



SOLVAY

asking more from chemistry®

**MORE
FUTURE**

**Rencontre avec
les Actionnaires Familiaux**

13 Octobre 2016
Maison Ernest Solvay



SOLVAY

asking more from chemistry®

MORE FUTURE

Jean-Pierre Clamadieu

Président du Comité Exécutif & CEO

NOTRE VISION

CRÉER UN AVENIR A *PLUS* FORT POTENTIEL



Construire
un nouveau modèle de
chimie durable répondant
aux grands enjeux
sociétaux

Créer une croissance à
long terme pour nos
parties prenantes



UN ENVIRONNEMENT EN ÉVOLUTION RENDANT L'ADAPTATION NÉCESSAIRE

- Marchés émergents en transition vers un nouveau modèle économique
- Faible croissance mondiale sur une période prolongée
- Fin du super-cycle des matières premières
- Forte volatilité: matières premières, devises, marchés financiers



Consolidation
du secteur de
la chimie



Ré-allocation
des
ressources

Croissance
stimulée par les
méga-trends

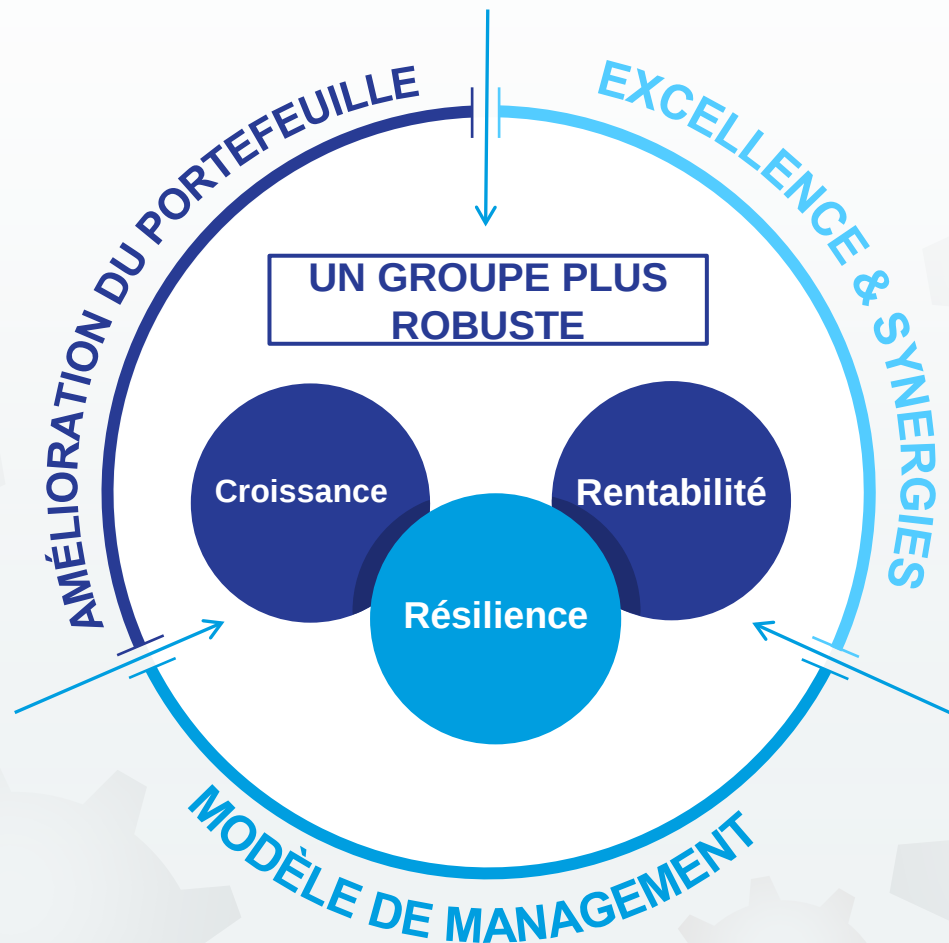
- *Raréfaction des ressources et attentes accrues en matière de durabilité*
- *Evolution de la démographie et des modes de consommation*
- *Accélération de l'innovation*



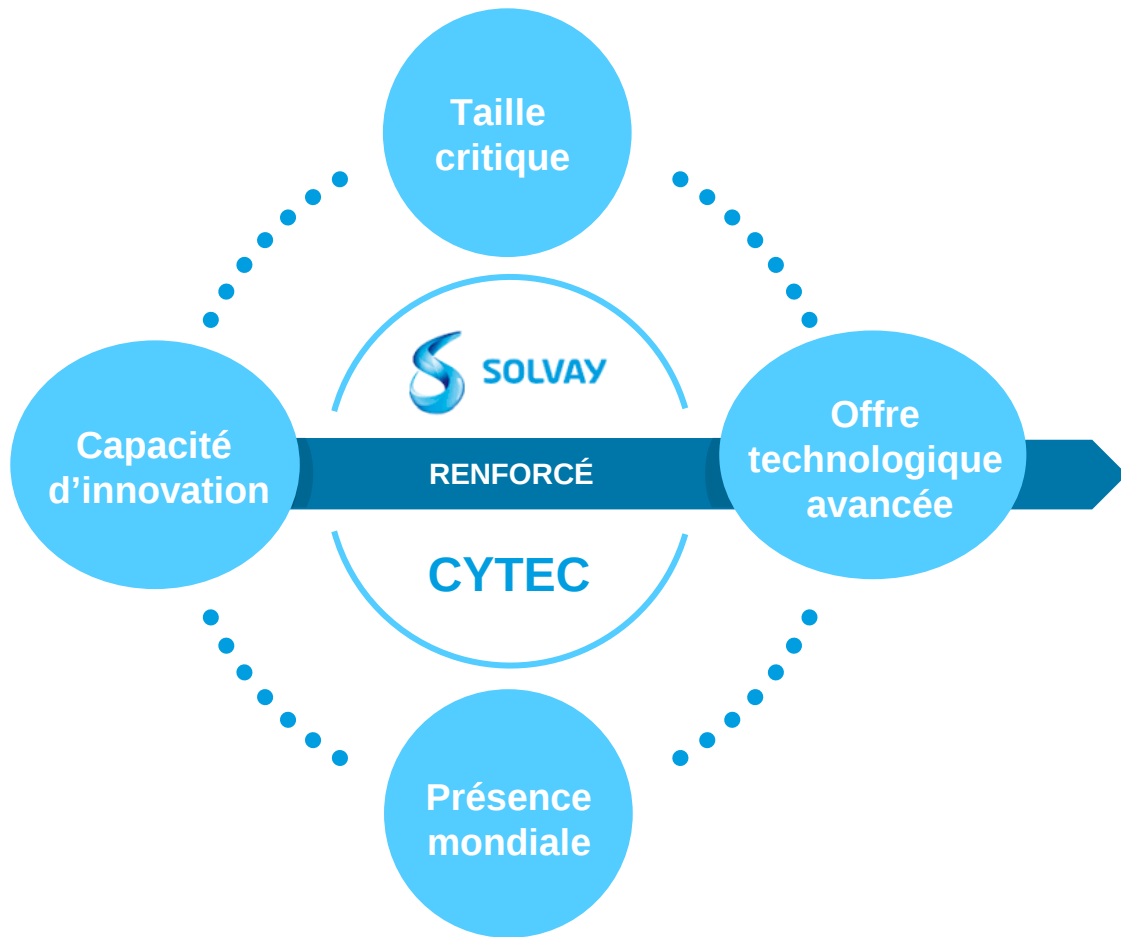
Clés du succès: **innovation, agilité, efficacité**

DÉPLOIEMENT DE NOTRE STRATÉGIE

UNE TRANSFORMATION EN PROFONDEUR



NOUS OFFRONS DES SOLUTIONS ADAPTÉES AUX DÉFIS DE NOS CLIENTS



Solutions
sur-mesure pour nos clients

PLUS de valeur

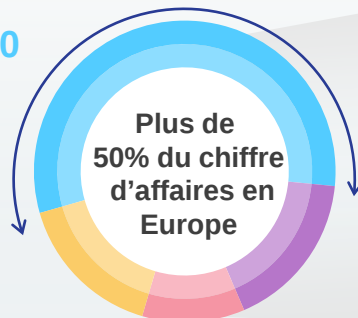


**PARTENARIATS
STRATÉGIQUES**

NOUS SOMMES UN GROUPE PLUS GLOBAL

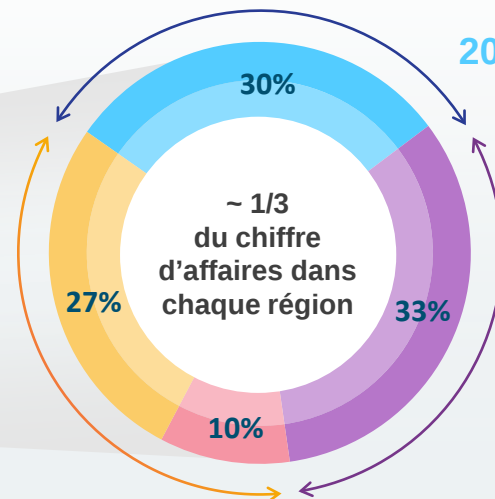
- Europe
- Asie et reste du monde
- Amérique latine
- Amérique du nord

2010



PROFIL RÉGIONAL ÉQUILIBRÉ

2015*



Automobile & aéronautique



Biens de consommation & santé



Ressources & environnement



Bâtiment & construction



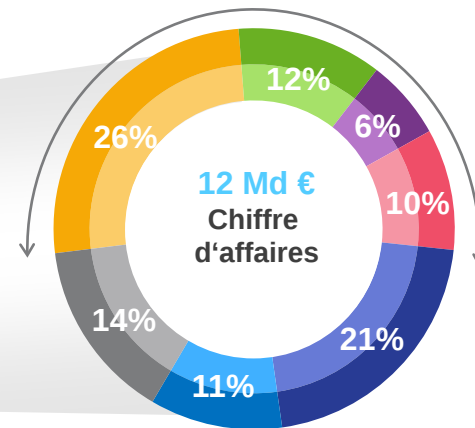
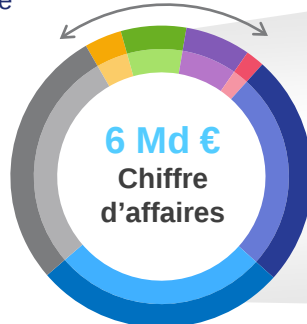
Electrique & électronique



Applications industrielles



Agro, alimentation animale & agriculture



DIVERSIFICATION DES MARCHÉS

(*) Pro forma, comme si Cytec étant consolidé en 2015

UN GROUPE APPORTANT *PLUS* DE VALEUR AJOUTÉE

2010

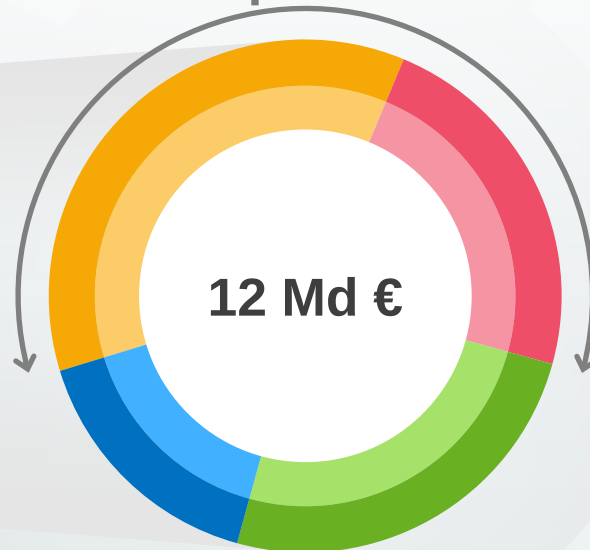
~1/3
de spécialités



Chiffre d'affaires
pro forma

~ 2/3
de spécialités

2015*



- Advanced Materials
- Performance Chemicals
- Advanced Formulations
- Functional Polymers

(*) Pro forma, comme si Cytec étant consolidé en 2015

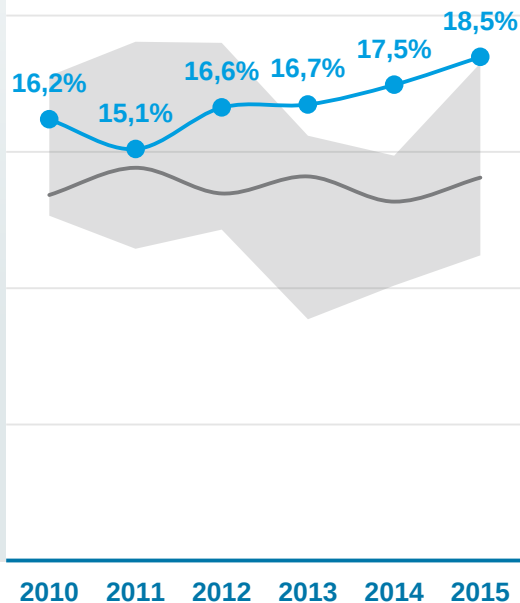


PLUS de croissance, rentabilité & résilience

UNE PERFORMANCE EN AMÉLIORATION PAR RAPPORT À NOS PAIRS

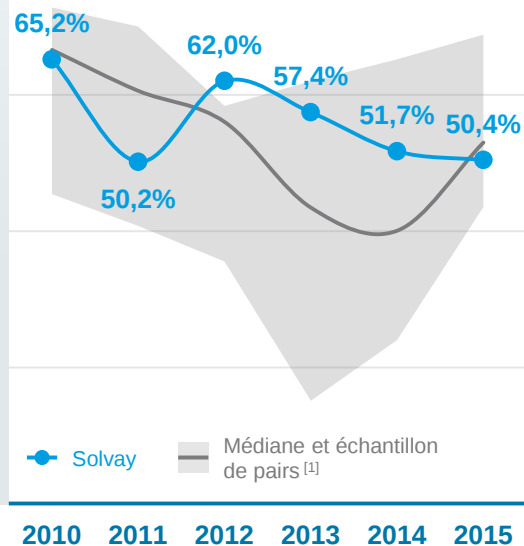
PROFIT

Marge d'EBITDA



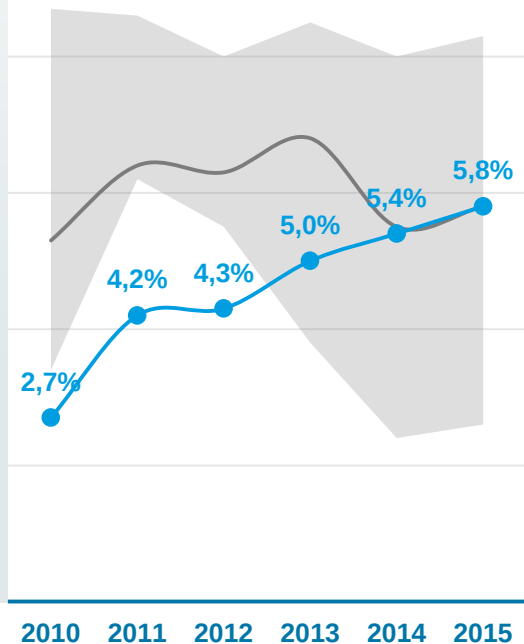
CASH

Cash conversion



RENTABILITÉ

HOLT CFROI^[2]



[1] Akzo Nobel, Arkema, BASF, Clariant, DSM, Evonik, Lanxess (indicateurs extraits de leurs reportings)

[2] Le modèle HOLT du Credit Suisse a été utilisé pour le calcul de notre CFROI. Il est basé sur le taux de rendement interne qui tient compte i) de la trésorerie générée par le Groupe dans le passé et de manière prospective, ii) du montant et de la durée de vie estimée de ses actifs d'exploitation. L'indicateur ne tient pas compte du goodwill et est exprimé en termes réels (càd. un rendement réel et pas nominal).

NOTRE OBJECTIF EST DE CRÉER PLUS DE VALEUR DURABLE POUR NOS PARTIES PRENANTES

3 années
2016 - 2018

3 années
2016 - 2018

PLANÈTE

Intensité des
émissions de GES
en kg de CO₂ eq. par euro d'EBITDA

Réduction de
20%

Solutions durables
% du chiffre d'affaires

33% → 40%

PROFIT

Croissance de
l'EBITDA

**Mid-to-high
single digit**
% annuel

EMPLOYÉS

Accidents du travail
Acc. par million d'heures travaillées

Réduction de
10%

Indice d'engagement
du personnel

Maintien à
75%

CASH

Free cash flow

> 2,4 Md €
cumulé

Cash conversion

> 60%
chaque année

SOCIÉTÉ

Actions sociétales
% d'employés engagés

20% → 25%

RENTABILITÉ

CFROI

50-100 pb
augmentation

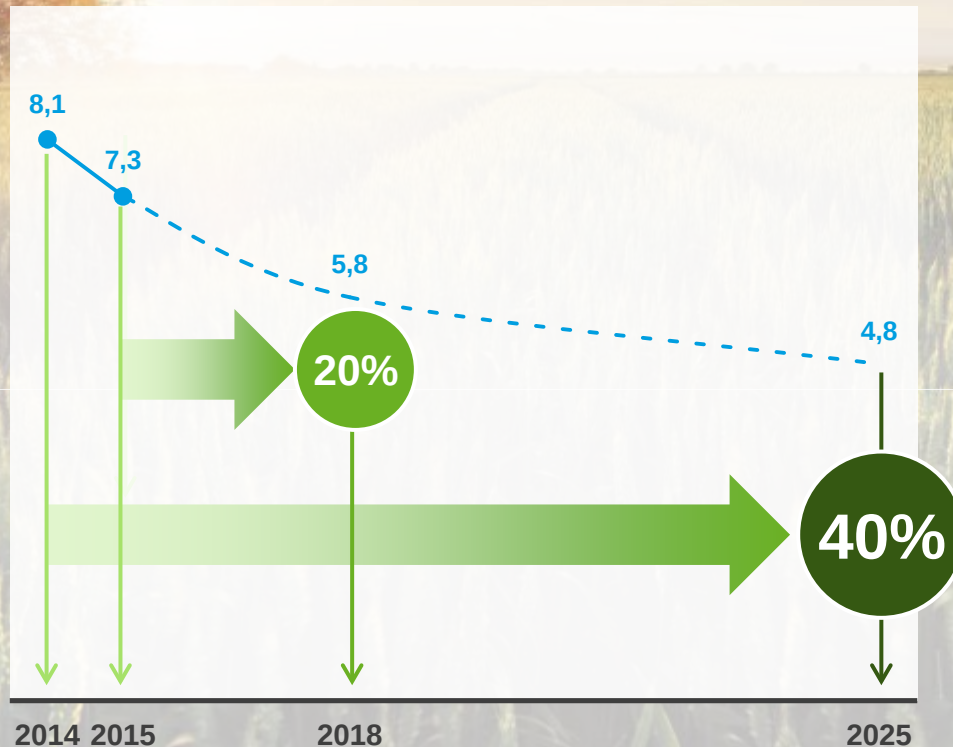
A périmètres et taux de change constants

NOUS DIMINUONS NOS ÉMISSIONS DE GAZ À EFFET DE SERRE

POUR RÉDUIRE NOTRE IMPACT ENVIRONNEMENTAL

INTENSITÉ GES

(en kg CO₂ eq. / euro d'EBITDA)



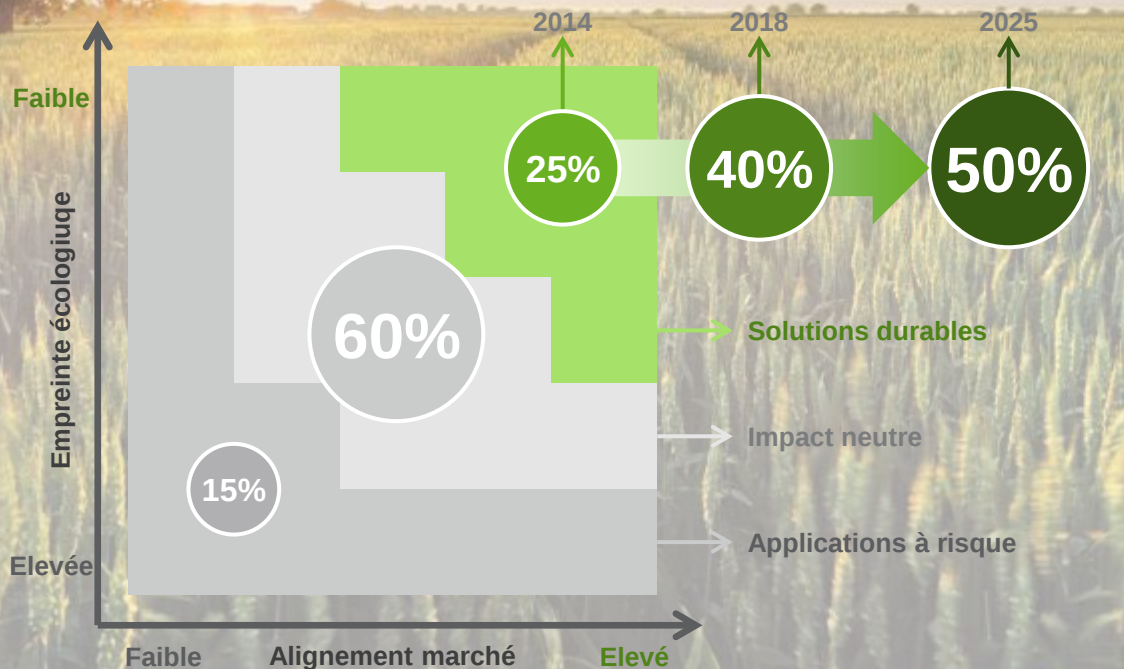
LEVIERS D'ACTION

- **Portefeuille**
- **Programme SolWatt**
 - Efficacité énergétique
 - Mix énergétique
- **Projets d'investissement**
 - Prix interne du carbone 25 € / tonne CO₂

NOUS ENRICHISSEONS NOTRE PORTEFEUILLE AVEC DES SOLUTIONS PLUS DURABLES

SUSTAINABLE PORTFOLIO MANAGEMENT

(en % du chiffre d'affaires)

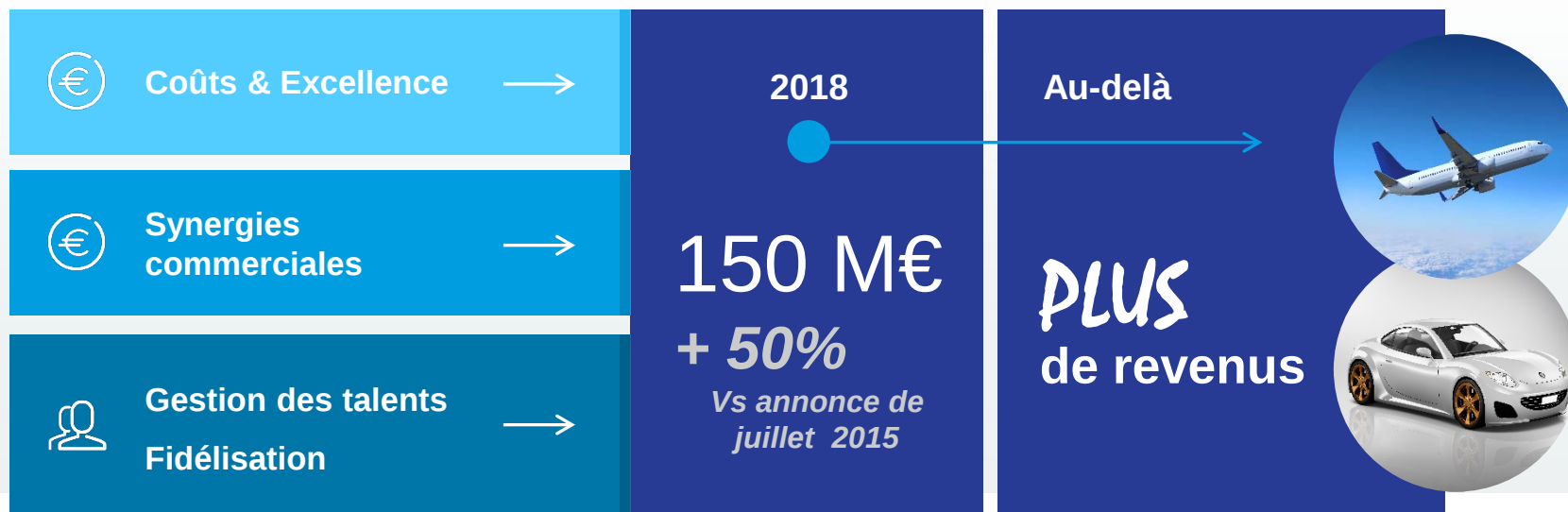


LEVIERS D'ACTION

- Portefeuille
- Dépenses d'investissement
- Priorités R&I

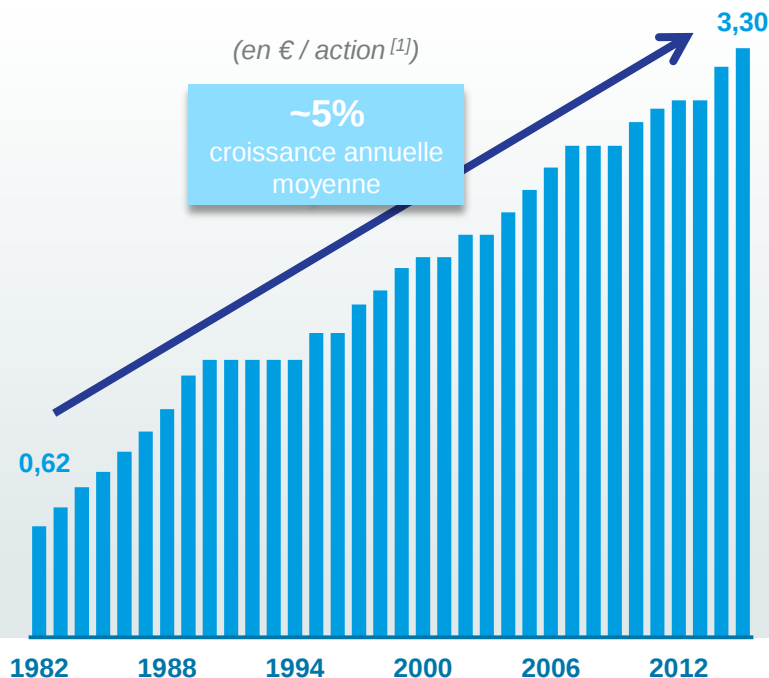
SYNERGIES LIÉES À L'INTÉGRATION DE CYTEC

PLUS IMPORTANTES & PLUS RAPIDES



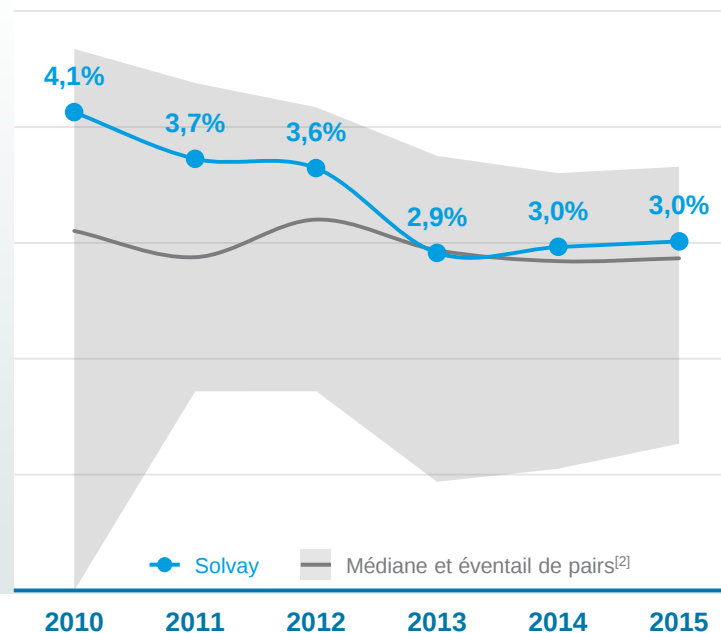
L'acquisition contribue à la génération de cash dès 2016 après prise en compte des coûts de financement

NOTRE ENGAGEMENT POUR UNE POLITIQUE DE DIVIDENDE STABLE OU EN CROISSANCE



**CROISSANCE DU DIVIDENDE
pour nos actionnaires**

[1] ajusté suite à l'augmentation de capital en 2015



**RENDEMENT
aligné sur celui de nos pairs**

[2] Akzo Nobel, Arkema, BASF, Clariant, DSM, Evonik, Lanxess

RÉSULTATS DU PREMIER SEMESTRE 2016



Chiffre d'affaires

5,8 M€

- 6%
vs. S1 2015

EBITDA*

1,2 M€

21% de marge

+5%

vs. 2015

Résultat net*

416 M€

**Vs. 418 M€
au S1 2015**

Free Cash Flow

183 M€

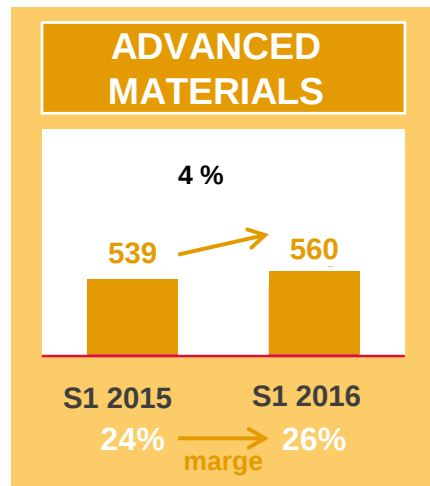
**Vs. – 166 M€
S1 2015**

*sous-jacent

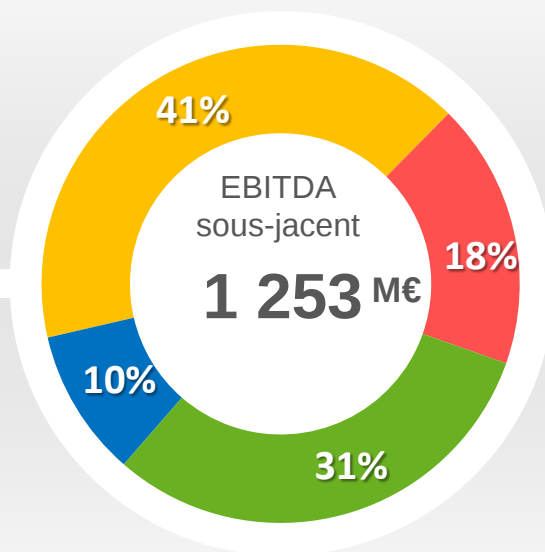
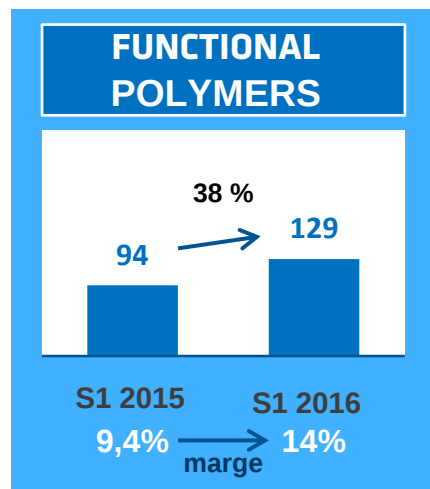
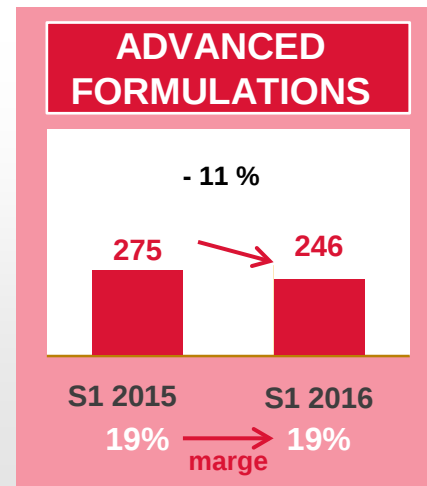
EBITDA EN CROISSANCE

DANS 3 DE NOS SEGMENTS OPÉRATIONNELS

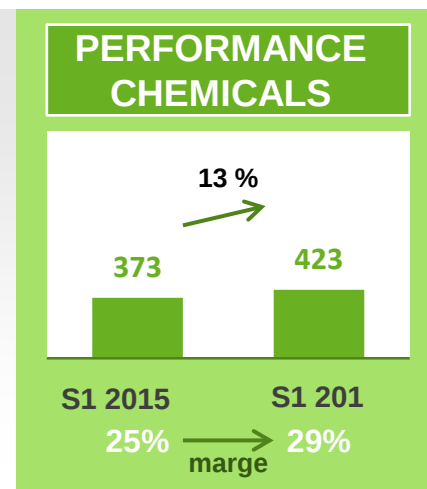
en M €



Volume en croissance dans trois des segments compensant le recul d'Advanced Formulations



Niveau de marge EBITDA record





SOLVAY

asking more from chemistry®

COMPOSITE MATERIALS

MORE SUSTAINABLE MOBILITY

Bill Wood

President,
Composite Materials

Carmelo Lo Faro

Head of Industrial Business Line,
Strategy & Business Development,
Composite Materials

James Pigford

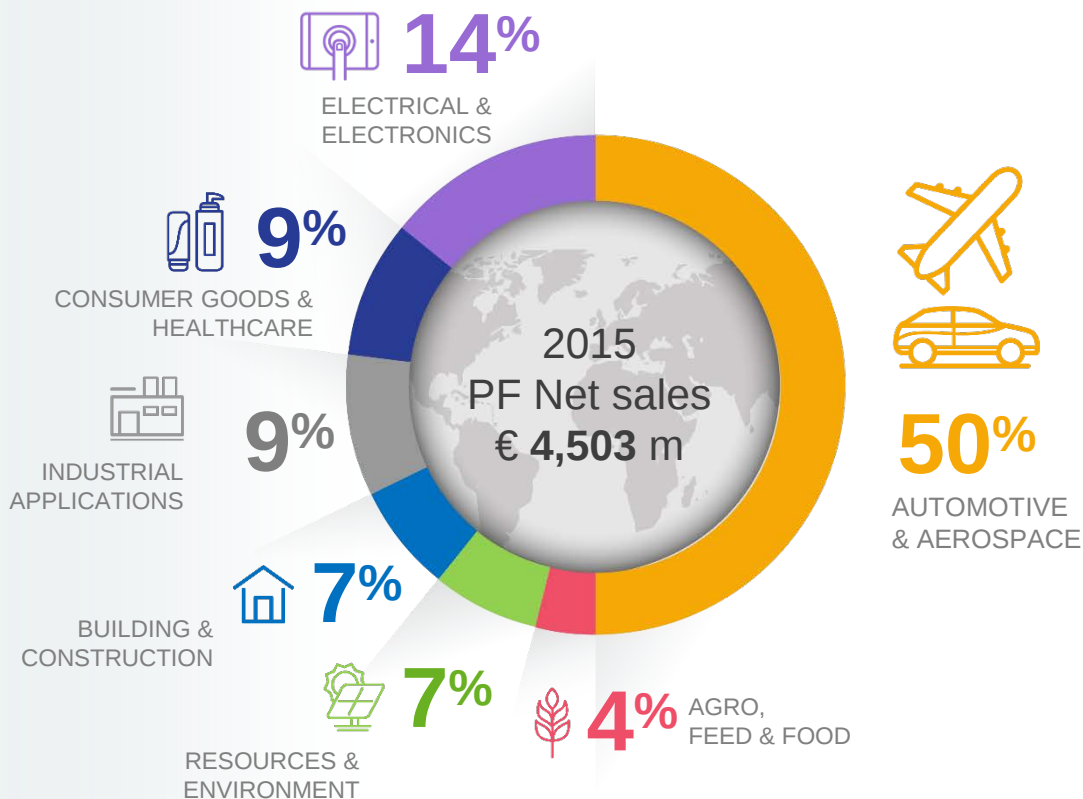
Head of Aerospace
Business Line,
Composite Materials

SUSTAINABLE MOBILITY A GLOBAL LEADER

Technology
leadership →

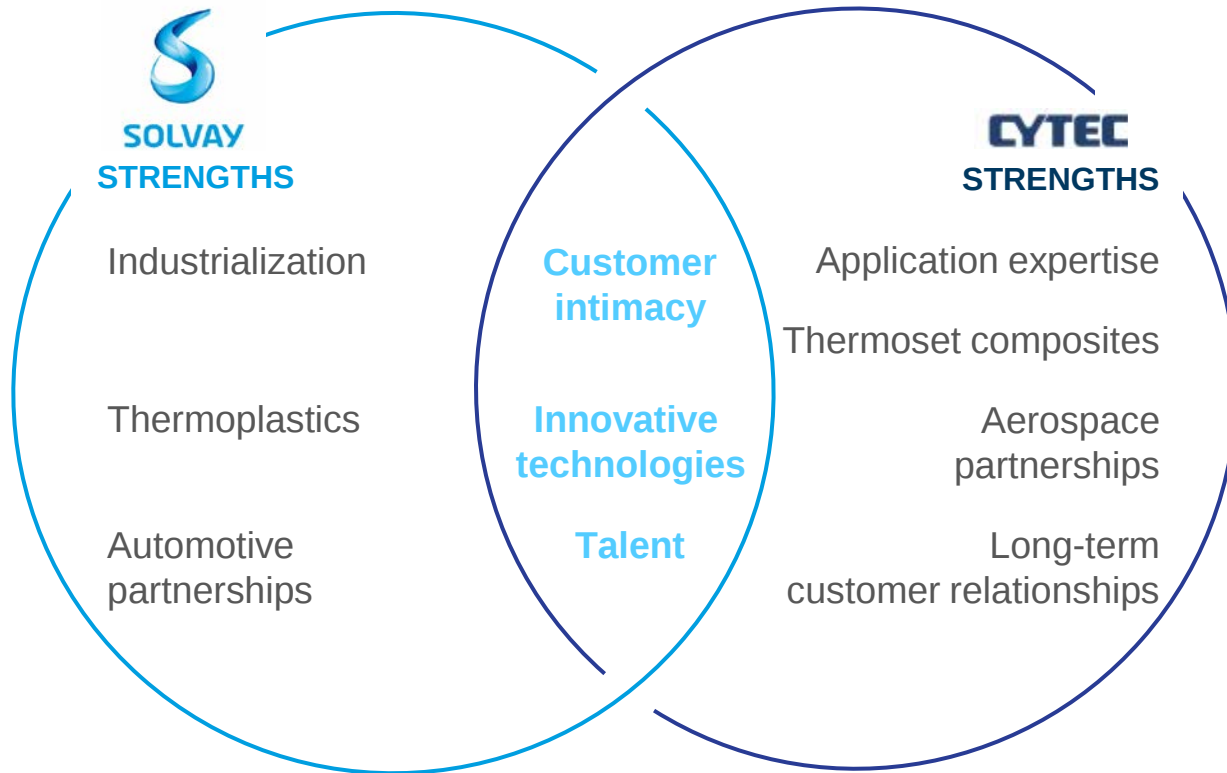
Strong customer
partnerships →

Application
expertise →



Developing innovative solutions
to create sustainable value for our customers

LEAD ACTOR WITH UNMATCHED MATERIALS TECHNOLOGY & INTEGRATION KNOW-HOW



Positioned to contribute more value for customers

COMPOSITE MATERIALS

“AT A GLANCE”

COMPOSITE MATERIALS



€ 1.2 bn
Net sales 2015

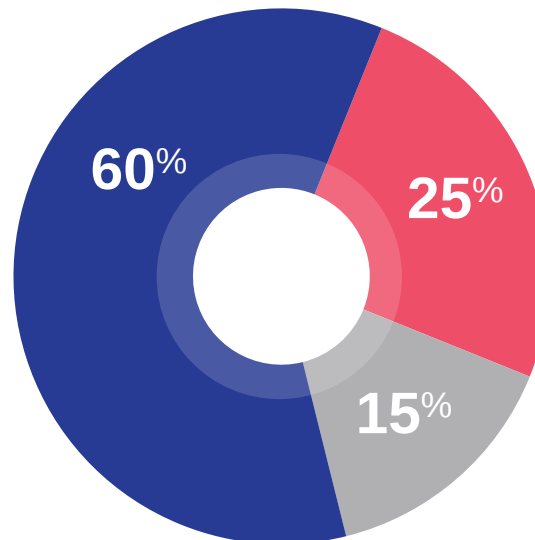


~ 3,000
Headcount



19
Industrial sites

Civil aircraft
Large commercial transport
Business jets
Regional jets
Rotorcraft



Military and space

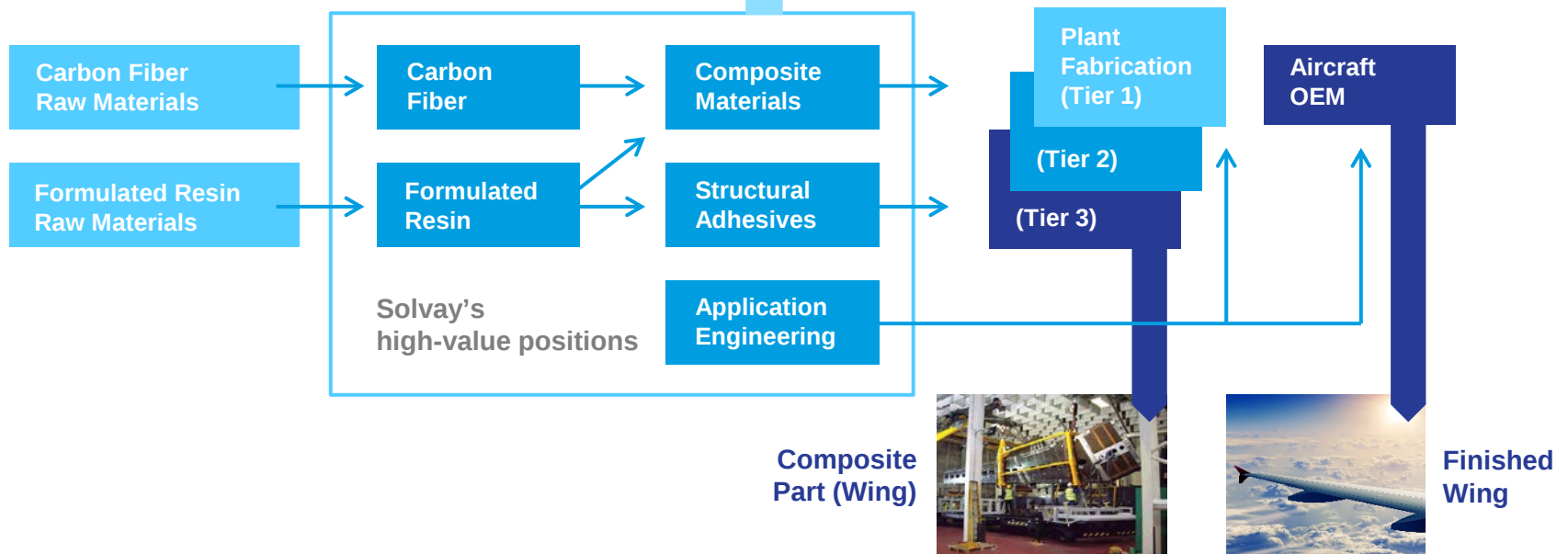
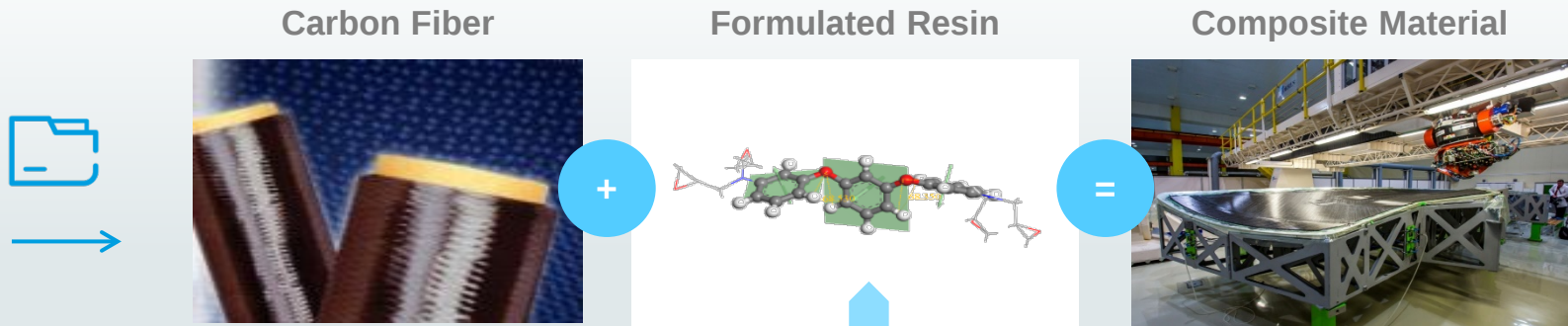
Fighter jets
Transports
Rotorcraft
Unmanned vehicles
Launch vehicles

Industrial

High-performance cars / Motorsport
Oil and gas
Wind energy

% of 2015 Net Sales

HOW ARE COMPOSITE MATERIALS AND PARTS MADE



DEVELOPING INNOVATIVE SOLUTIONS...



Primary and highly loaded structures



Empennage

Wing



Helicopter
Structure
& Blades

Engine
Fan Blades
& Cases



Fuselage





Secondary structures and interiors



Structures
Landing Flaps,
Other Wing
Moveables,
Fairings

Interior
Sidewalls &
Ceilings



Structures
Engine Nacelles

Interior
Stowbins



DEVELOPING INNOVATIVE SOLUTIONS



Other markets

High-
performance
automotive



Wind
energy, rail,...



BRINGING MORE VALUE TO OUR CUSTOMERS

Composites benefits

Lightweighting

Aerodynamics

Fatigue life

Corrosion resistance

Lean manufacturing
lower part cost

Increased
passenger comfort

Life-of-program
maintenance costs



HOW WE WIN



SOLVAY'S UNIQUE STRENGTHS



**Recognized
for our
technology
leadership**



**Extensive and
proprietary
materials
portfolio**



**Broad
materials
qualification
heritage**



**Providing,
capturing and
sustaining
value**



**Delivering value
through strategic
customer collaborations**

EXCELLENCE AND SYNERGIES TO CREATE ADDITIONAL VALUE



COMMERCIAL AND MANUFACTURING EXCELLENCE

- Debottlenecking thermoplastic lines
- Pricing and portfolio management
- Distribution synergies
- Cost-basis improvements via excellence projects

COMMERCIAL SYNERGIES WITH SPECIALTY POLYMERS

- Thermoplastic composites
- Competitiveness via polymer integration
- Boeing/Airbus interiors with foam core
- Selling synergies in aircraft



2020+

2018

2016



KEY PROGRAMS FOR SOLVAY AEROSPACE GROWTH



NEW PROGRAMS RAMPING UP

- F-35 Joint Strike Fighter
- Boeing 777X Empennage
- Boeing 787 & 777X Secondary Structure
- LEAP engine (737MAX and A320neo)
- Hondajet Business Jet
- Bombardier Cseries
- COMAC ARJ21 Regional Jet

CUSTOMER COLLABORATIONS ON NEW DEVELOPMENT PROGRAMS

- GE-9X Engine used on Boeing 777X
- New Russian and Chinese Civil Aircraft
- U.S. Long Range Strike Bomber



2025

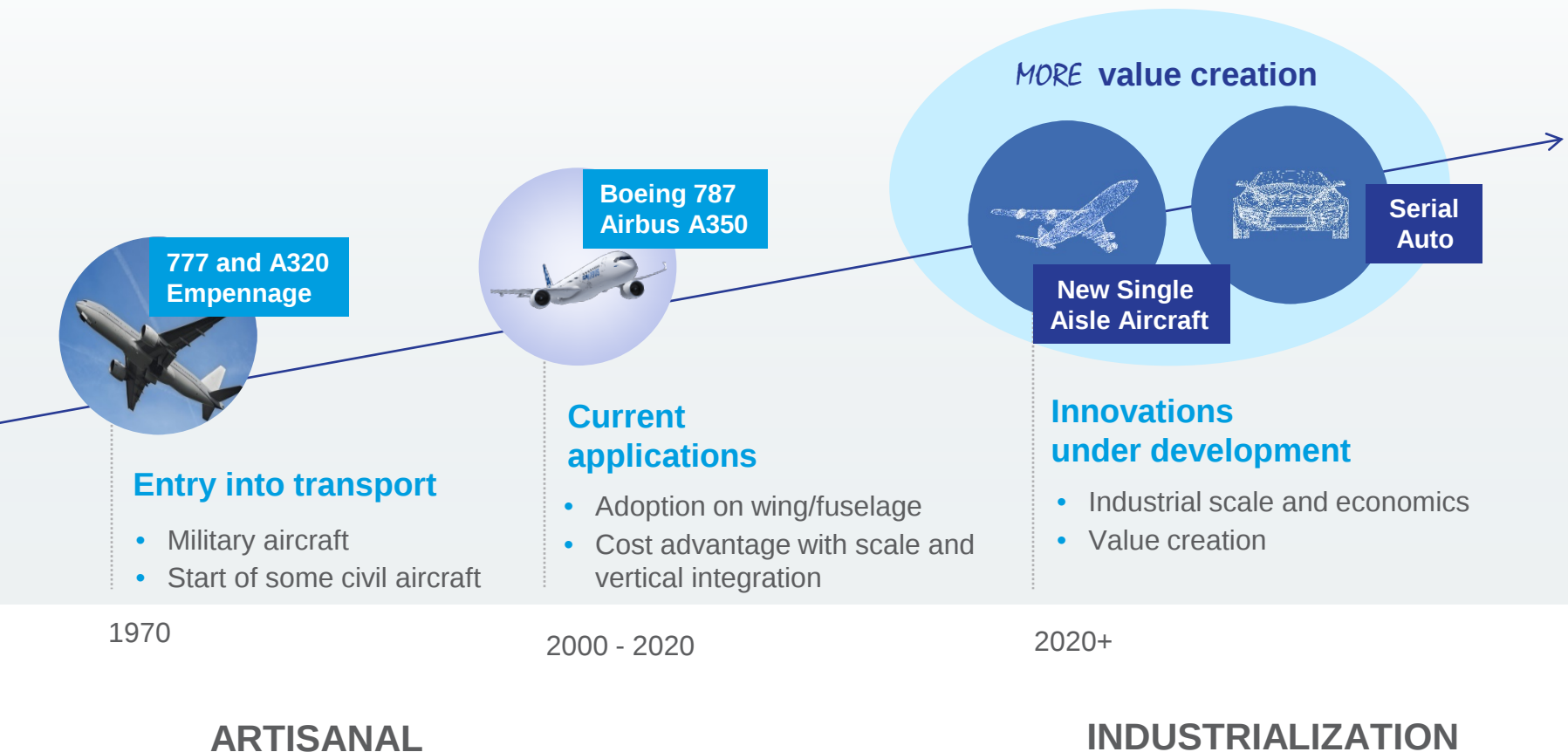
2020



2016

Positions on most major aircraft programs

DRIVING SUSTAINABLE MOBILITY BEYOND TODAY



SUSTAINABLE MOBILITY ON THE ROAD



NEW INDUSTRY PARADIGM

- Sustainability
- Shared mobility
- Connectivity

- Regulations driving CO2 emissions reduction
- Car sharing services and self-driving cars
- Safety: zero casualties

WITH COMPOSITES



Lightweighting



Electrification



+ Design freedom

OUR VISION FOR THE AUTOMOTIVE MARKET

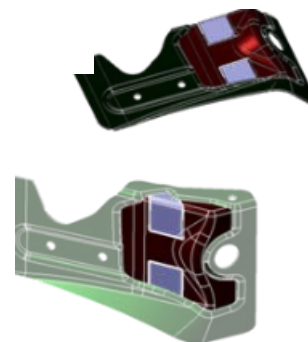


Be a leading supplier of differentiated composite materials solutions



OUR APPROACH

- Exploit composites' value *beyond just light-weighting*
- Make composite parts cost-competitive vs metals
- Leverage Solvay competences to develop "ecosystem": design, recycling and repair



THERMOSET COMPOSITES

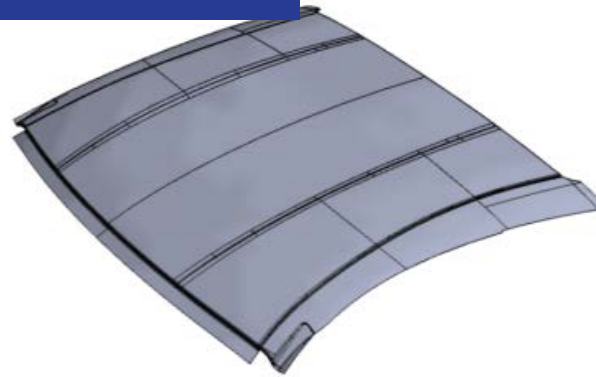


Broadly used for aircraft and supercars but with limited suitability for high volume automotive

Solvay has developed unique technologies:

- automation
- faster cycle time
- use of existing metal forming assets

Traditional hood



Process Time

12 hours



10 minutes

BMW M4 GTS hood



THERMOSET COMPOSITES

A FULL COMPOSITE CHASSIS



Developed broad set of material and manufacturing technologies to manufacture concept chassis

Leveraged investment in engineering firm to exploit value of composites through design

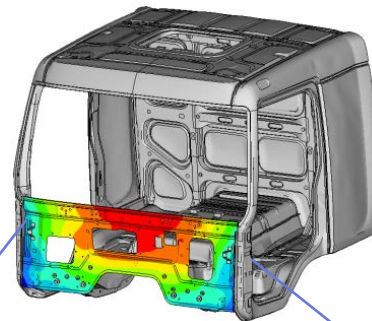


First step of a journey towards a composite-centric chassis used at higher volume

THERMOPLASTIC COMPOSITES ADDRESSING INDUSTRY GAPS



- Fast cycle time
- Assembly
- Recyclability



**Working
on multiple insertion
opportunities with
OEMs and Tier 1s**

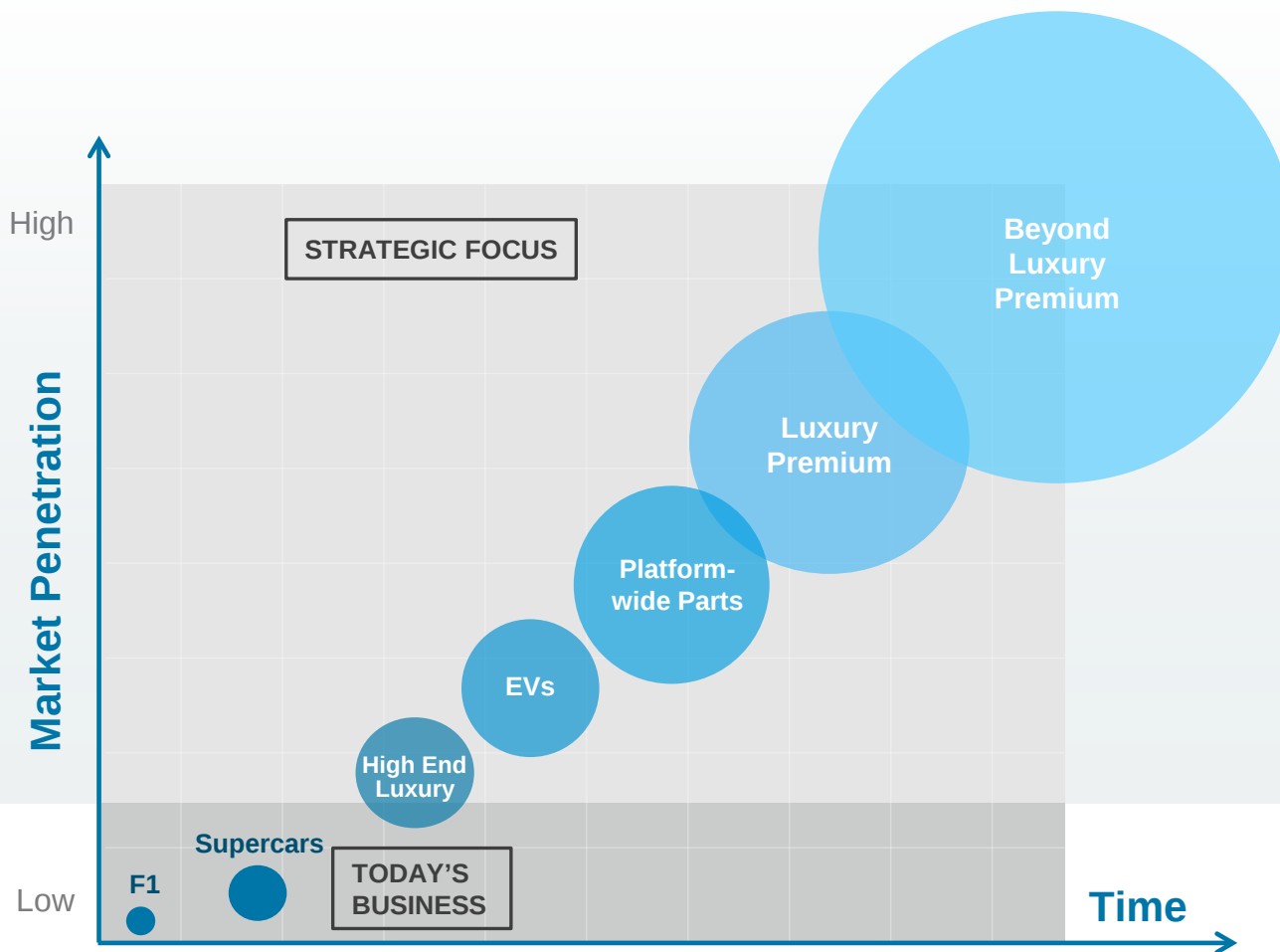


VOLVO TRUCK FIREWALL



Delivering top-line synergies

A CLEAR APPROACH FOR THE AUTOMOTIVE MARKET





**MORE
SUSTAINABLE
MOBILITY**

**Bill
Wood***President, Composite Materials*

Bill Wood

began his career as manufacturing manager at Fiberite Composite Materials in California. He then held various positions in manufacturing and engineering management, and then in general business management, in various locations in the U.S. After Fiberite was acquired by Cytec, he was appointed Managing Director for Cytec's Engineered Materials division in Europe and was an ex-pat in the U.K. from 1999 until 2002 in this role. Upon his return to the U.S., he assumed general management responsibility for Cytec Engineered Materials' Americas and Asia Pacific divisions.

Since 2009 he has been President of Cytec Aerospace Materials, a member of the Cytec Executive Leadership Team, and an officer of Cytec Industries. Upon Solvay's acquisition of Cytec he became President of the Composite Materials GBU.

Bill Wood, a US national is a Summa Cum Laude graduate from the University of Utah with a B.S. in Chemical Engineering. He received an M.B.A. from the Phoenix University.



Carmelo Lo Faro

Head of Industrial Business Line, Strategy & Business Development, Composite Materials

Carmelo Lo Faro

has full P&L responsibility for the Industrial Business Line of Solvay Composite Materials. He is a member of Solvay Composite Materials Leadership Team and is also responsible for Strategy and Business Development. Carmelo began his career with ICI, as a Research Scientist developing advanced composite materials. He joined Cytec in 2001 and, since then, has held positions of increasing responsibility including Six Sigma Master Black Belt, Product Development Manager, Technology Director, VP of Technology and Chief Technology Officer while living in Europe and in the United States.

Throughout his career, Carmelo has been instrumental in introducing innovative materials and processes on multiple aerospace, defense and automotive programs. He has also developed and executed several strategic partnerships with customers, suppliers and the academic community.

Carmelo holds a Doctorate of Science degree in Material Science, a Master's degree in Mechanical Engineering from Catania University and an MBA from Arizona State University.



James Pigford

*Head of Aerospace Business Line,
Composite Materials*

James Pigford

began his career as a development engineer at AlliedSignal (now Honeywell) in Aerospace. James has held various positions in engineering, engineering management, manufacturing, commercial and general business management in both the original equipment (OEM) and aftermarket (MRO) segments. James has led or been a key contributor to major product & business model launches, acquisitions and organizational transformations.

Since joining Cytec in 2006, James has lead commercial organizations within the Composite Materials business including the marketing & product management organization and NBD. In addition to commercial roles, he led the Cytec culture initiative.

James holds a Master of Science degree in Mechanical Engineering from the University of Notre Dame, a Bachelor of Science degree in Mechanical Engineering from Rose-Hulman Institute of Technology and an MBA from Indiana University South Bend.

www.solvay.com

