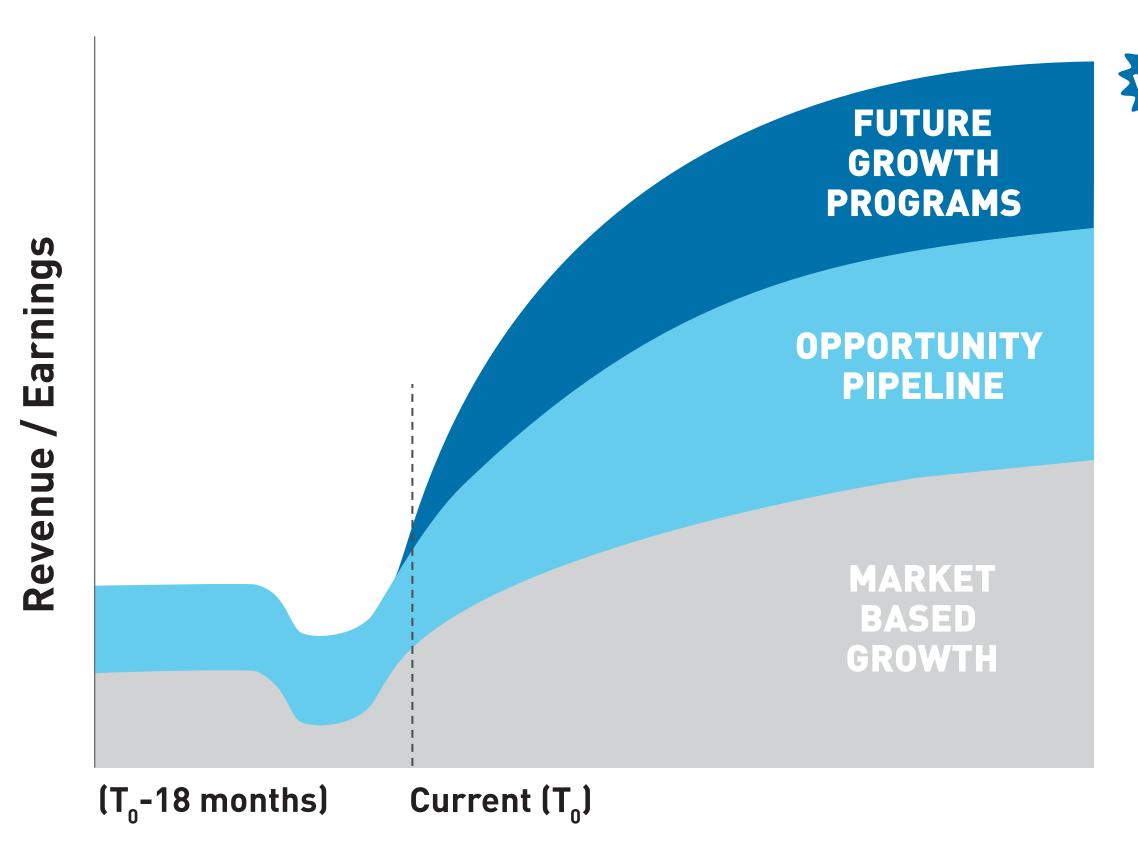
# Continuous innovations to expand solution set... MULTIPLYING OUR MOMENTUM





# Pipeline model reinforced by growth programs...





INCUBATE

**ACCELERATE** 

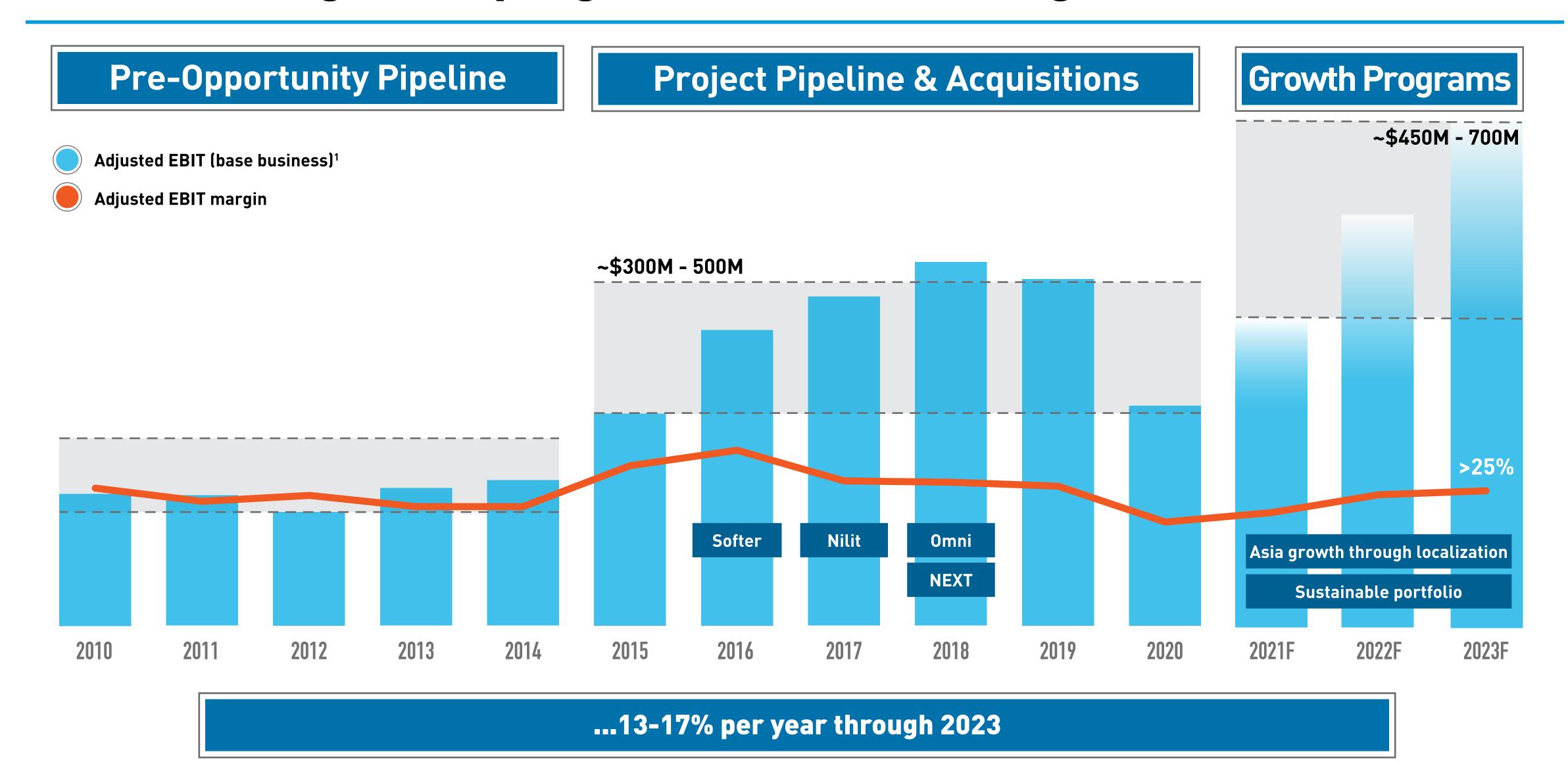
**PARTICIPATE** 

- Disruptive trends
- Growth and profit focus
- New to CE / new to customers
- Technology roadmaps
- Unmet customer needs
- Customized material development
- Curated opportunities
- Differentiated customer experience

...drives growth rates far above the market

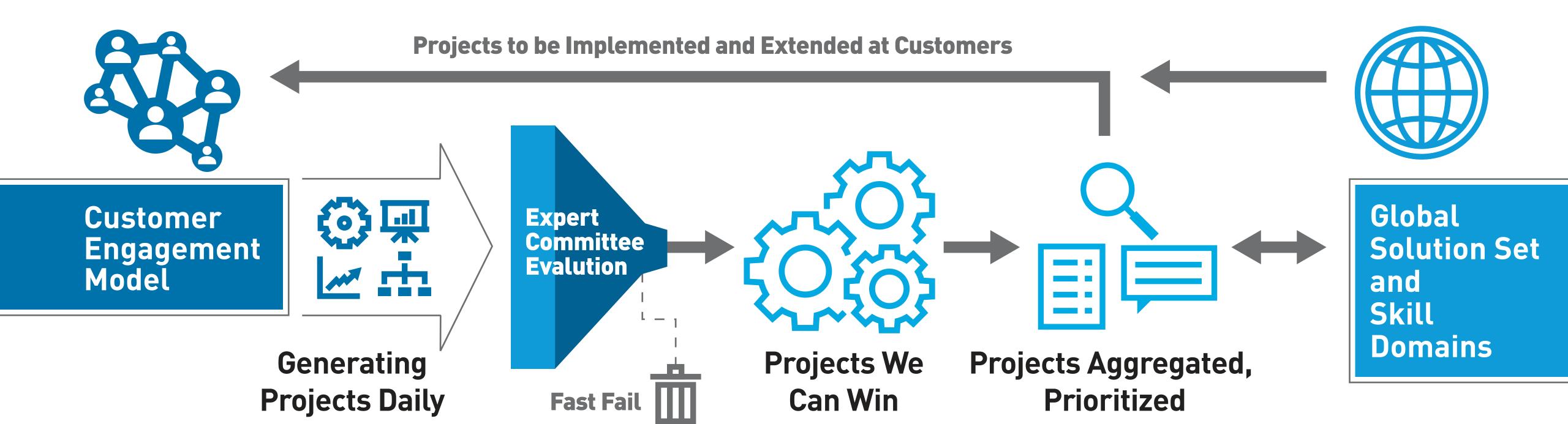
# Model and growth programs lift EM earnings...





# Opportunity model continues to be foundational





Leveraging years of pipeline data to make model more efficient and predictive

& Executed

### Model evolves to support continued innovation...



SCALE THE MODEL















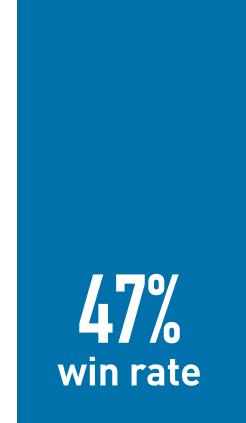


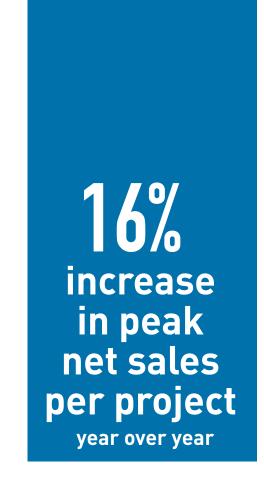














...and remained strong through market disruption

# Growth programs and technology innovation make EM future ready



#### Programs aligned with mega trends





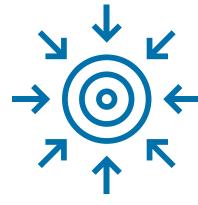




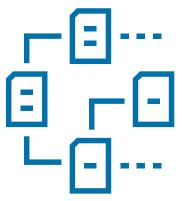
#### Elements of program that enable growth



Dedicated Program Teams



Forward Looking Objectives



Aligned Technology & Product Roadmaps



Voice-of-Customer Driven Approach

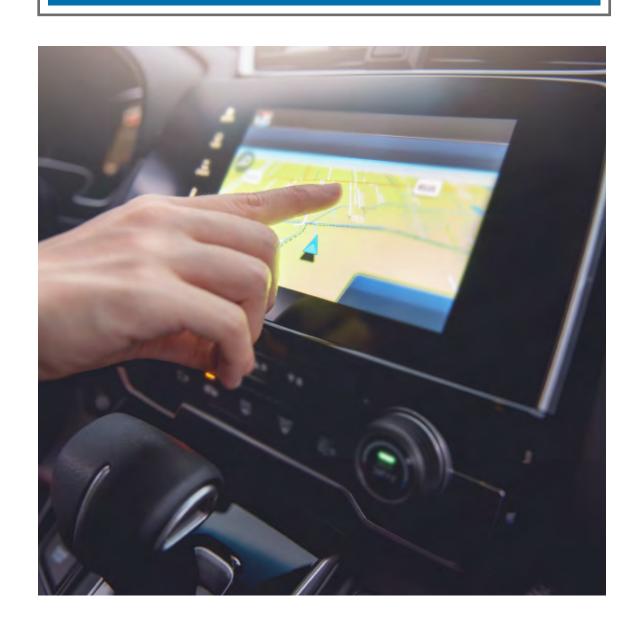


# Opportunities in future mobility expand the scope for EM solutions



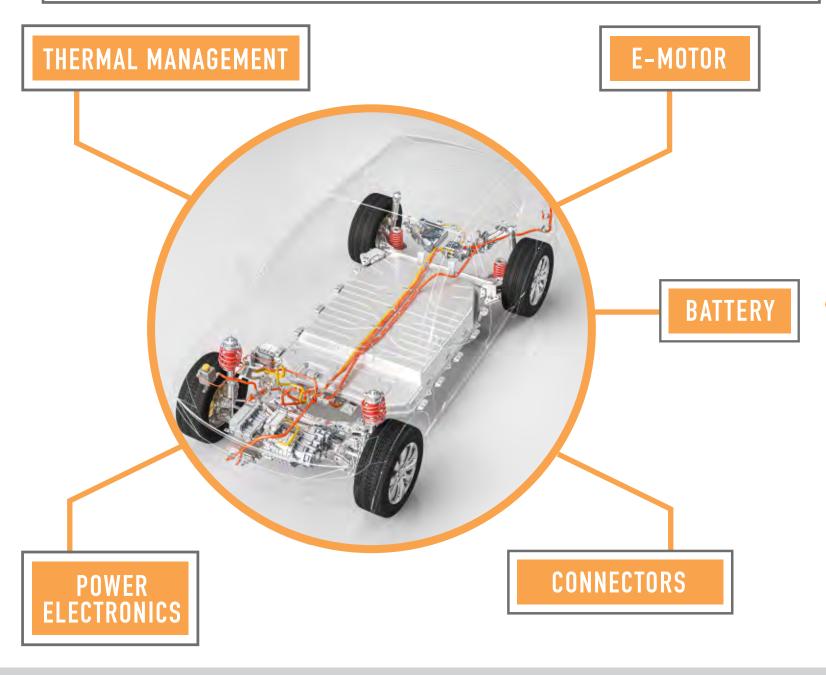
#### Safe navigation

Advanced Driver Assistance Systems



#### Lighter and safer

Electric vehicle powertrain



#### **GUR exceptionally well-positioned**

in lithium-ion battery separator (LiBS) market

		CE	PEER 1	PEER 2	PEER 3
	Global Production & Sales				
	Portfolio Breadth				
	Global Technical Expertise				
	<b>Customized Solutions</b>				
	Separator Manufacturer*				
	Battery*				
	OEMs*				

<sup>\*</sup>LiBs Mfg. Relationships

3.5X

Number of opportunities with new customers

3.5X

Number of OEM specifications in e-powertrains

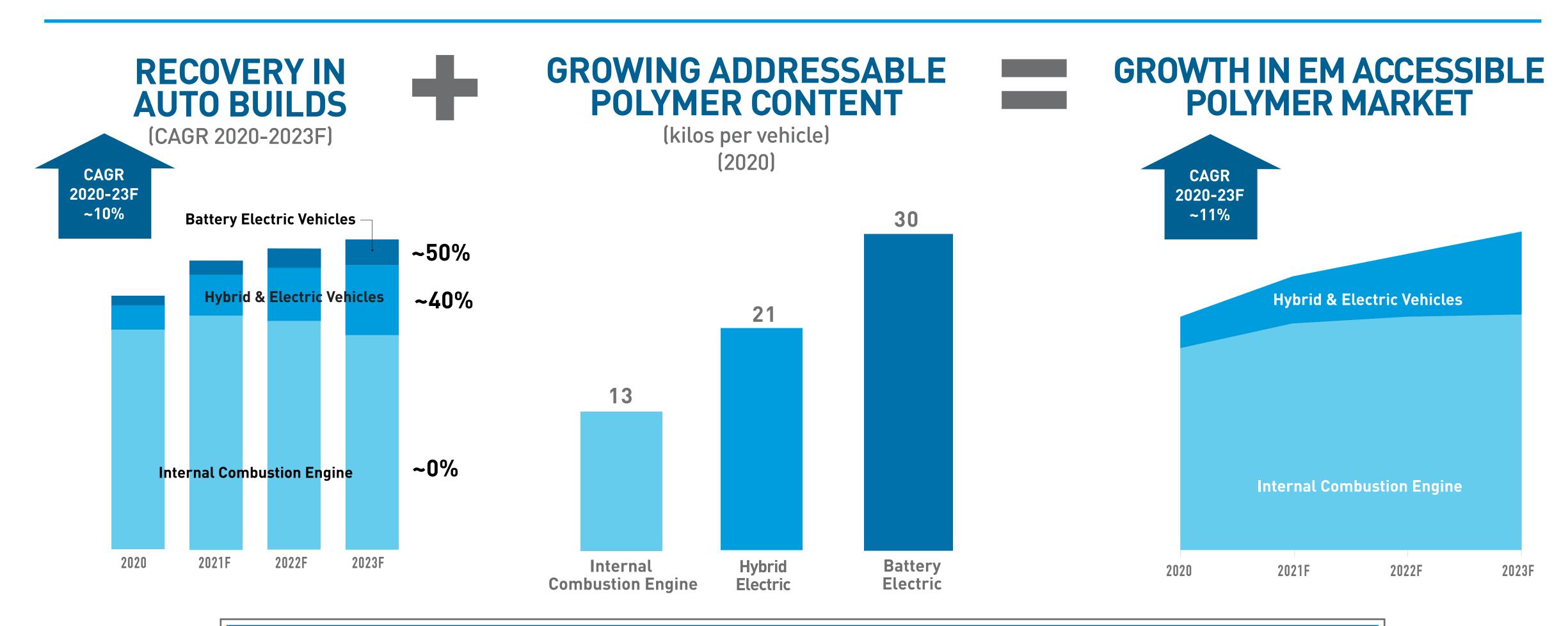
24%

Growth in pipeline net sales¹ from future mobility program



# Focused EV program driving growth beyond industry fundamentals...





...with >10% growth in auto business from 2020-2023





### Broad medical-pharma capabilities...



#### Capabilities



- Customized POM, GUR, PBT, LCP, EVA grades
- Certified biocompatibility grades



- Design assistance
- Analytical testing
- Moldflow<sup>®</sup> for modeling and analysis
- Processing support
- Regulatory support
- Pharma lab feasibility services



- Orthopedic implants
- Inhalers and injectors
- Medical bags and fluid handling
- Long-acting drug delivery
- Lab equipment and diagnostics
- Surgical instruments

#### Therapeutic Areas

EXISTING









EMERGING









...enable a range of therapeutic solutions



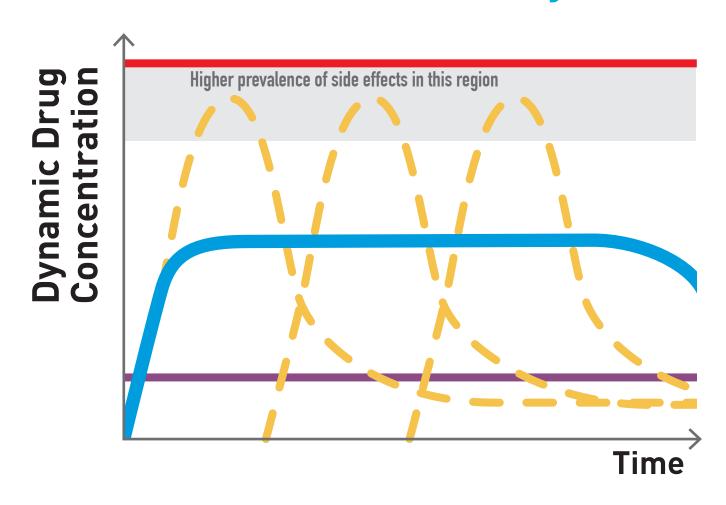
# VitalDose® success in drug delivery systems... MULTIPLYING OUR MOMENTUM





#### **Celanese Solution**

#### **Controlled Release Dynamics**



- Maximum Effective Concentration Minimum Effective Concentration
- Conventional Formulation
- VitalDose® Controlled Release Solution

#### **Platform Technology**

- **Drug-eluting implants**
- Intravaginal rings
- **Ophthalmic devices**
- Transdermal patches

#### **Therapeutic Areas**

- Oncology
- **Anti-virals**
- **Central nervous** system disorders
- Women's health
- **Ophthalmology**

#### **Industry Focus**



**Improved Efficacy** 



**Patient-centered Treatments** 



Fewer **Interventions** 



Value-based Healthcare

...creating new opportunities for future growth



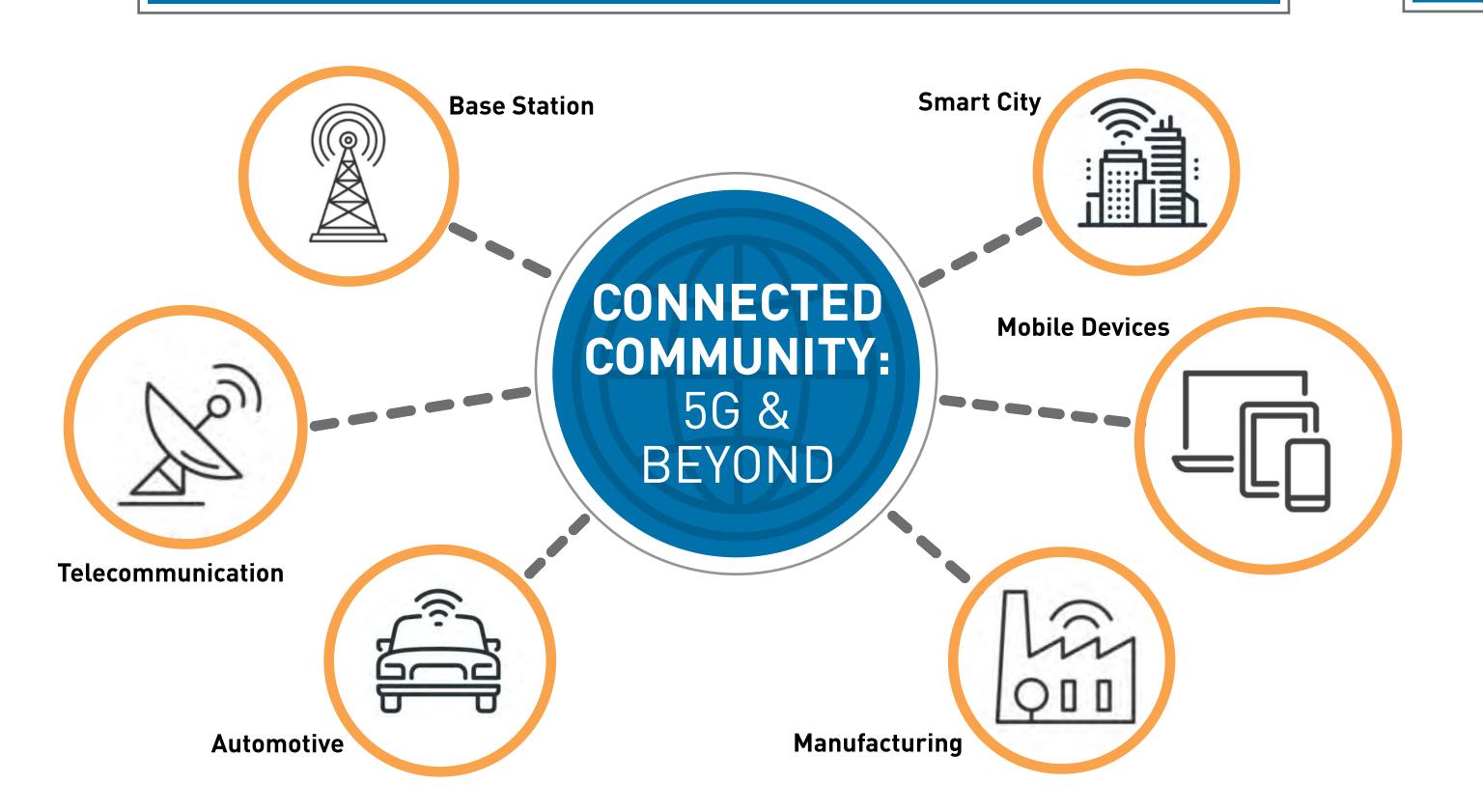


# Multiple mega trends are enabled by 5G...



#### Advancements in 'smart' applications...

...are creating new design requirements



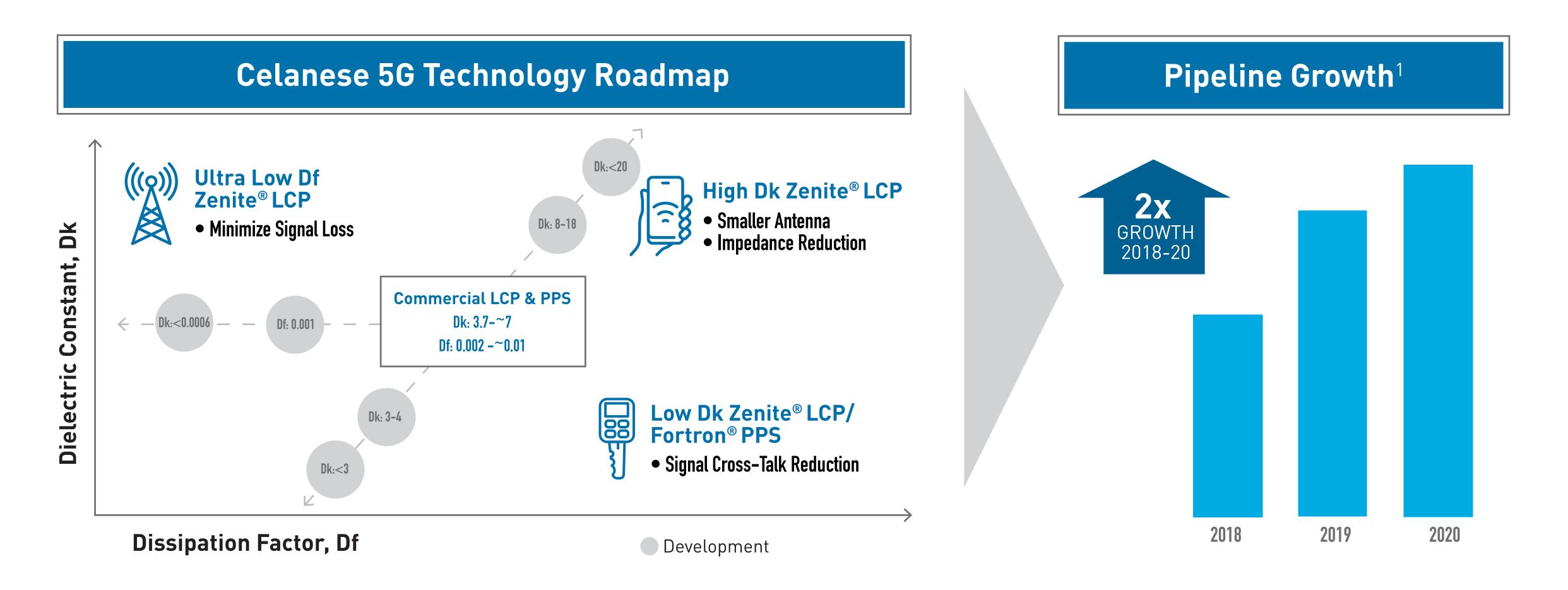
- Improved reliability
- Enable smaller and higher performance antenna
- Broad bandwidth
- Part consolidation
- Weight reduction
- Improved signal integrity
- EMI shielding

...driving demand for high-value, tailored solutions



# Customizing LCP to meet unique design requirements...





...across multiple applications to drive innovation

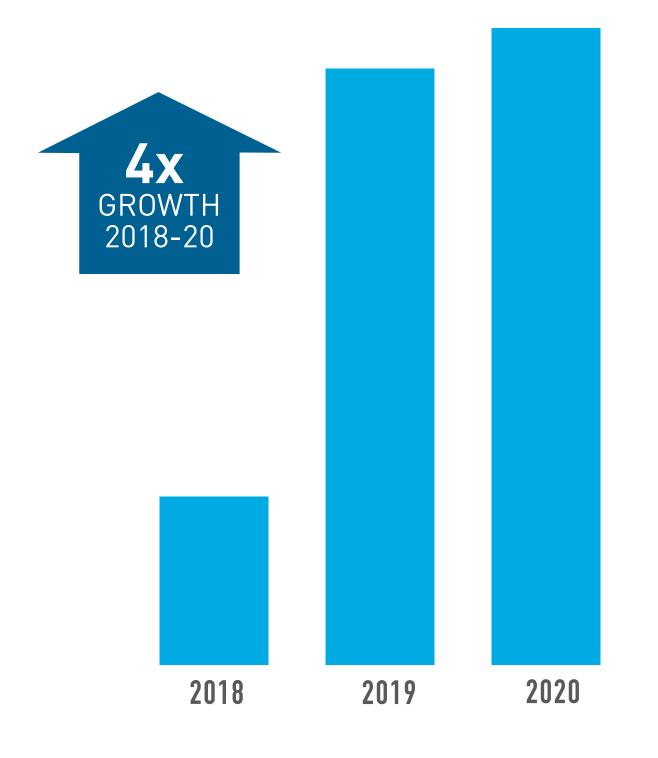


# Growing portfolio of sustainable offerings...



	SEGMENTS	APPROACH	CELANESE SOLUTION
CURRENT END MARKETS	Highly specified performance polymer	Reduced CO <sub>2</sub> footprint  Bio-based raw materials	<ul> <li>Eco-B POM</li> <li>Clarifoil®</li> <li>BlueRidge™</li> <li>China LCP</li> </ul>
	Standard polymer	Recycled content	<ul> <li>Ecomid® Nylon</li> <li>Celanex® PBT</li> <li>Polifor® PP</li> <li>Amorphous</li> </ul>
NEW END MARKETS	Single-use plastics	Biodegradable	<ul> <li>Clarifoil®</li> <li>BlueRidge™</li> </ul>





...to meet exponential global demand expansion

### Investing in Asia localization...







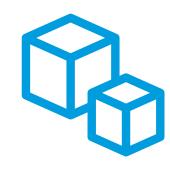
Winning with Local Innovators



Local Development



**Commercial Excellence** 



**Local Supply** 





In capital expenditures over the last 10 years

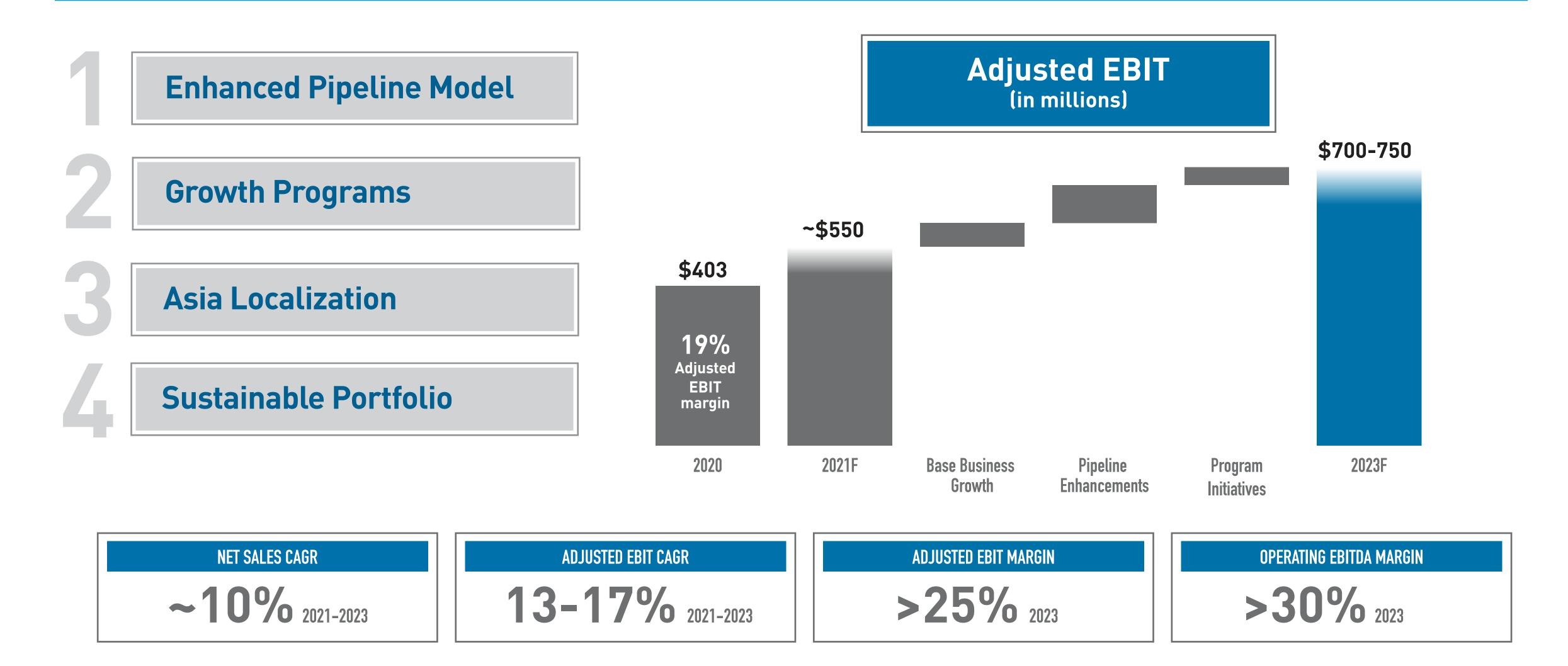


Number of employees in region to support growth

...to support innovation and deliver out-sized growth

# Engineered Materials financial outlook







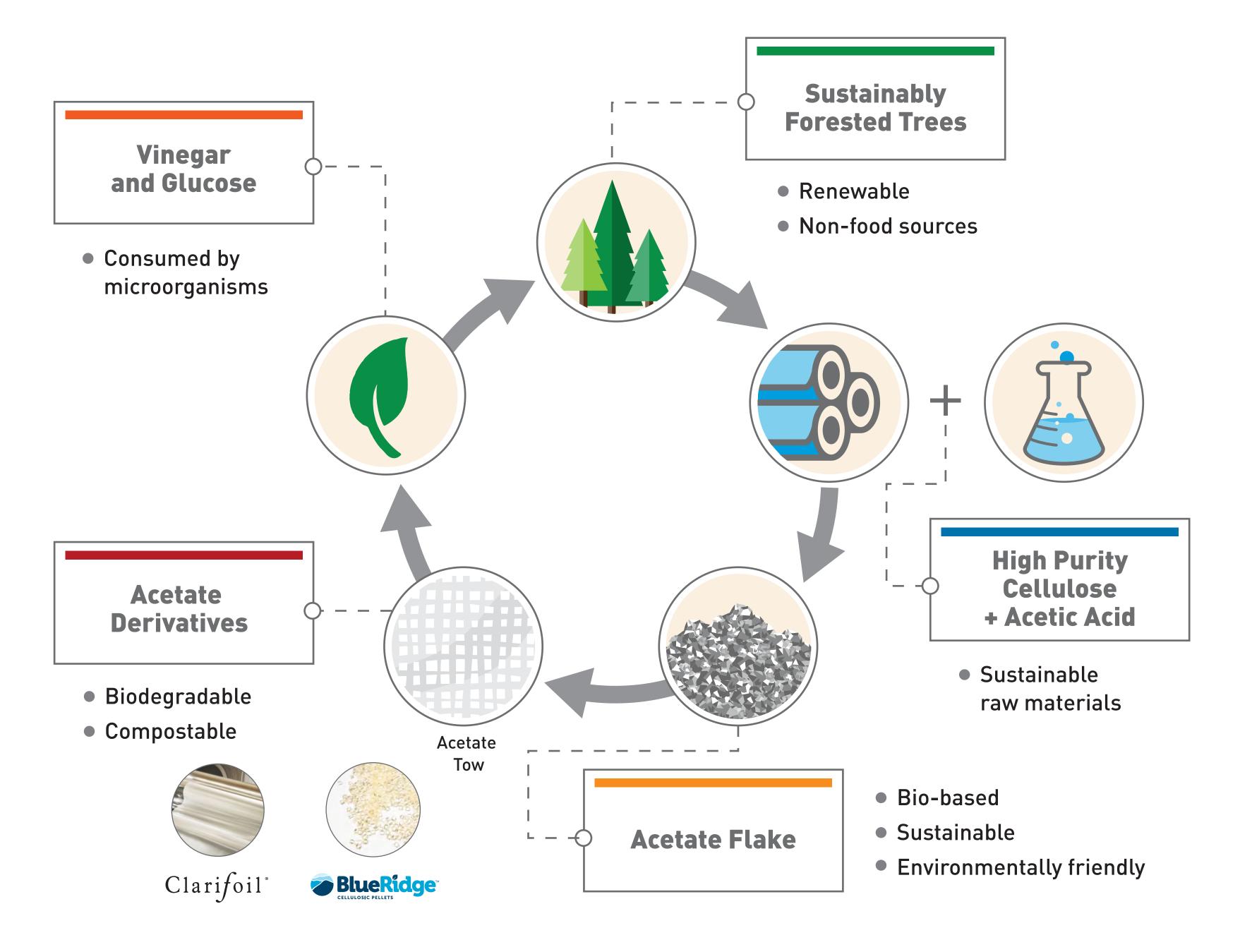
# Acetate Tow

Lori Ryerkerk

MULTIPLYING OUR MOMENTUM

# Celanese Acetate Enterprise

MULTIPLYING OUR MOMENTUM



### A central link in our businesses

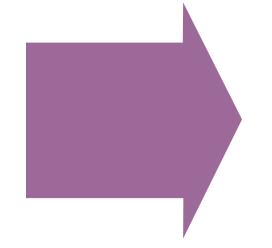


Consumer of upstream products

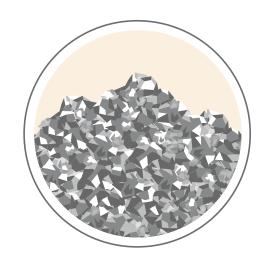
Supplier of sustainable materials

**Acetyl Chain** 

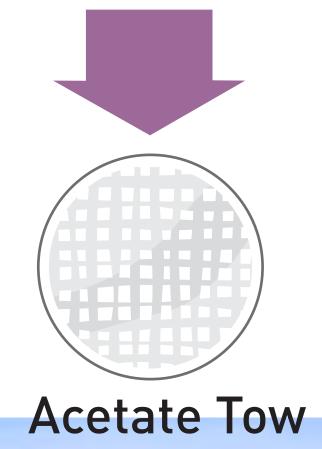




**Acetate Tow** 







**Engineered Materials** 

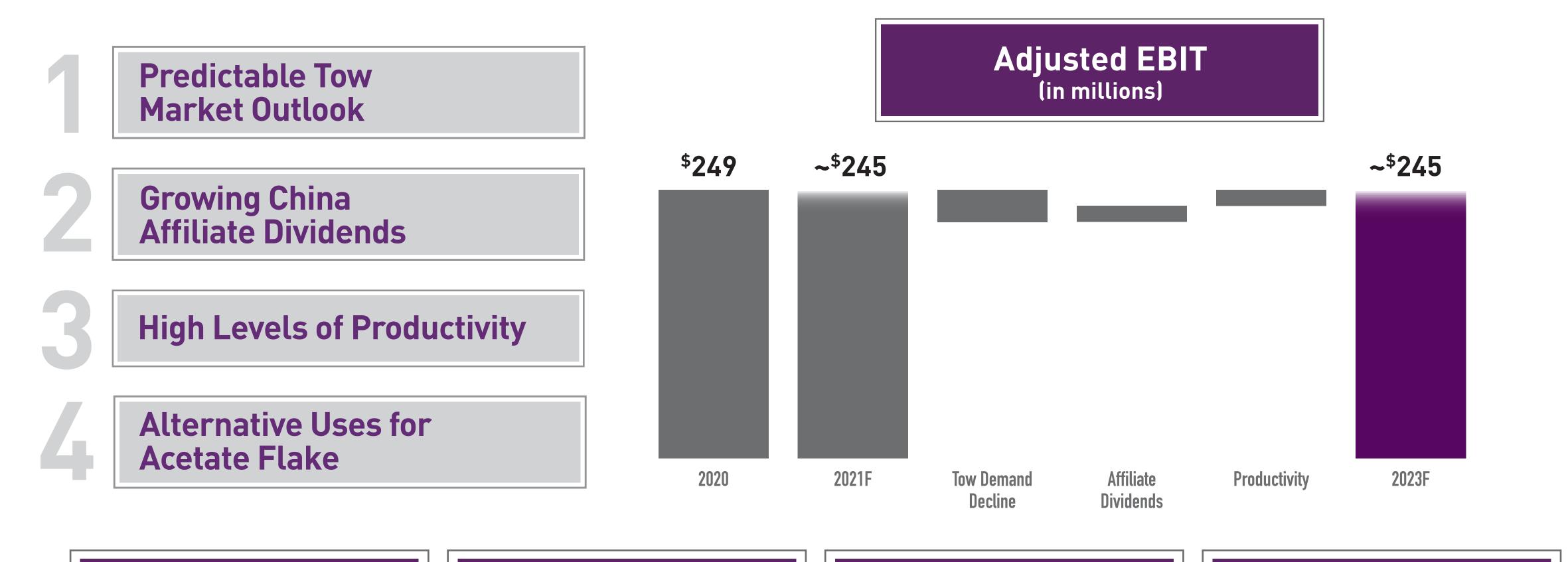






#### Acetate Tow financial outlook





INDUSTRY DYNAMICS

STABLE

ADJUSTED EBIT MARGIN

—45% 2023

OPERATING EBITDA MARGIN

~50% 2023

**DIVIDENDS FROM AFFILIATES** 

~55% of Total Adjusted EBIT 2023



# Sustainability

Lori Ryerkerk

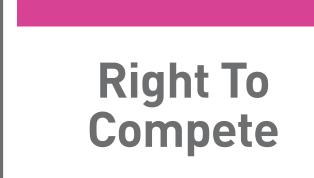
MULTIPLYING OUR MOMENTUM



# Accelerating safe and sustainable solutions through chemistry

#### **Central to Our Business**

























### Our approach to sustainability



#### GOVERNANCE: NAVIGATING A SUSTAINABLE FUTURE

#### **ENVIRONMENTAL**

#### PRESERVING THE ENVIRONMENT

- Waste
- Water
- Energy
- Air
- Climate

#### SOCIETAL

# INVESTING IN OUR PEOPLE AND COMMUNITIES

- Human Capital
- Workforce Health and Safety
- Process Safety and Emergency Preparedness
- Community Relations

#### COMMERCIAL

#### ADVANCING SAFE AND SUSTAINABLE CUSTOMER SOLUTIONS

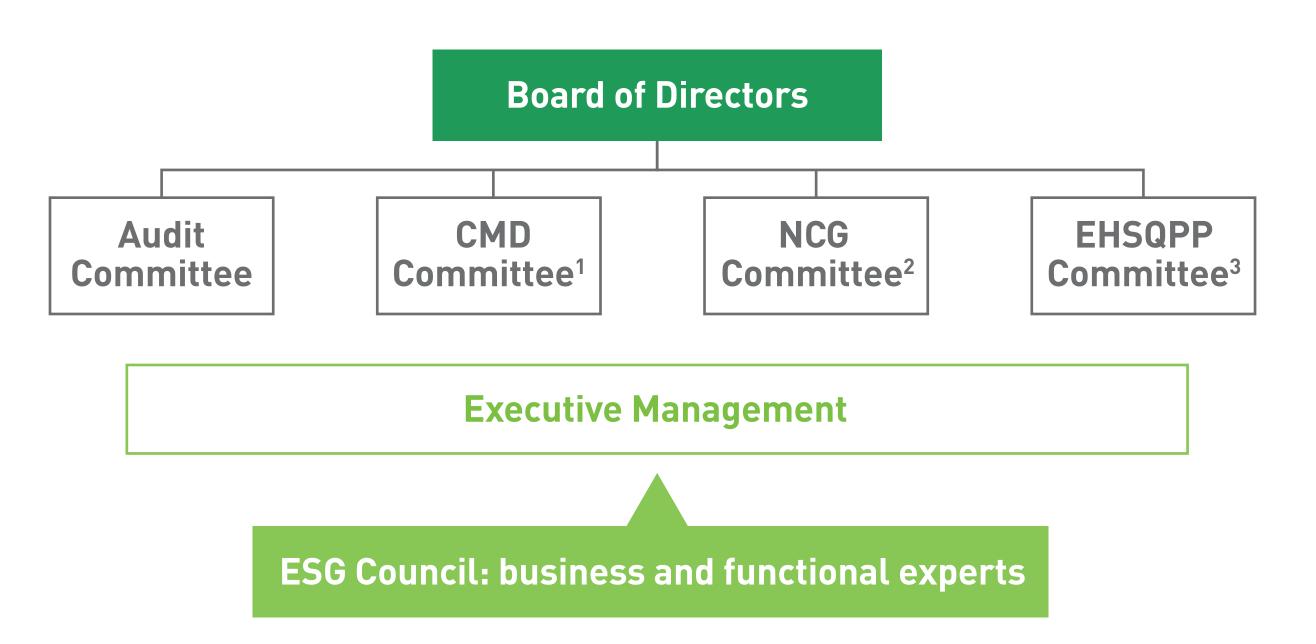
- Chemical Safety
- Supply Chain Management
- Circular Economy

Three sustainability pillars under a shared governance framework

### Governance: navigating a sustainable future



# Commitment formalized through an ESG Council with Board oversight



#### ESG Council's Progress:

Q3 2019	$\bigcirc$	Formed ESG Council
Q4 2019	0	Completed ESG priority assessment
Q1 2020	0	Committed to adopt SASB Chemical Industry standards
Q2 2020		Launched enhanced sustainability website and proxy disclosures
Q3 2020	0	Formed 10 ESG expert committees to develop KPIs, baselines, and targets
Q1 2021		Developing 2020 Sustainability Report and website aligned to SASB and UNSDGs <sup>4</sup>

#### Our sustainable future starts with leadership



### Preserving the environment











- 34% reduction in solid waste intensity 2013-2019¹
- ~160,000 MMBtu per year heat recovery and reuse from hazardous waste incinerator project
- 15% reduction in total waste by 2030²



- Committed to Operation Clean Sweep pledge for European and U.S. facilities
- 10% reduction in water consumption intensity by 2030²



- 237 energy projects delivered
   \*\$25 million in savings from
   2019-2020
- ~3,100 mt reduction of CO<sub>2</sub> annually at Lanaken site from new combined heat power unit
- 10% reduction in total net energy intensity by 2030²



- 37% VOC³ intensity reduction from 2013-2019¹
- 30% GHG<sup>4</sup>
   intensity
   reduction
   from
   2013-2019<sup>1</sup>



Capturing Hazardous
 Air Pollutants (HAPS)
 in 2020 for future
 disclosure and target

Strategic steps aimed to reduce our operational impact

# Addressing climate change



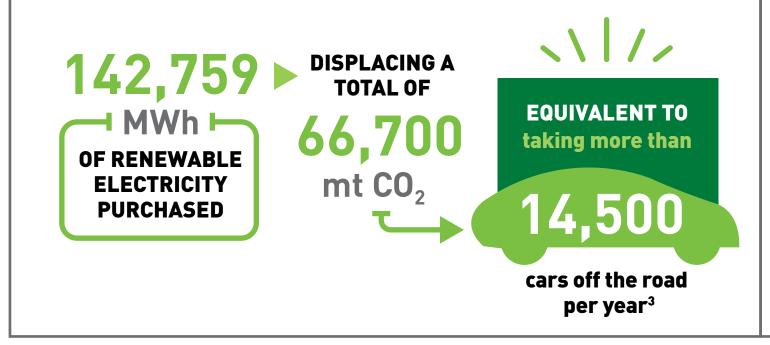
#### **Investing in projects to:**

- Increase energy efficiency and improve reliability
- Recover and reuse waste heat
- Increase use of renewable energy and sustainable raw materials

#### Green Initiatives at Clear Lake, Texas Facility

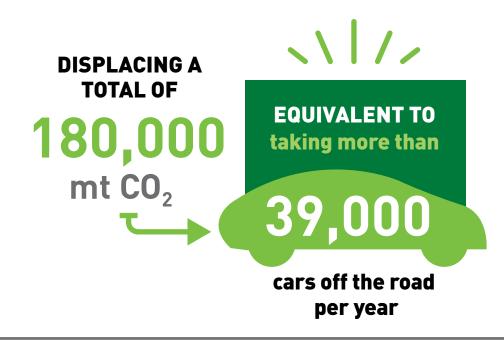
#### Renewable Energy Supply

Signed a renewable energy contract to supply ~33% of the annual electricity consumption at the site.<sup>1,2</sup>



# Methanol Production from Recycled CO<sub>2</sub>

By-product CO<sub>2</sub> as alternative feedstock for methanol production<sup>4</sup> to be used in a range of end-products.



Adopted climate policy in 2020 and committed to establishing robust climate program



### Committed to our people and communities





Workforce Health & Safety Process Safety & Emergency Preparedness



Community Relations

- Providing a diverse, equitable and inclusive culture
  - 50% women on Board of Directors
  - 28% women in management
  - 29% people of color in U.S. management roles
- Tools and resources to support employee development, career growth and wellness needs

- **~50% reduction in total**recordable incidents from 2014-2020
- 21 of 35 sites with no recordable injuries in 2019
- ~75% reduction in total process safety incidents 2013-2020
- ~50 U.S. companies have adopted CE's "Walk the Line" program focused on operational discipline
- Performed severe weather assessments for 8 CE high and medium risk facilities in 2020

- \$1.4 million donated to ~900 non-profit organizations in 2020
- \$4.4 million donated to ~1,500 non-profit organizations in 2019
- 900,000+ volunteer hours since 2016

Driving greater engagement within Celanese and our communities

### Driving Diversity, Equity & Inclusion (DE&I)...





- Global DE&I Council as our advisory committee
  - 18 cross-functional employees representing 11 countries
  - Senior leadership chair
  - Oversight by the Board of Directors



#### **Employee Engagement**



**Employee Resource Groups (ERGs)** to inspire, develop and increase the visibility of under-represented employee groups

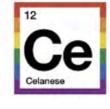
8 ERGs | 39 Chapters





















- **Engagement with key industry** and academic organizations to recruit diverse talent
- Initiatives to support under-represented groups pursuing STEM<sup>1</sup> degrees
- Global cultural awareness and heritage celebrations
- Supplier diversity program

...for a culture of inclusion, innovation and growth

### Advancing safe and sustainable customer solutions



#### **Chemical Safety**



- Publish product profiles prioritized by risk/volume
- Establish customer chemical safety education program
- Align with ACC's<sup>1</sup> product safety innovation program

#### **Supply Chain Management**



- Sourcing of renewable energy and renewable or bio-based raw materials
- Improved management of supplier, vendor and contractor risk profiles
- ~\$150 million economic benefit through Celanese purchases from small businesses²

#### **Sustainable Solutions**



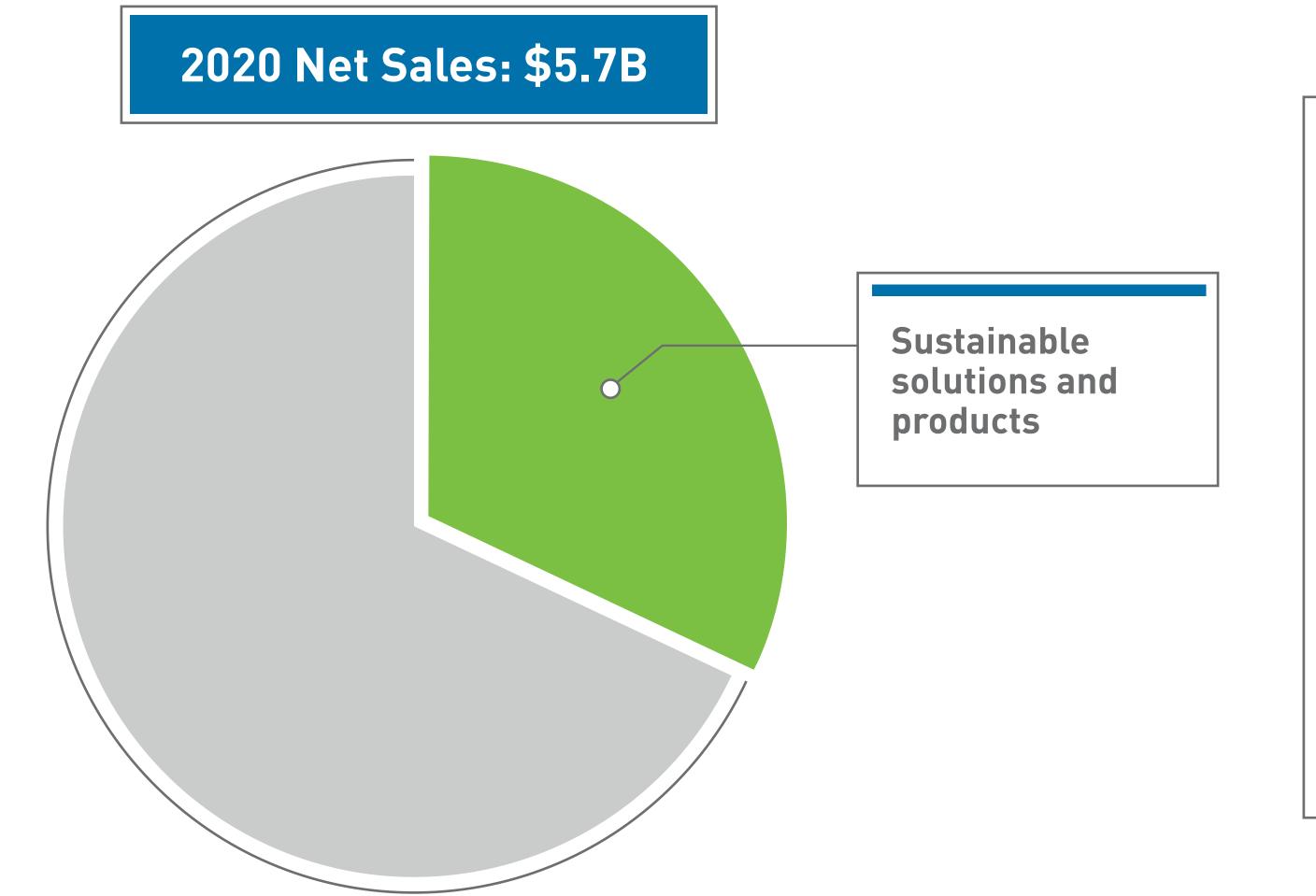
- Chemistry of platform well suited for long-term transition to more renewable feedstocks
- Heavy exposure to highly engineered, durable applications
- Focus on customer solutions that improve resource efficiency and product life

Helping our customers realize the sustainability goals of their end use products



### Enabling sustainable solutions





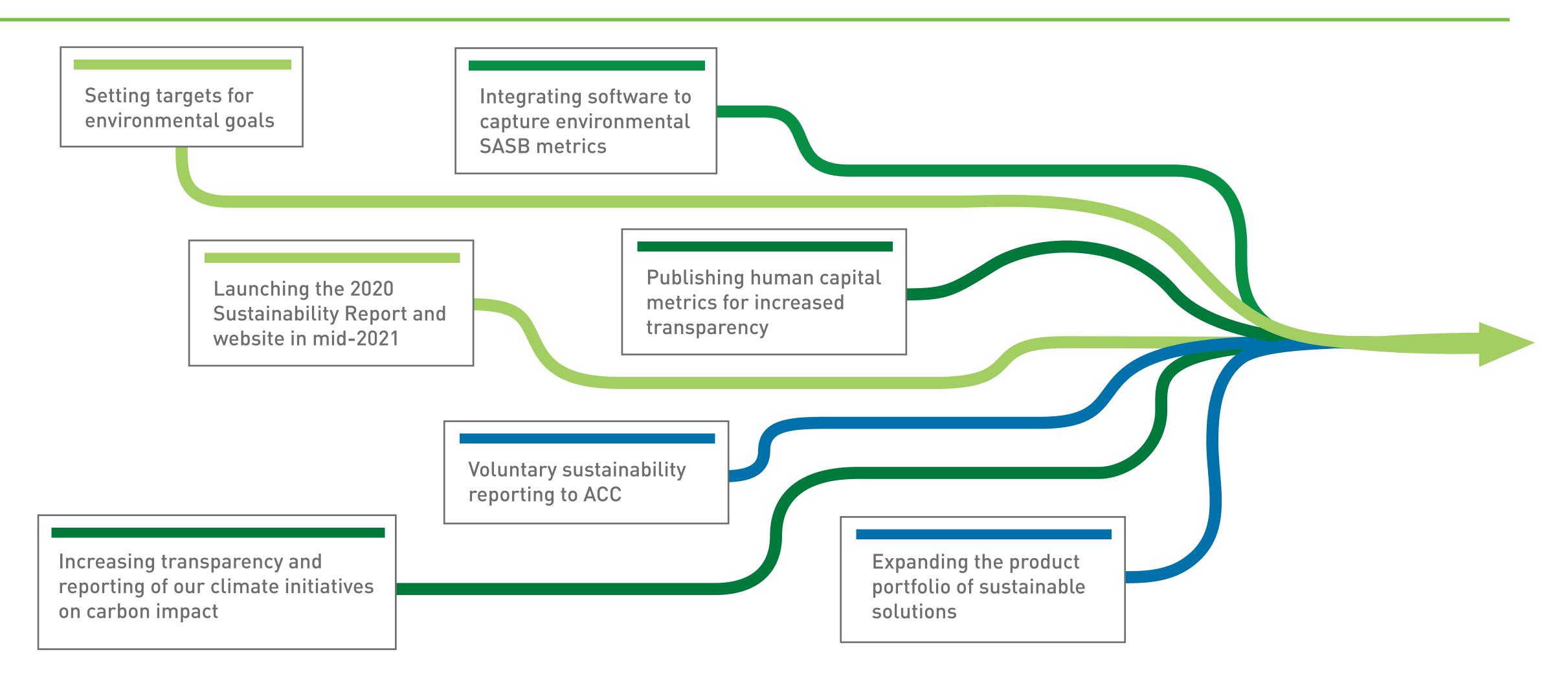
Sustainable **Solutions** and Products



- Redispersible powders reduce required tile adhesive thickness, lowering the carbon footprint by up to 50%
- Clarifoil® and BlueRidge™ product offerings that are bio-based materials Clarifoil° BlueRidge<sup>™</sup>
- **EM** lightweighting solutions improve fuel economy by offering up to 30% mass savings vs. traditional part materials

# On our sustainability horizon





Leadership through consistent improvement in transparency



# Financial Excellence

**Scott Richardson** 



### Disciplined focus to drive shareholder value



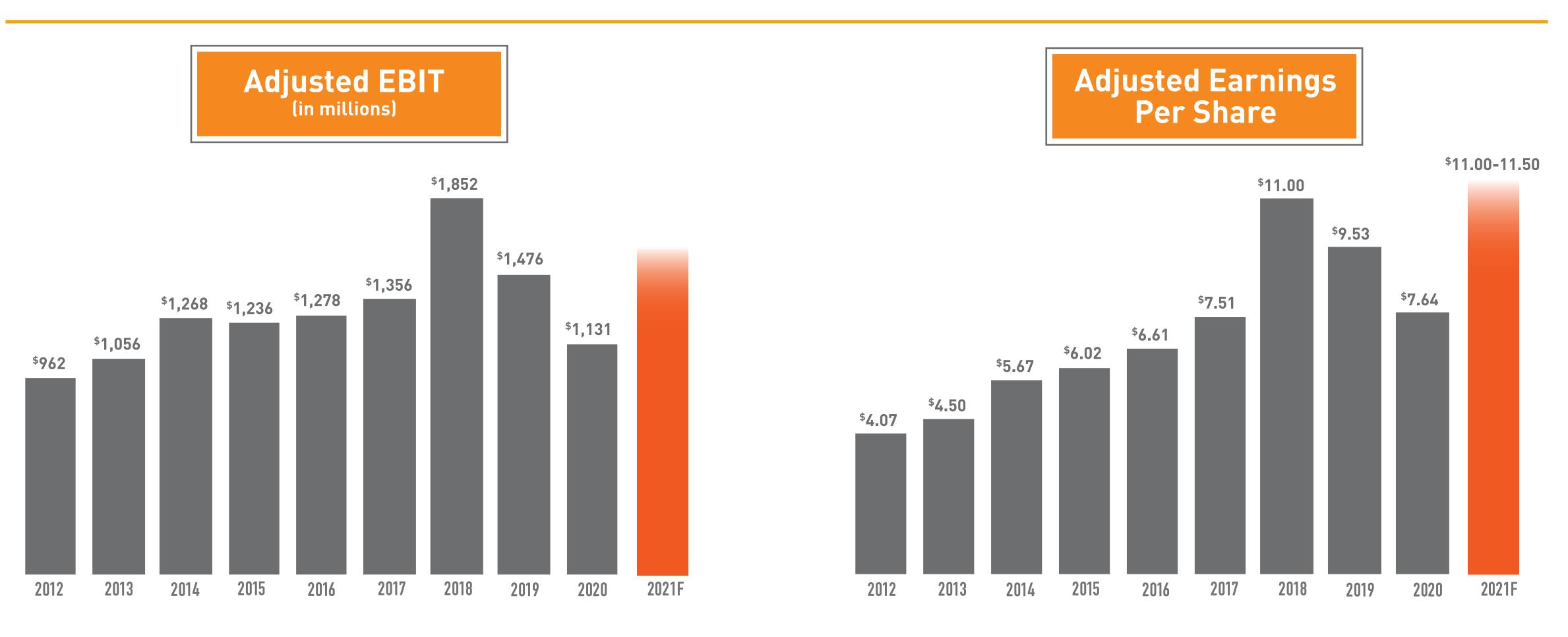
INVEST TIME AND EFFORT TO EVOLVE OUR LEADING BUSINESS FRANCHISES

LEVERAGE OUR BUSINESSES TO DRIVE STRONG CASH GENERATION AND USE THAT CASH FOR SHAREHOLDER VALUE ACCRETION

FOCUS ON DELIVERING DOUBLE-DIGIT PER YEAR ADJUSTED EARNINGS PER SHARE GROWTH



# Leading positions and business model evolution have driven performance uplift



Sustained track record of earnings growth

# Consistent performance translates to shareholder value



Total Shareholder Return

(February 28, 2018 – February 28, 2021)

CE 47%

**DJUSCH** 

22%

29%

**Proxy Peers** 

CE

Free Cash Flow Yield

(Avg. 2018 – 2020)

**DJUSCH** 

6%

**Proxy Peers** 

6%

Return on Invested Capital

(Avg. 2018 – 2020)

20% CF

**DJUSCH** 

11%

Proxy Peers 12%

Shareholder Yield

(Avg. 2018 – 2020)

**S**%

DJUSCH

4%

**Proxy Peers** 

5%

Compelling relative performance and valuation continue to drive superior returns

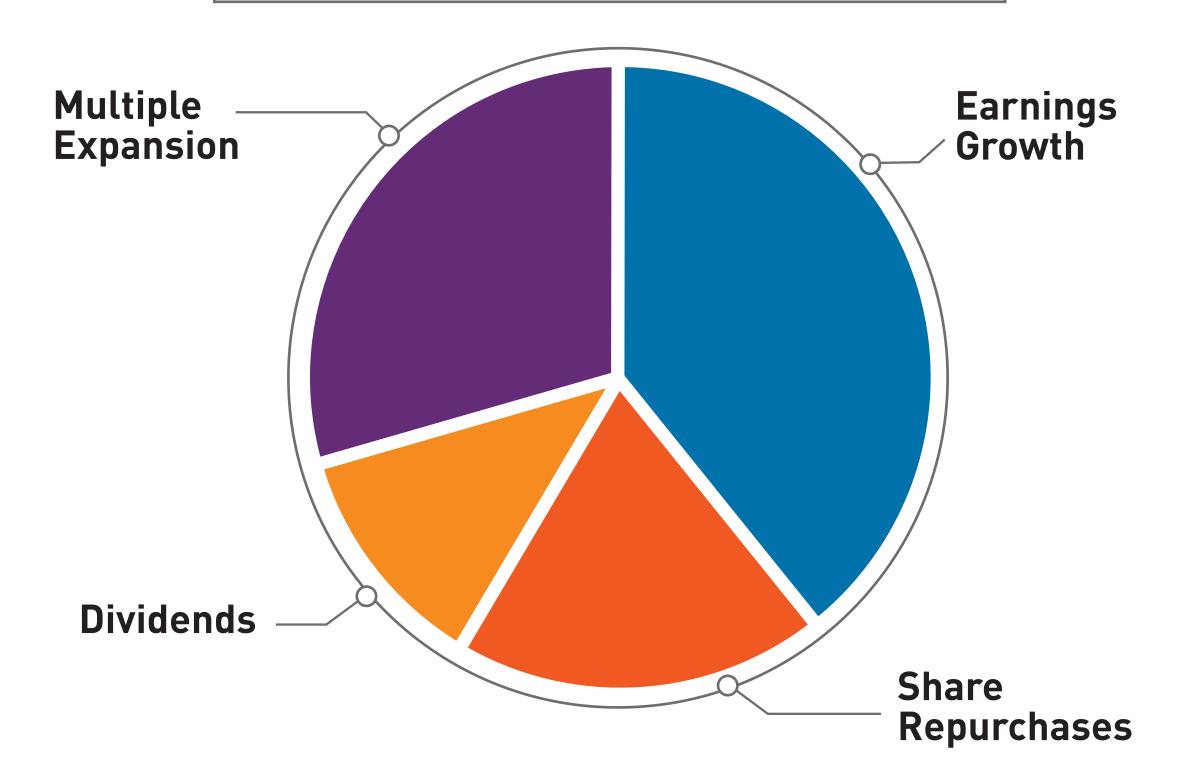
## Reliably strong total shareholder returns



Over the last decade, CE has delivered...

...positive TSR in  $9^{\text{out}}$   $10^{\text{years}}$  with average annual TSR¹ of  $15^{\text{0}}$ 

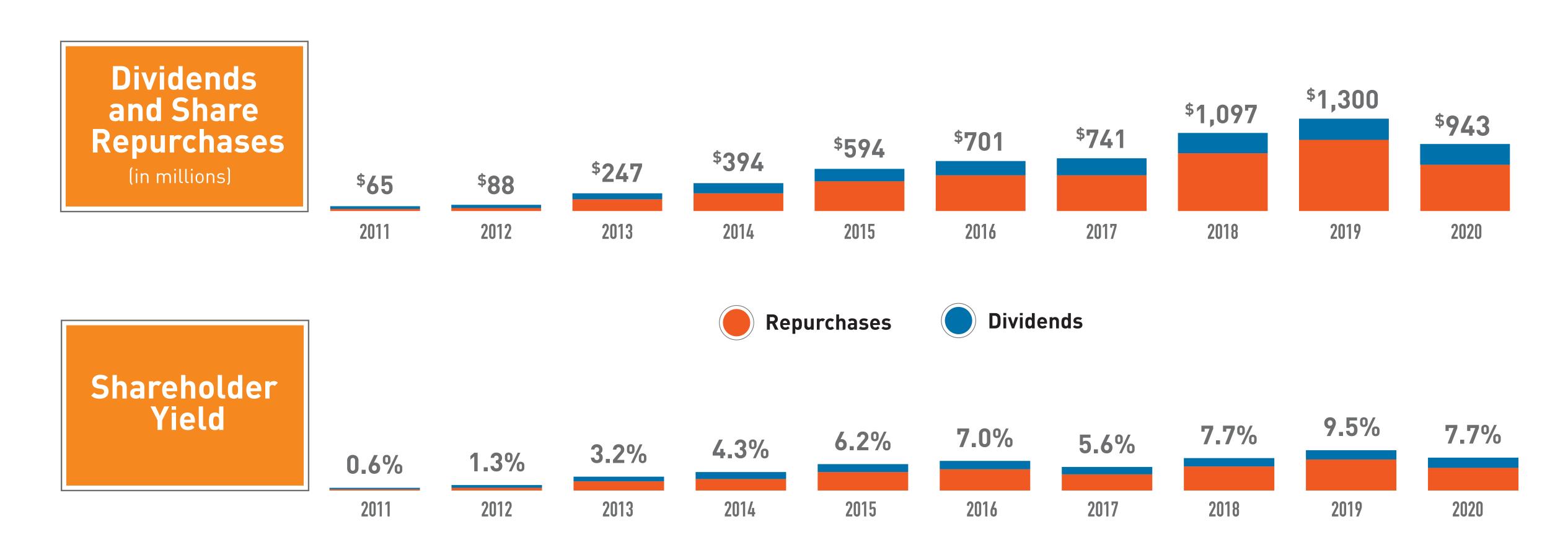
Driven in an average year over this period by...



Two-thirds of historical shareholder value generated by controllable actions

#### MULTIPLYING OUR MOMENTUM

## Foundational level of returns from dividends and share repurchases



>\$6 billion returned over the last decade and growing shareholder yield

## Key pillars in place to lift earnings profile



#### **Productivity**



- Raw material & energy efficiency
- Scaling our production
- Process & system automation

## Business Model Enhancement



- Pipeline model evolution
- Scaling our models
- Expanded optionality

#### Organic Investment

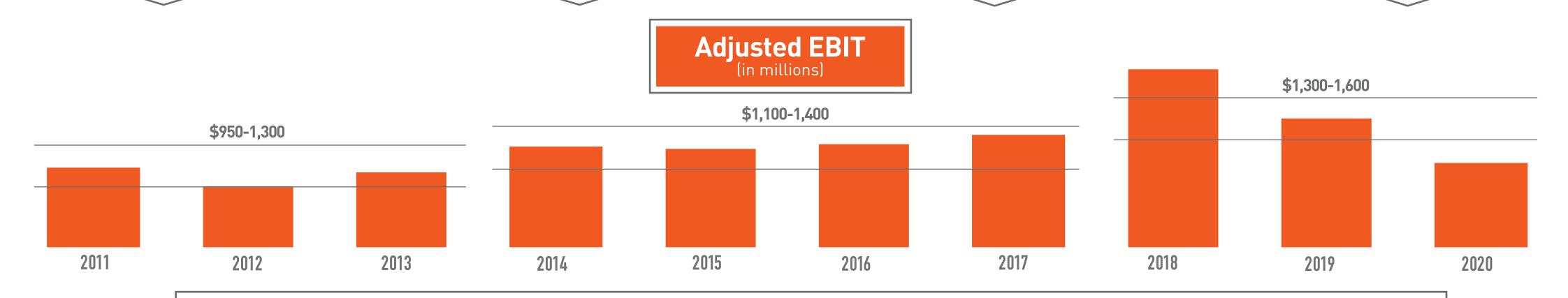


- Productivity-based investments
- Incremental, capital-efficient expansions
- Production & supply chain optimization

## High-Return M&A



- Product & technology enhancement
- Supportive of business models
- Feeding productivity pipeline



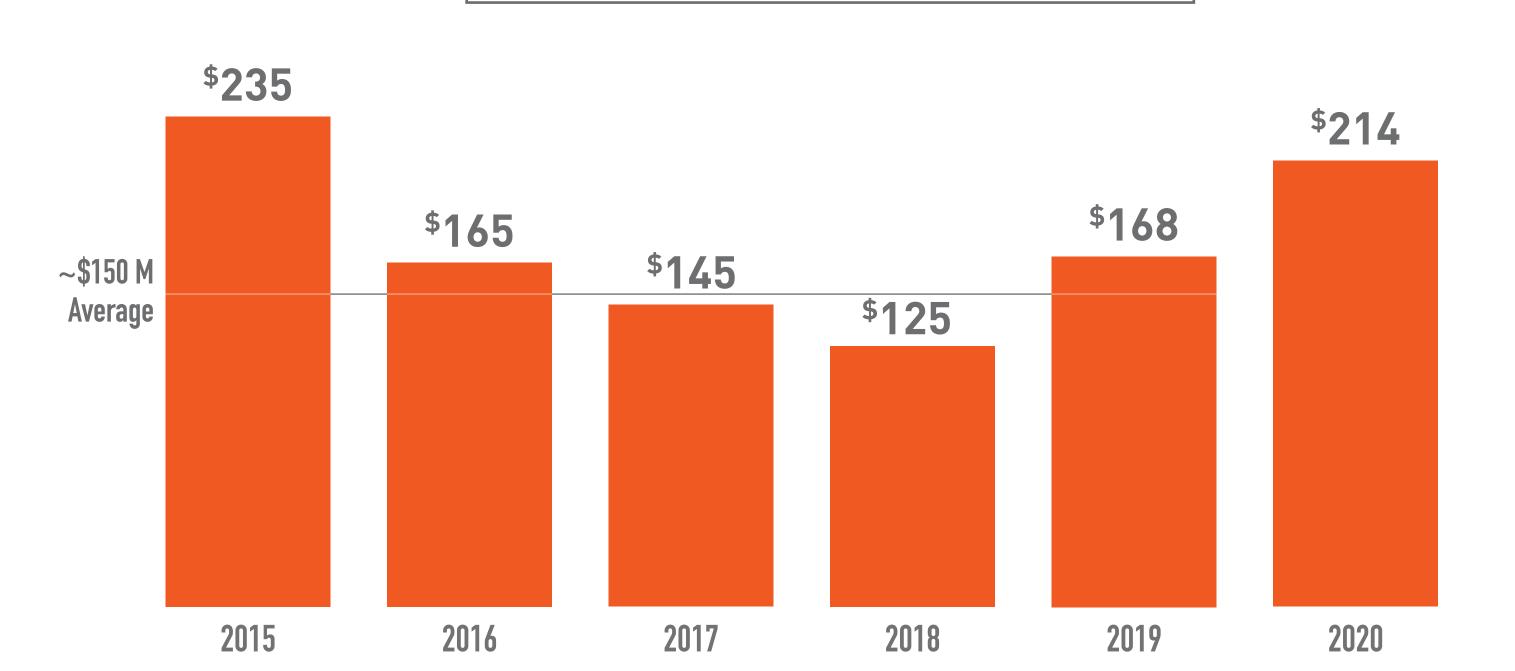
Complementary pillars focus the organization on controllable actions

## Earnings growth begins with productivity culture

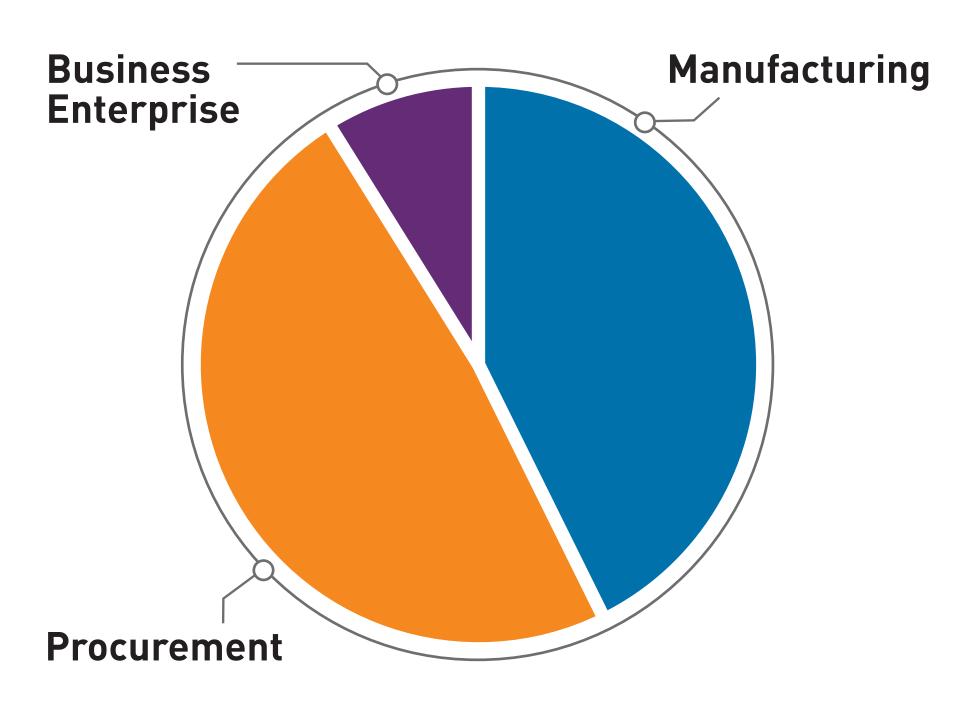




#### (in millions)



#### **2020 Productivity**



Elevated and highly sustainable productivity in 2020

## Productivity remains core component of organic investment



	Clear Lake Acetic Acid Expansion	European Compounding Center of Excellence	End to End Supply Chain Transformation (Wave 1)
Business	Acetyl Chain	Engineered Materials	All
Capital Cost & Completion	<\$350 <sub>M</sub> 2023	<\$20 <sub>M</sub> 2022	<\$25 <sub>M</sub> 2021
Productivity	<ul> <li>Low-cost natural gas feedstock</li> <li>Raw material &amp; catalyst usage gains</li> <li>Fixed cost scale</li> </ul>	<ul> <li>Consolidate European footprint</li> <li>Improve compounding utilization</li> <li>Leverage existing infrastructure</li> </ul>	<ul> <li>Supply chain optimization tools</li> <li>Process optimization</li> <li>Analytics platforms</li> </ul>
	ROCE 25% +	Simple 2 5 years	2021 <b>\$20</b> M Savings <b>\$20</b> M

Three examples of how productivity contributes to top tier capital returns



## Example of end to end supply chain transformation



Multiple Waves

11 Project Workstreams (Wave 1)

**Hundreds of Drivers** 

**Three Benefits** 

Wave 1

Wave 2

**Advanced Statistical Forecasting** 

**Supply Network Planning** 

**Production Schedule Optimization** 

**End-to-End Cost-to-Serve** 

**Sampling Execution** 

**Distribution Network Optimization** 

**Customer Experience Solutions** 

New supply chain technology tools



Productivity Savings

RPA's<sup>1</sup> ("Bots")

**Customer Satisfaction** 

>20k Hours of work take out



20



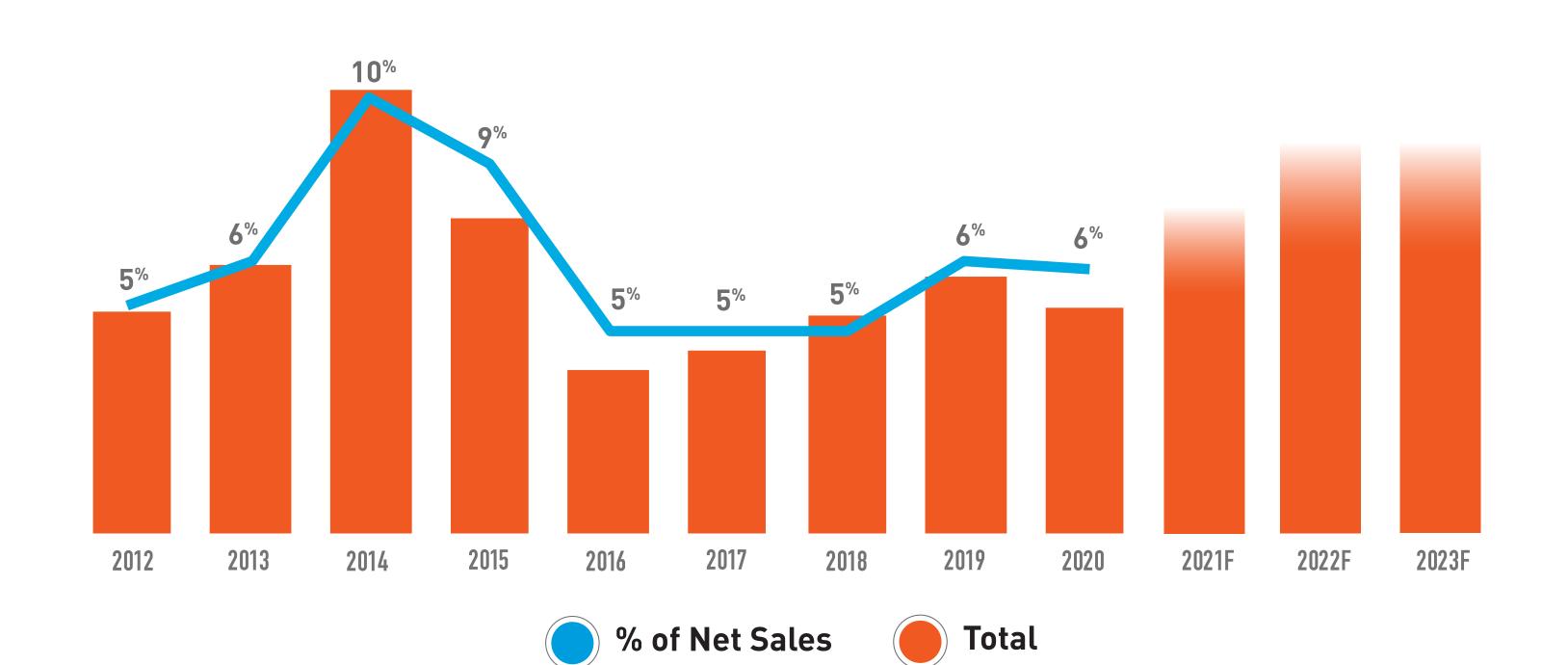
**Employee Satisfaction** 

Annual productivity is comprised of hundreds of individual projects

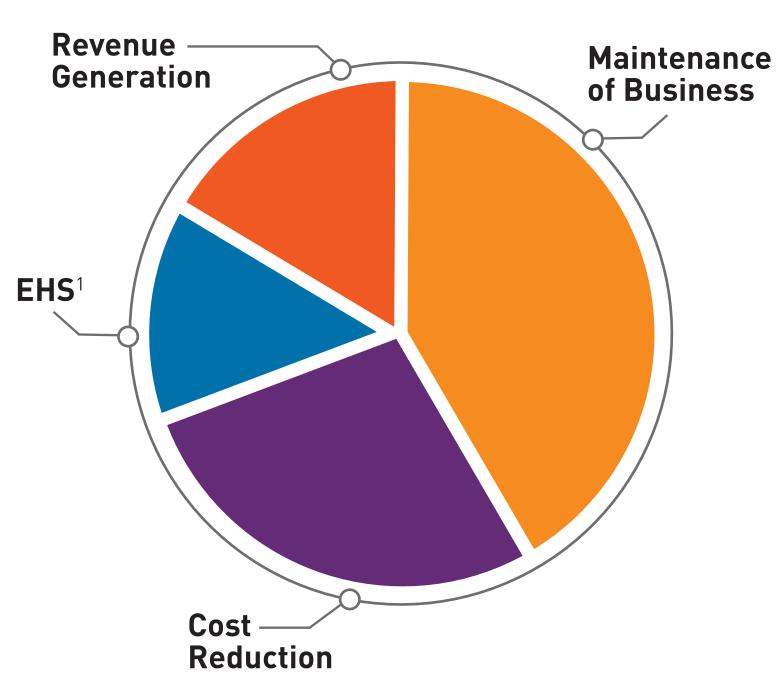
## Organic investments represent highest return opportunities



#### Historical CAPEX



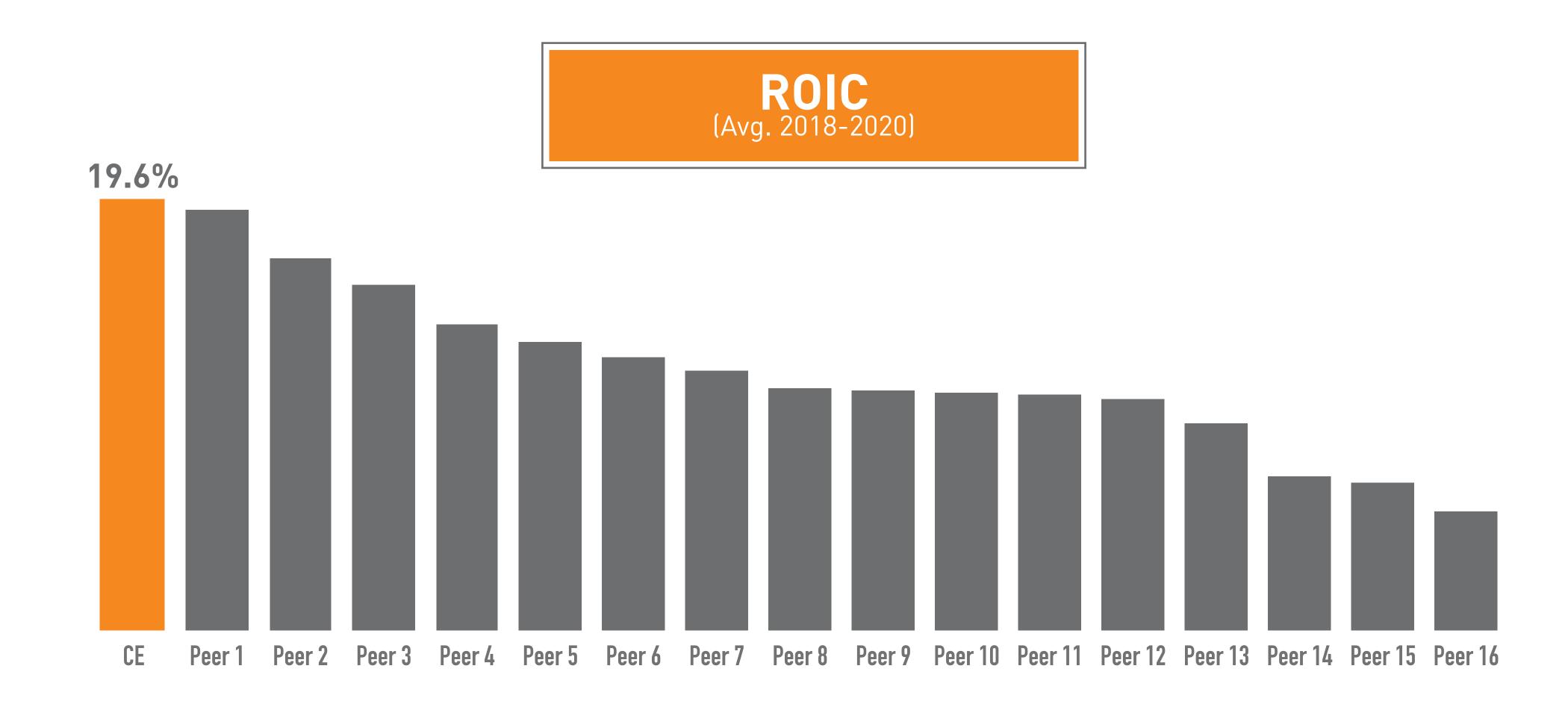
#### **2020 CAPEX**



Revitalizing a deep organic investment pipeline to drive future returns

## Highly disciplined capital allocation strategy





Unwavering discipline drives top tier return on capital

## Business plans to yield high-quality earnings



\$700-750 million

## ENGINEERED MATERIALS

- Project pipeline and incremental investments
- >85% adjusted EBIT from base business
- Upside from M&A potential

\$900-1,000 million

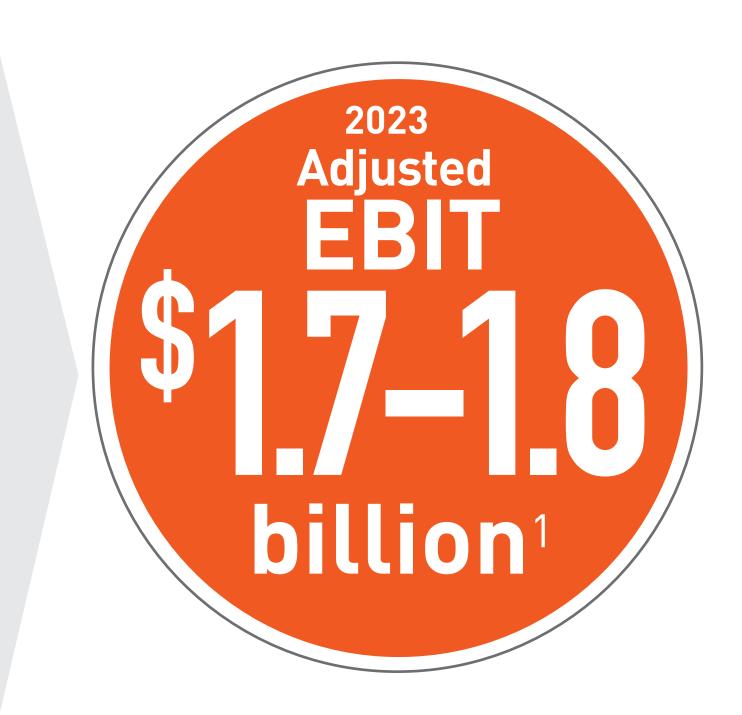
ACETYL CHAIN

- Leading network optionality and incremental expansion
- Earnings profile on normalized industry dynamics
- Upside from M&A potential and industry dynamics

~\$245 million

ACETATE TOW

- Stabilized industry dynamics
- Secular demand declines offset by productivity
- >50% from growing Chinese affiliate dividends



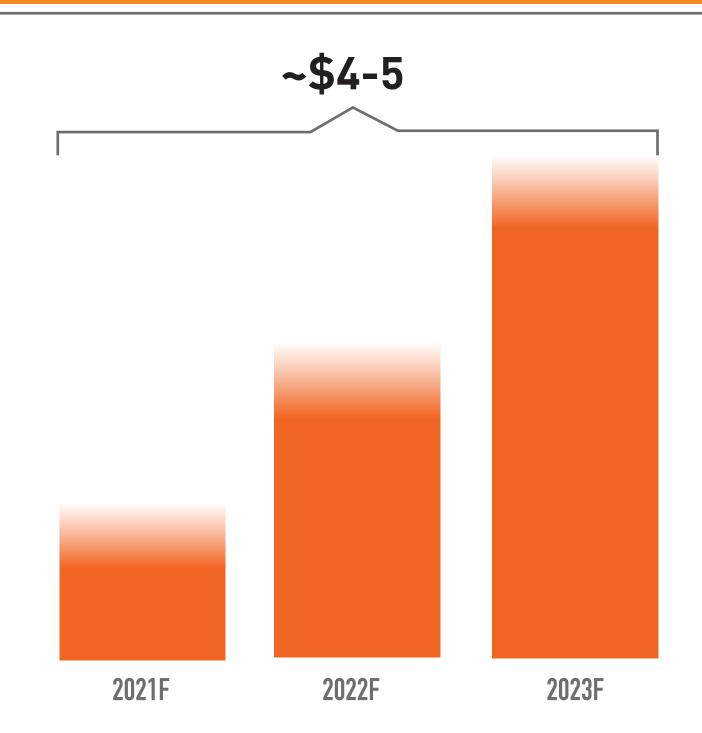
Elevating the sustainable earnings profile of our businesses

## Business plans yield powerful cash generation OUR MOMENTUM



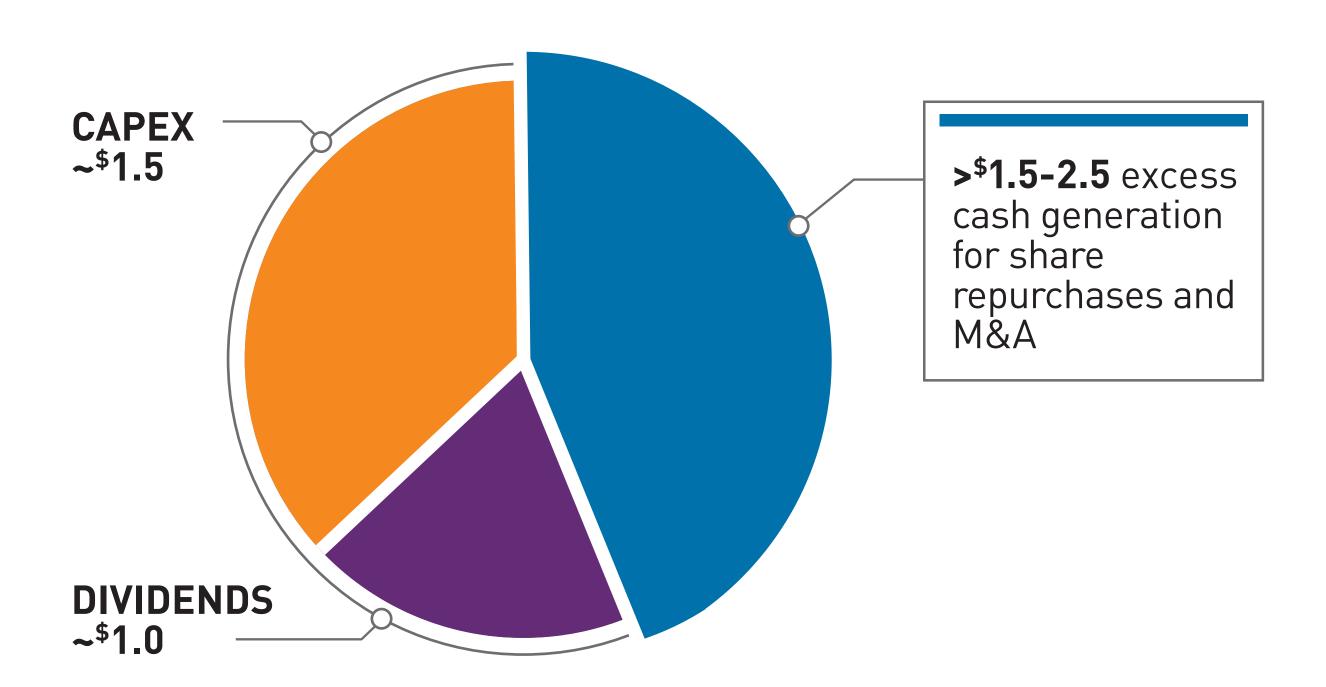
#### **Cumulative Operating Cash Flow**

(2021 - 2023)(in billions)



#### Uses of Operating Cash Flow

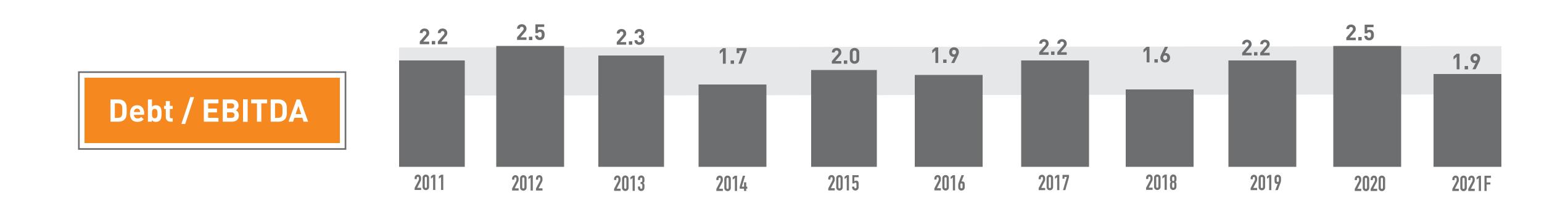
(2021 - 2023)(in billions)

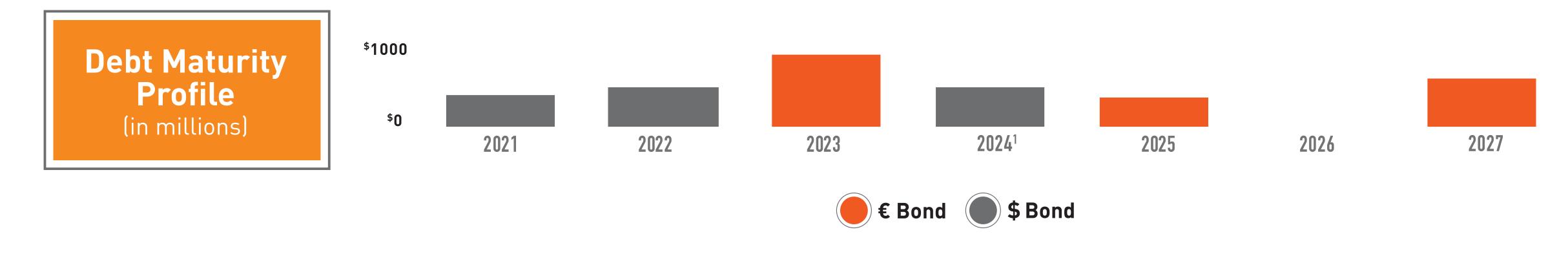


Excess cash generation between 2021 and 2023 for further deployment



## Flexible, diversified balance sheet enables growth strategy

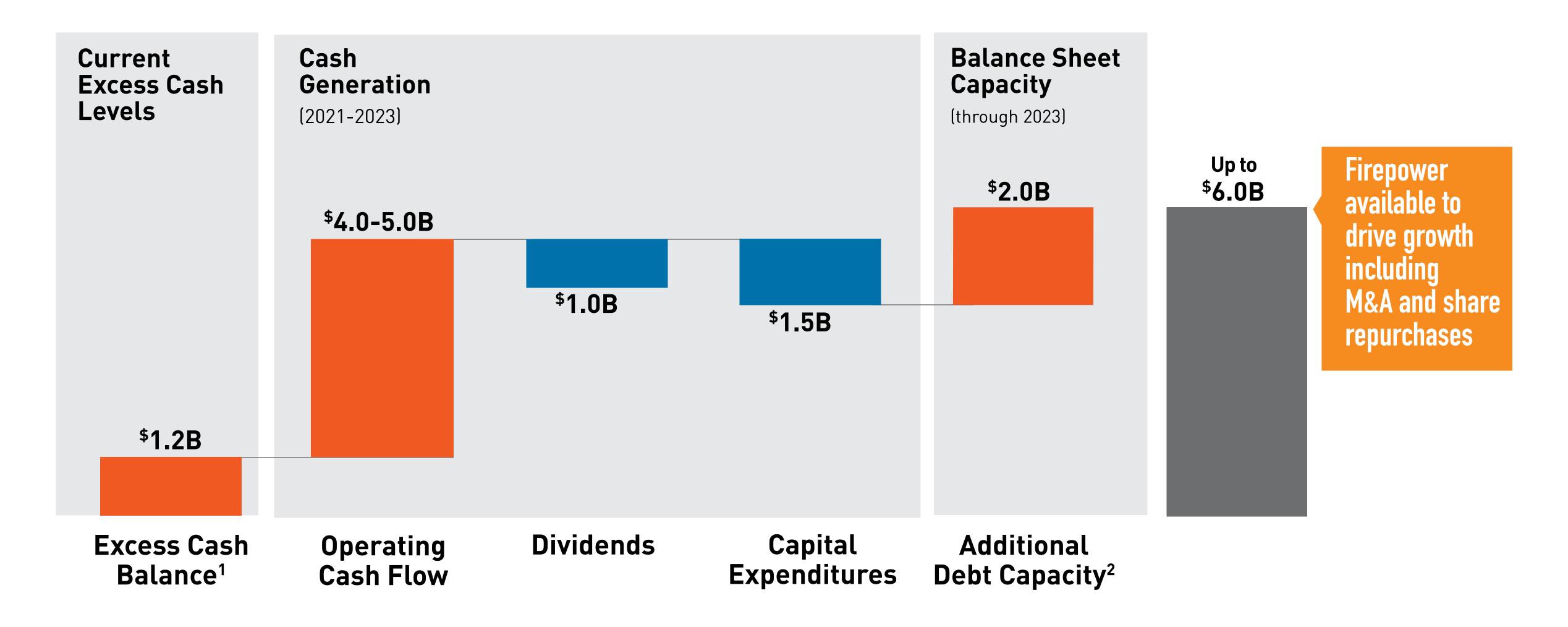




Ability to access multiple debt markets quickly and efficiently

## Additional firepower on the balance sheet



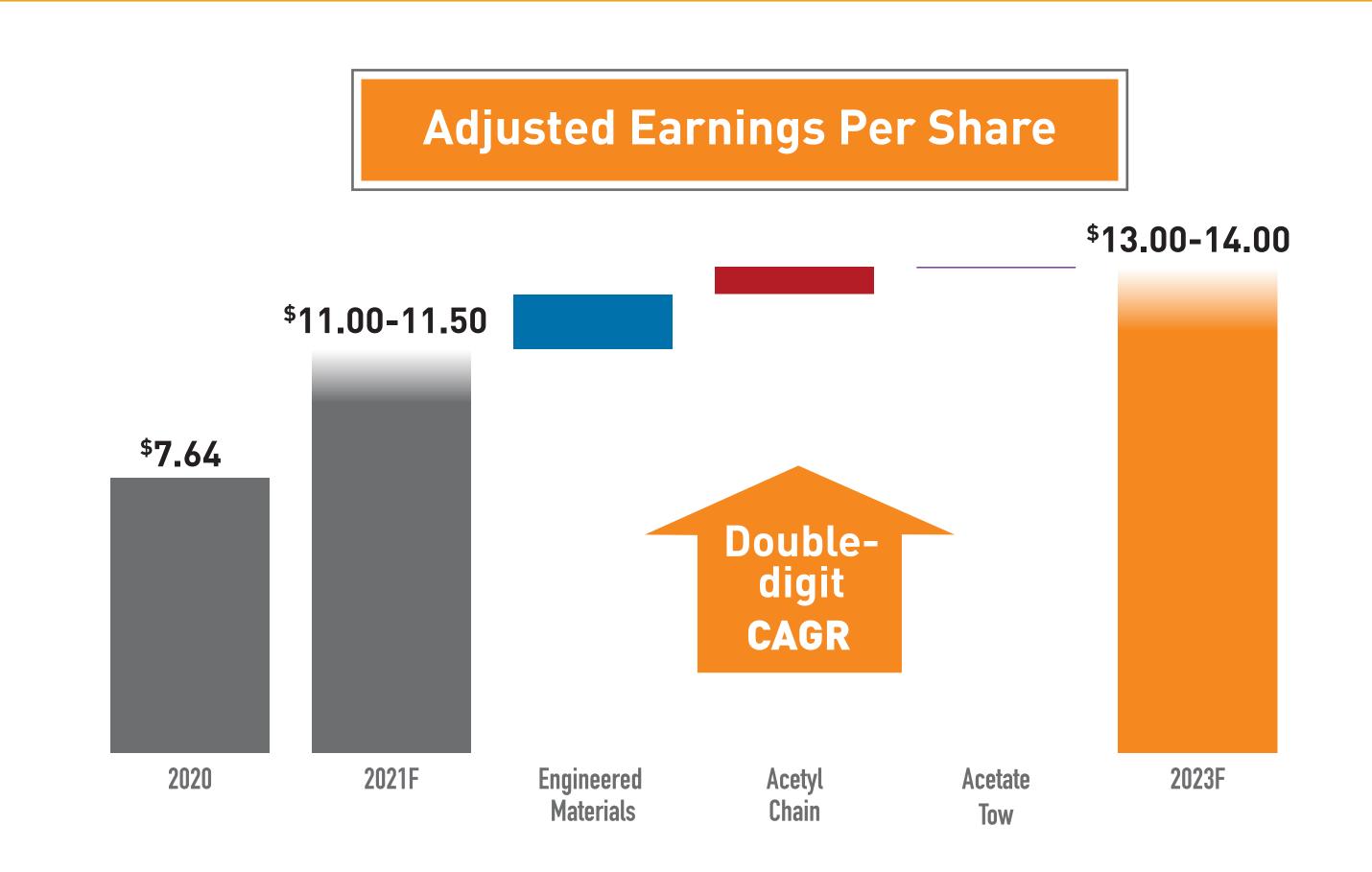


Up to \$6B available through 2023 for opportunistic deployment

## Sustaining double-digit growth in adjusted earnings per share...







...on business earnings growth, cash conversion and capital deployment strategy

### Glossary



For Celanese Non-GAAP measures, please refer to the Non-US GAAP Financial Measures and Supplemental Information documents under Financial Information/Non-GAAP Financial Measures on our investor relations website, investors.celanese.com

- Average Market Cap is the average of quarterly beginning and ending market caps during each measurement period. For instance, 2020 average market cap is the average of market caps of the beginning of Q1, and the ending of Q1, Q2, Q3, and Q4 of 2020.
- Dividend Yield is defined as Common Stock Cash Dividends Paid divided by Average Market Cap. (6)
- Free Cash Flow for proxy peers and DJUSCH index is defined as Cash Flow from Operations less Capital Expenditures; Free Cash Flow for Celanese is per Celanese non-GAAP disclosure.
- Free Cash Flow Yield is defined as Free Cash Flow divided by Average Market Cap. (4)
- **Debt to EBITDA Ratio** is defined as Total Debt divided by Operating EBITDA. (15)
- Proxy Peers include ALB, APD, ASH, AVNT, AXTA, CC, CF, ECL, EMN, FMC, HUN, IFF, LYB, PPG, RPM, SHW. (4, 12)
- Repurchase Yield is defined as Share Repurchases divided by Average Market Cap. (6)
- **ROIC** for proxy peers is defined as adjusted earnings<sup>1</sup> tax effected, divided by the average Invested Capital at the beginning and ending of each measurement period. ROIC = adjusted EBIT less adjusted income taxes<sup>2</sup>) / (average Total Debt + average Stockholders' Equity). (4, 12); ROIC for Celanese is per Celanese non-GAAP disclosure.
- Shareholder Yield is defined as the sum of Dividend Yield and Repurchase Yield. (4, 6)

# MULTIPLYING OUR MOMENTUM





### Keep in mind...



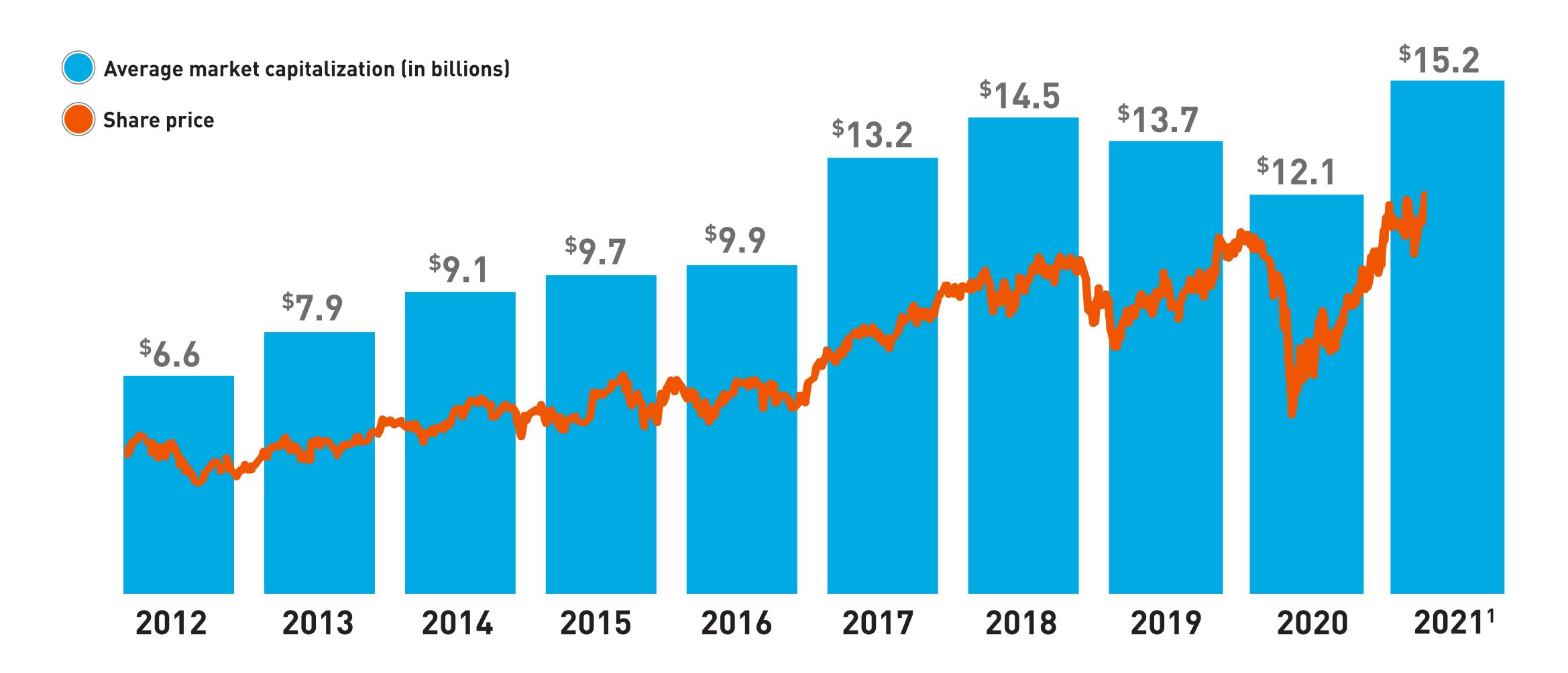
**OUR 2023 OUTLOOK IS BASED ON CONTROLLABLE ACTIONS** 

THERE ARE SIGNIFICANT VALUE OPPORTUNITIES BEYOND WHAT IS INCLUDED IN OUR 2023 OUTLOOK

WE ARE TAKING ACTIONS TODAY TO DELIVER INCREMENTAL GROWTH BEYOND 2023

## History of sustained growth...





...driven by controllable actions

## Additional growth opportunities





Broad replacement of single-use plastics with sustainable alternatives



Material acetyls curtailment or rationalization activity in China



Acceleration of US, EU, or China infrastructure development



Tow industry rationalization or consolidation



Accelerated global transition to electric and hybrid vehicles



Actionability of industry M&A, particularly transformational

Uniquely positioned to drive these opportunities for further earnings growth

## Real value generated from our business portfolio



#### **Diversification**



End market diversification



#1 Auto

#2 Electrical & Electronics

#3 Industrial





#1 Coatings

#2 Adhesives

#3 Packaging





#1 Filtration

#### **Cost Efficiency**



~\$50M ann





Shared primary raw materials



Shared corporate functions



Cross-business product flows

#### Natural Hedges



Business cycles



Currency



Oil volatility



Raw material swings

#### **Capital Allocation**



Complementary cash generation



Complementary capital needs



Any portfolio change must be part of an opportunity for greater value



## Disciplined M&A pipeline criteria





### Industry

- Industry leadership
- Competitive cost position
- Upstream or downstream value creation



#### Financial

- High synergy opportunities
- Opportunity to unlock growth
- Double-digit IRR



#### Commercial

- High customer intimacy
- Aligns well with commercial model
- Complementary (region, end market)
- Differentiated offering (products, capabilities, services)



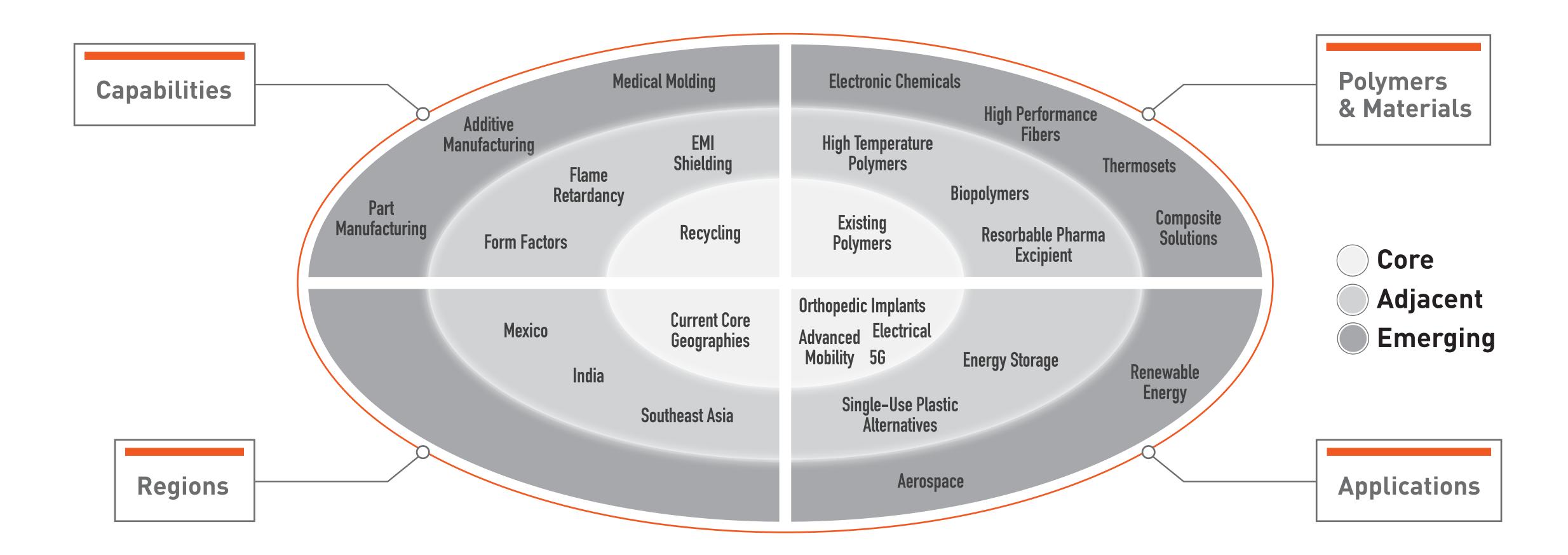
#### **Technical**

- Differentiated technology & strong IP
- Application know-how
- Formulation expertise

Consistently applying criteria to evaluate pipeline of high-return M&A opportunities

## Broad M&A opportunity set in Engineered Materials



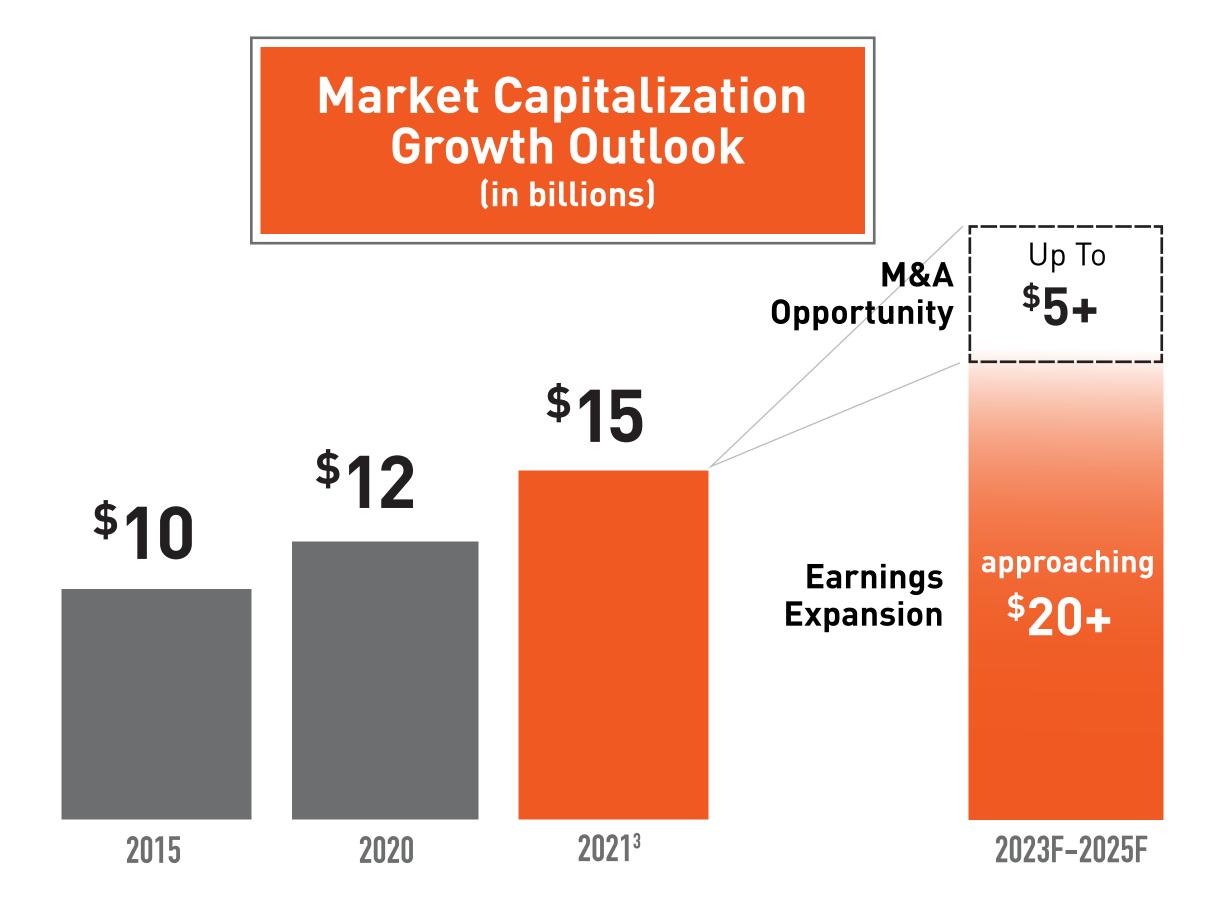


Synergistic opportunities that leverage our commercial model, capabilities and product portfolio

## Significant upside with M&A



- Outlook assumes 100% of excess cash generation goes to share repurchases and bolt-on M&A
- Potential for \$2-3B value creation<sup>2</sup> from synergies from larger M&A
- Additional value opportunity through rerating from demonstrated track record and portfolio



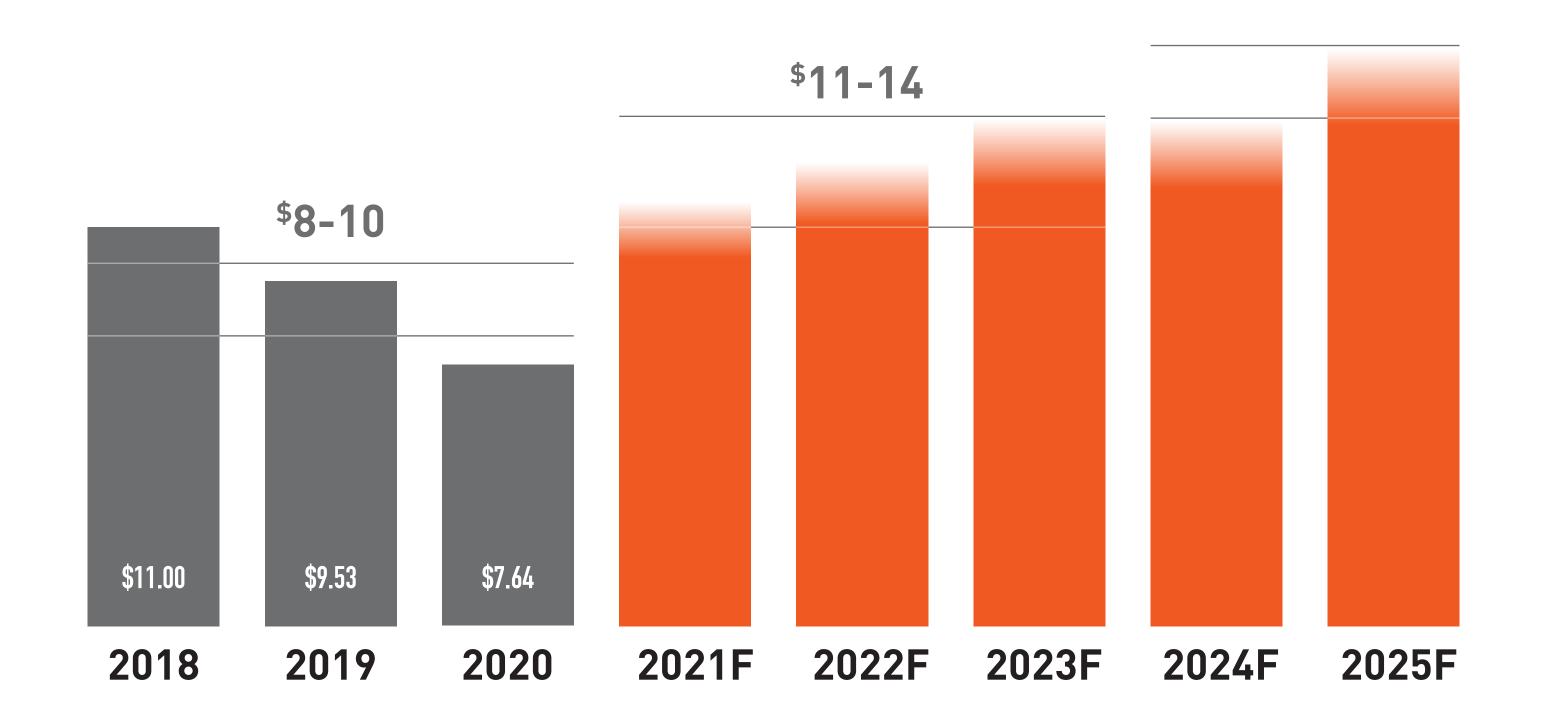
Committed to delivering outsized value creation through strong execution and M&A



## Extending our strategic investment horizon



#### **Adjusted Earnings Per Share**



## **Contributors Beyond 2023**

(startup within 2023 or after)

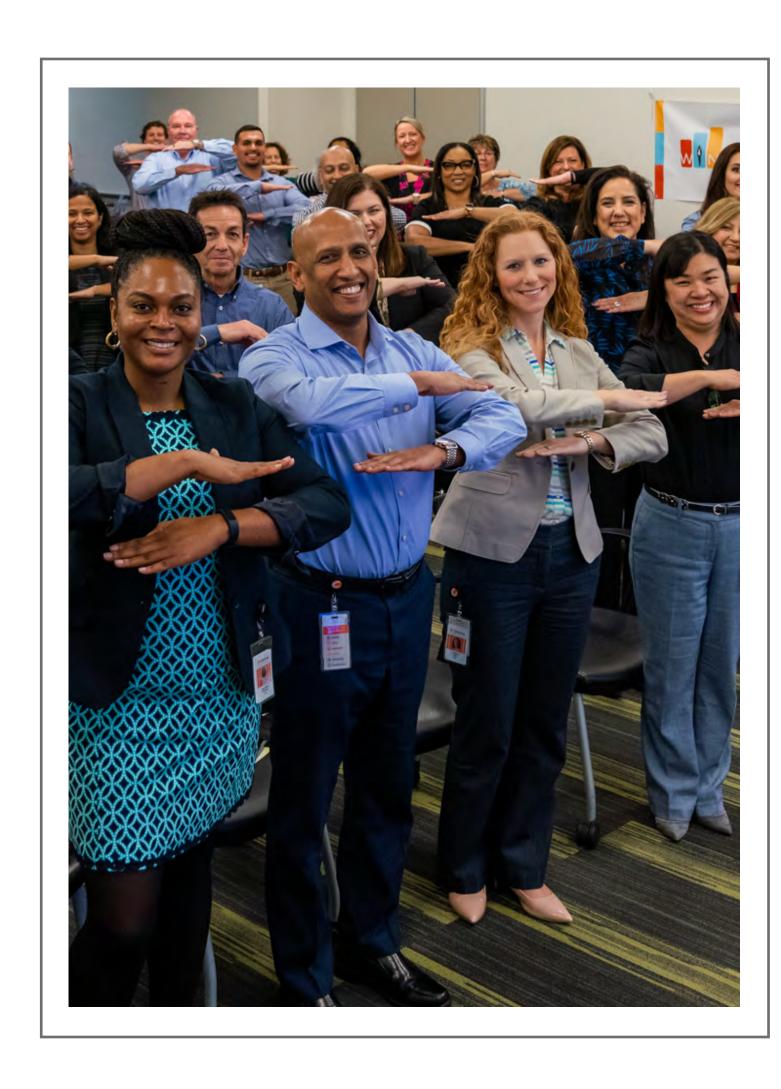
Acetyl Chain	Startup
Clear Lake acetic acid expansion	2023
Methanol from CO <sub>2</sub>	2023
Nanjing VAM expansion	2023
Frankfurt emulsions expansion	2023
Nanjing emulsions expansion	2023
Engineered Materials	
Nanjing compounding expansion	2023
LCP China capacity	2024
EU GUR expansion	2024

Controllable actions today to deliver value beyond 2023



### How we deliver shareholder value...





### Multiplying Our Momentum

- Deliver shareholder value on what we can control
- Partner with our customers to deliver innovative solutions
- Expand and flex our commercial optionality
- Allocate our capital with a disciplined focus on returns
- Foster a culture of diversity, equity and inclusion
- 6 Deliver a growing portfolio of sustainable products























## Acetate Tow

Appendix

MULTIPLYING OUR MOMENTUM

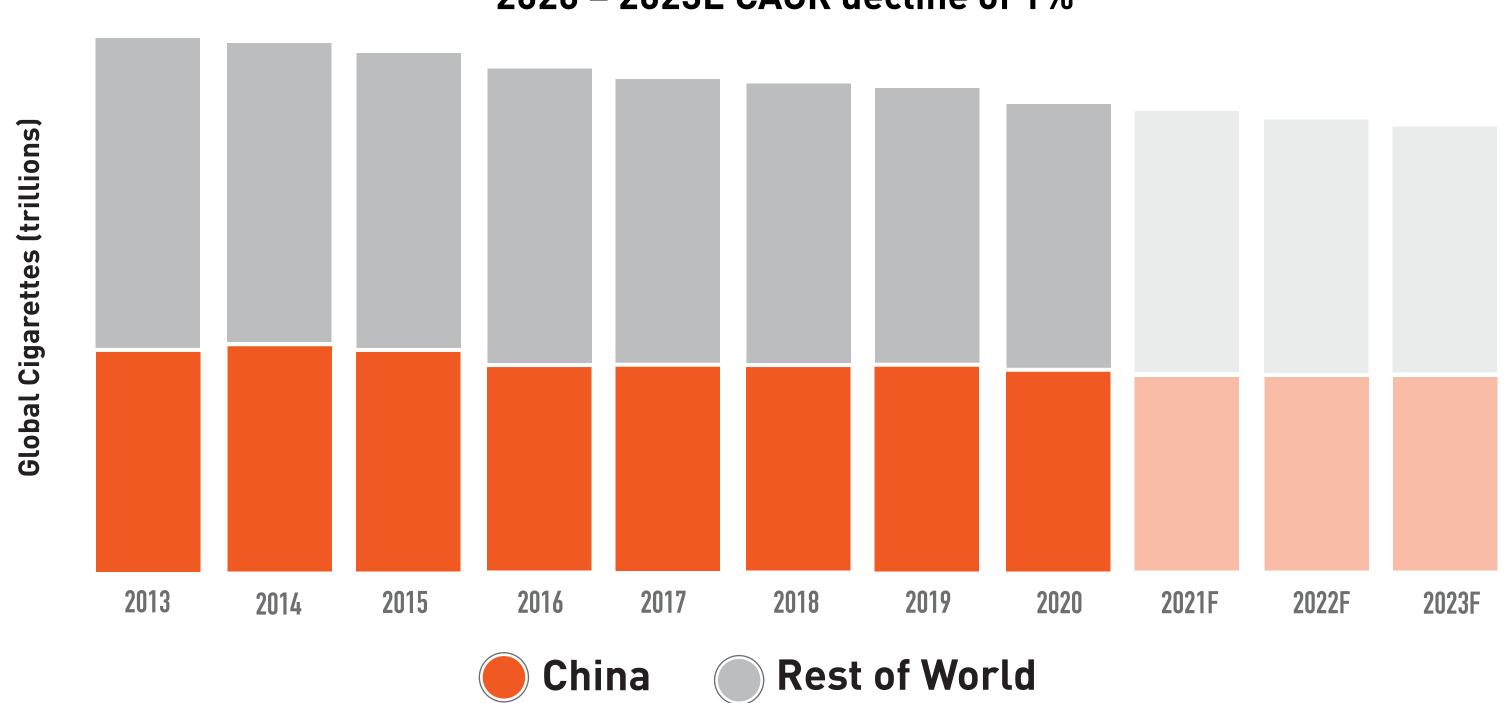
#### Predictable and stable market outlook



- Gradual, secular decline in tow demand
- Limited impact on tow demand from COVID-19 pandemic
- Stable inventory and regional trade dynamics







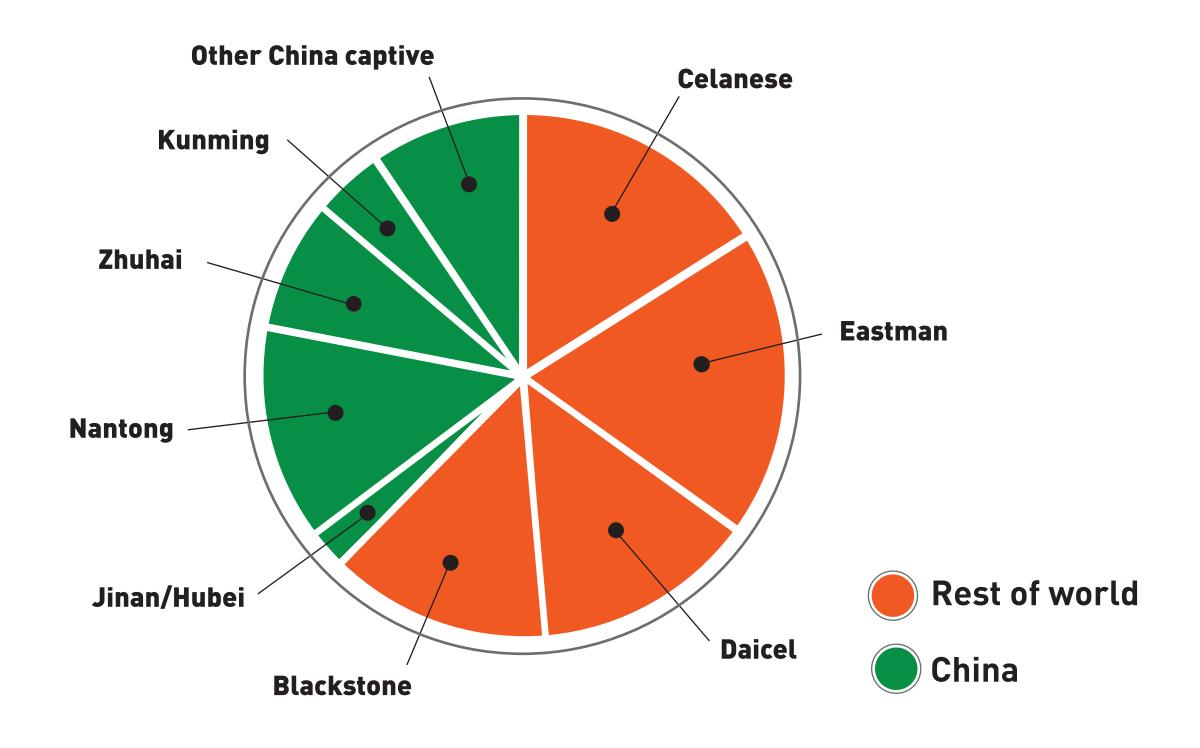
Manageable future demand deterioration



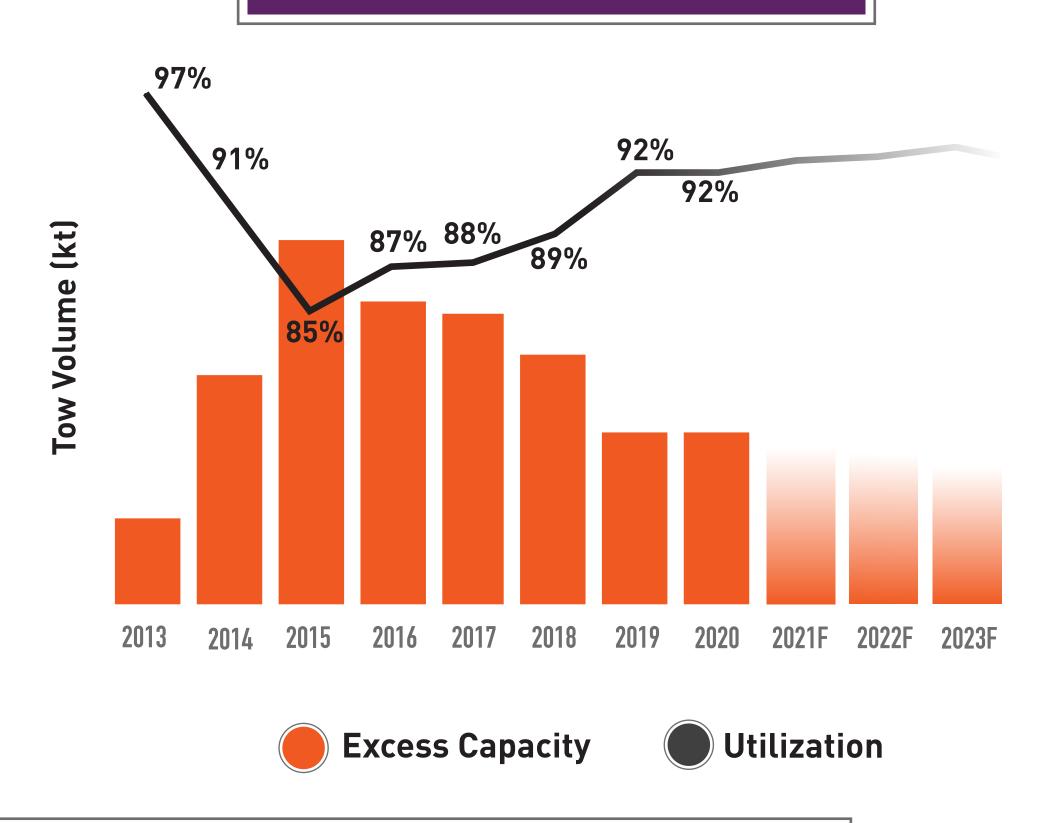
## Stabilizing industry dynamics



Estimated Global Tow Capacity (~800 kt)



#### **Global Tow Utilization**



Utilization could improve further as producers continue to address cost positions



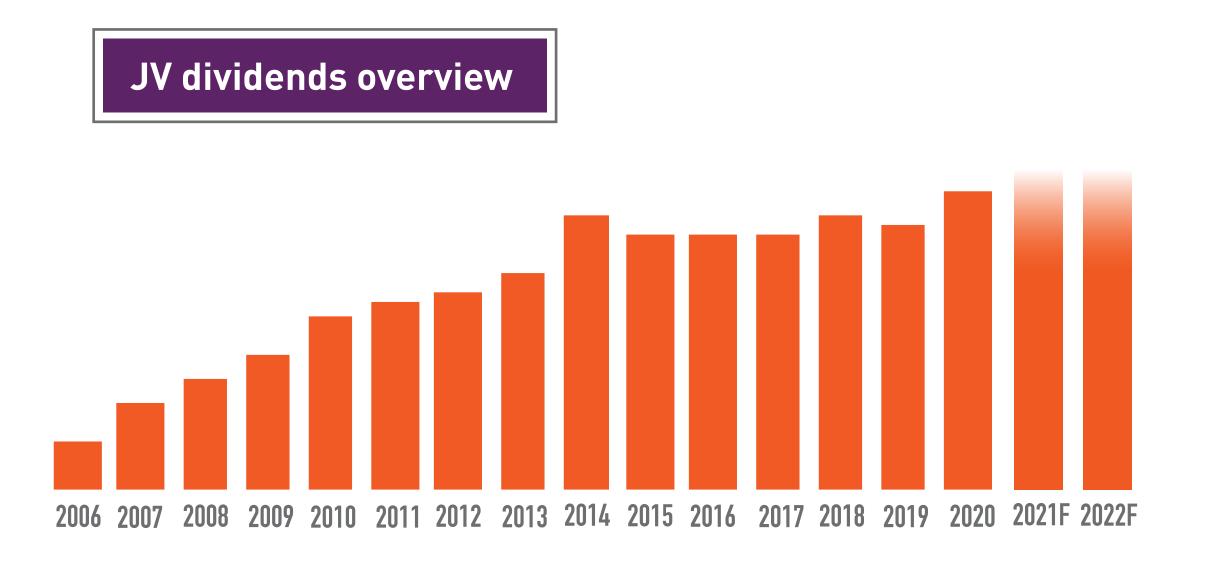
### **Growing China dividends**



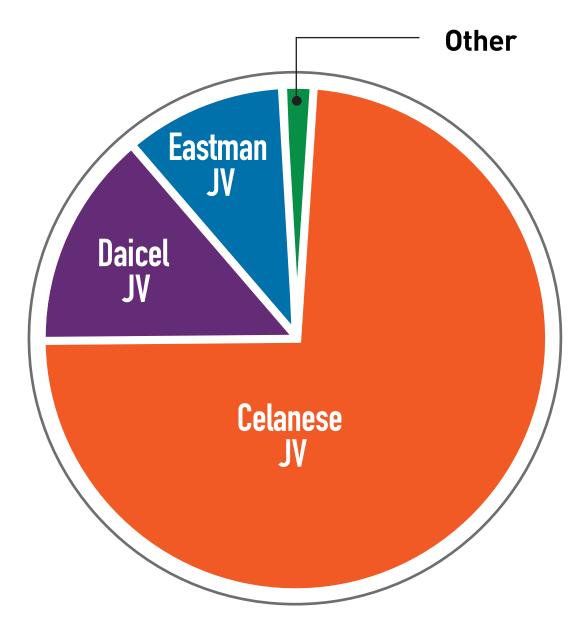
#### Dividend growth drivers

- Flake expansion and potential future incremental expansions
- Cost reductions in raw materials such as pulp and acid

- Efficiency improvements at our China JVs
- Increased tow sales in China
- Development of new flake end uses



**Share of China capacity** 



Largest China position with >70% of capacity



## Maintaining high level of productivity



## **Productivity Initiatives**

2015 Pulp sourcing optionality

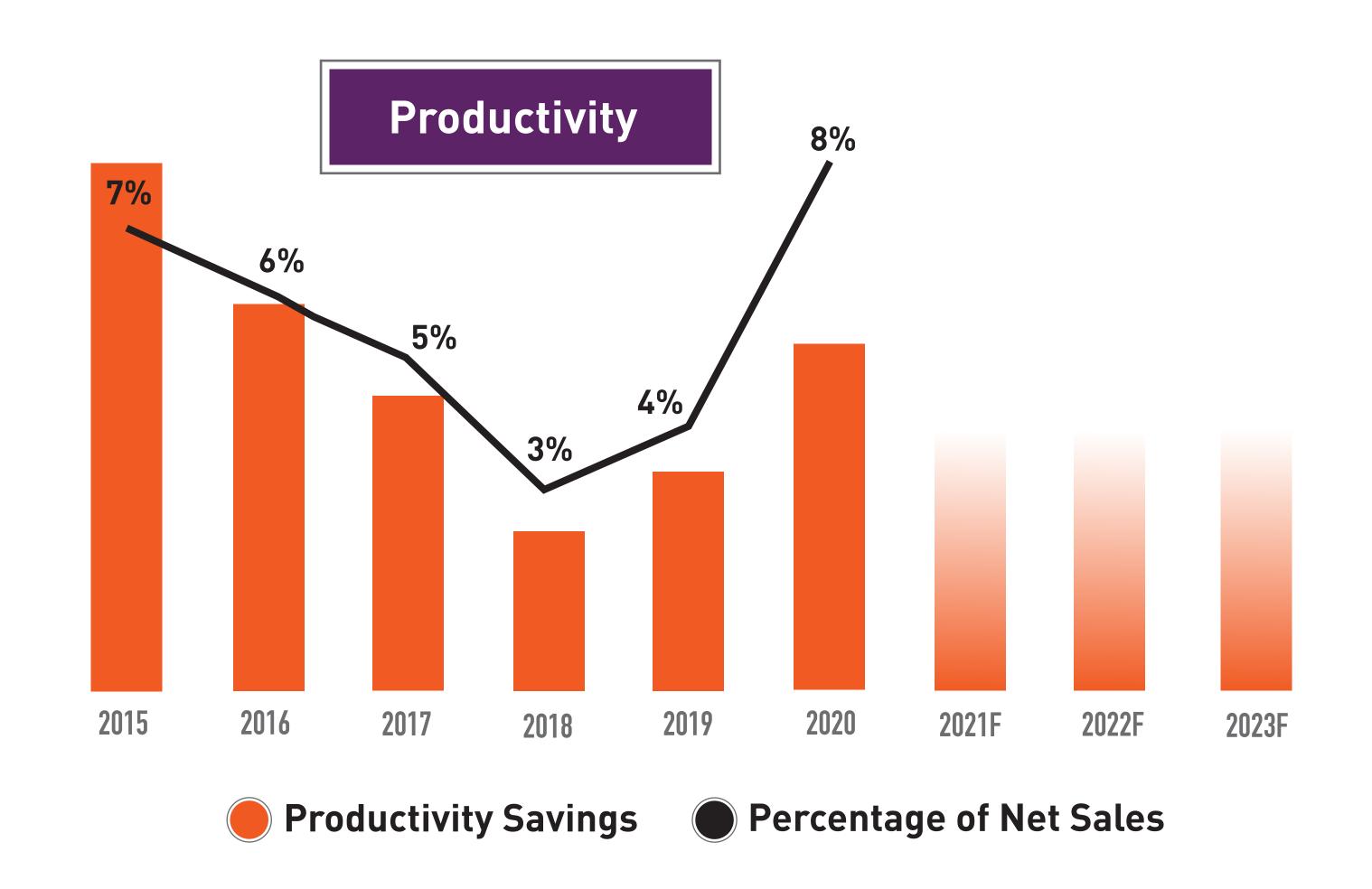
2016 Capacity reduction at Lanaken

2019-2020 Ocotlán closure

2020 Combined heat power plant at Lanaken

#### 2021-2023

- Energy reduction
- Manufacturing improvements
- Raw material optimization
- Digitalization



Proven productivity track record that more than offset inflation in last five years

### Driving value by capturing market opportunities



#### Product Growth Opportunities

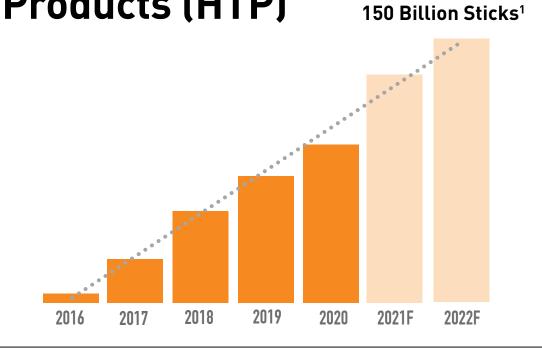
#### **OPPORTUNITY:**

Growth in alternatives to traditional cigarettes

#### **CE RESPONSE:**

Capturing market share in Heated-Tobacco Products (HTP)

150 Billion



## Regional Growth Opportunities

#### **OPPORTUNITY:**

Shift in regional demand

#### **CE RESPONSE:**

Leading position in China and in growing markets such as Indonesia and the Middle East



## **Sustainability Opportunities**

#### **OPPORTUNITY:**

Demand for sustainable products

#### **CE RESPONSE:**

Designing enhanced, eco-friendly products such as low-carbon tow



Pockets of opportunity to help offset declining tow demand

