Aerospace & Defense webinar

SOLVAY

Progress beyond

February 28, 2023

With you today

Ilham Kadri

CEO and President of the Executive Leadership Team of Solvay

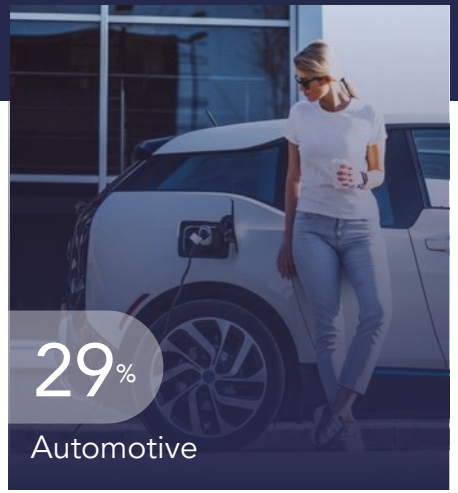
Carmelo Lo Faro

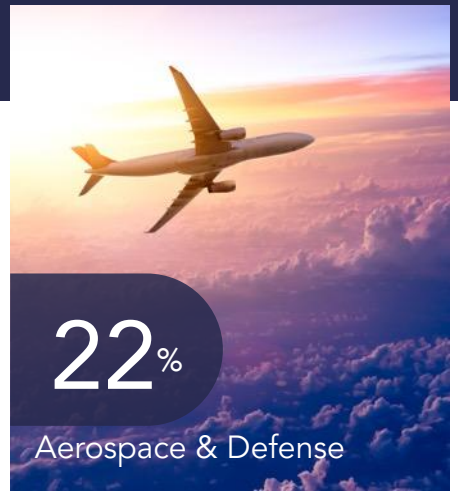
President, Materials Segment

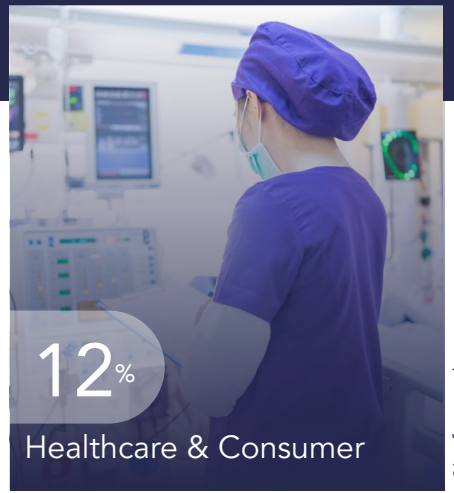
Our highly attractive Materials business is part of SpecialtyCo

Aerospace & Defense represents a key market

MATERIALS







% of net sales

Materials FY 2022

Net sales	Organic sales growth ('22-'26F)	EBITDA margin
~€4.1bn	~10%	>30%

Note: Percentages shown refer to percentage of Net sales of Solvay's Materials segment

We are an advanced material provider to OEMs and suppliers

OEMs

BOEING · NORTHROP GRUMMAN · AIRBUS · SAFRAN AEROSPACE · DEFENCE · SECURITY · LOCKHEED MARTIN

ADVANCED MATERIAL SUPPLIERS

SOLVAY

Solvay is 1 of 3 qualified carbon fiber composites suppliers globally

Tier 3, 2 & 1 suppliers

GKN AEROSPACE · SPIRIT AEROSYSTEMS · FACC

Advanced materials

SOLVE

the industry's most critical performance and sustainability challenges

30% weight reduction vs aluminum ✓	5 times stronger vs aluminum & superior properties[1] ✓	Improved aerodynamics ✓	Superior manufacturing & design flexibility ✓

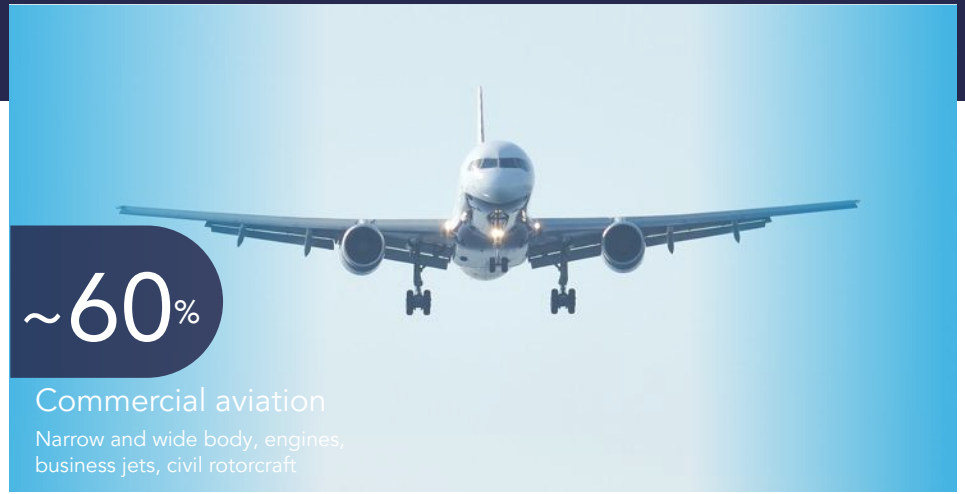
Up to 25%

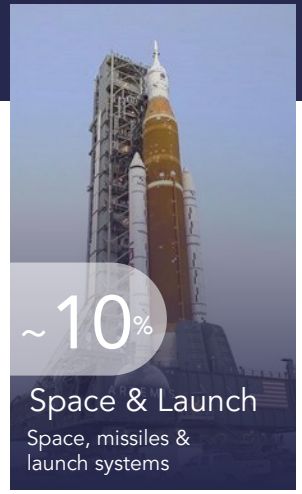
Increased fuel efficiency ✓ & Reduced greenhouse gas emissions[2] ✓

(1) Superior corrosion, fatigue & thermal resistance
(2) Mainly CO_2, NO_x

Aerospace & Defense is a key market within our Materials business

AEROSPACE & DEFENSE





% of net sales

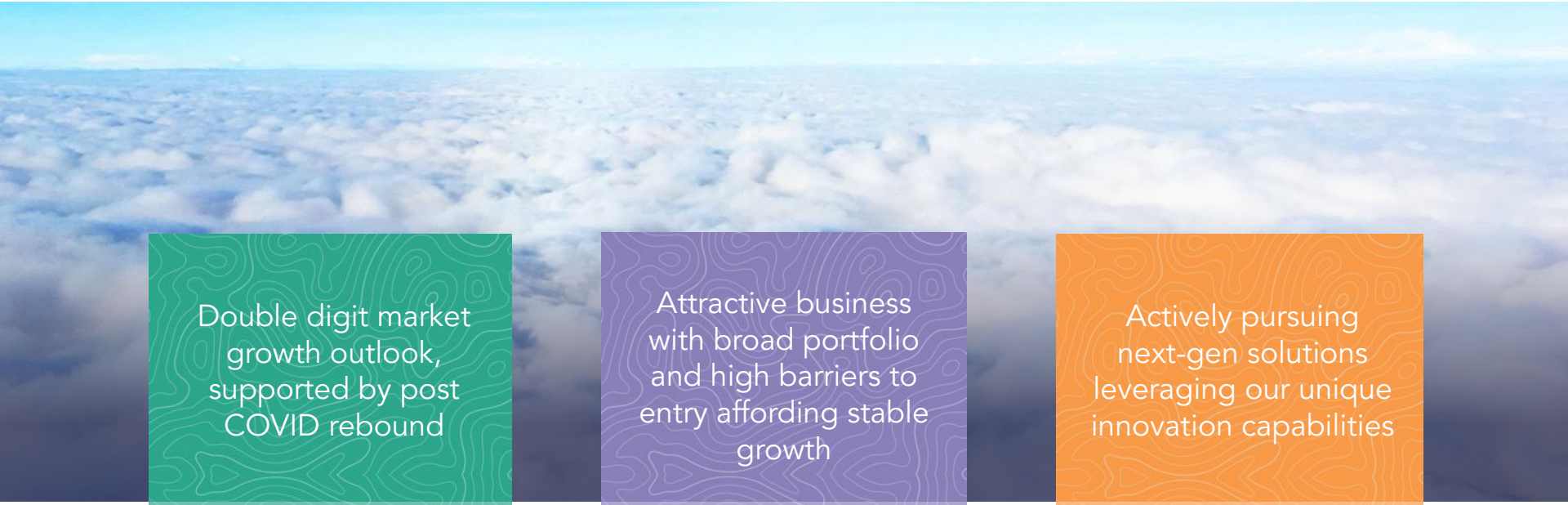
Aerospace & Defense FY 2022

Net sales	'21-'22 Sales growth	Organic volume growth ('22-'26F)
~€0.95bn	~30%	~10%

Aerospace & Defense market

Note: Percentages shown refer to percentage of Net sales of Solvay's Materials segment

Aerospace & Defense key takeaways



Double digit market growth outlook, supported by post COVID rebound

Attractive business with broad portfolio and high barriers to entry affording stable growth

Actively pursuing next-gen solutions leveraging our unique innovation capabilities

With you today

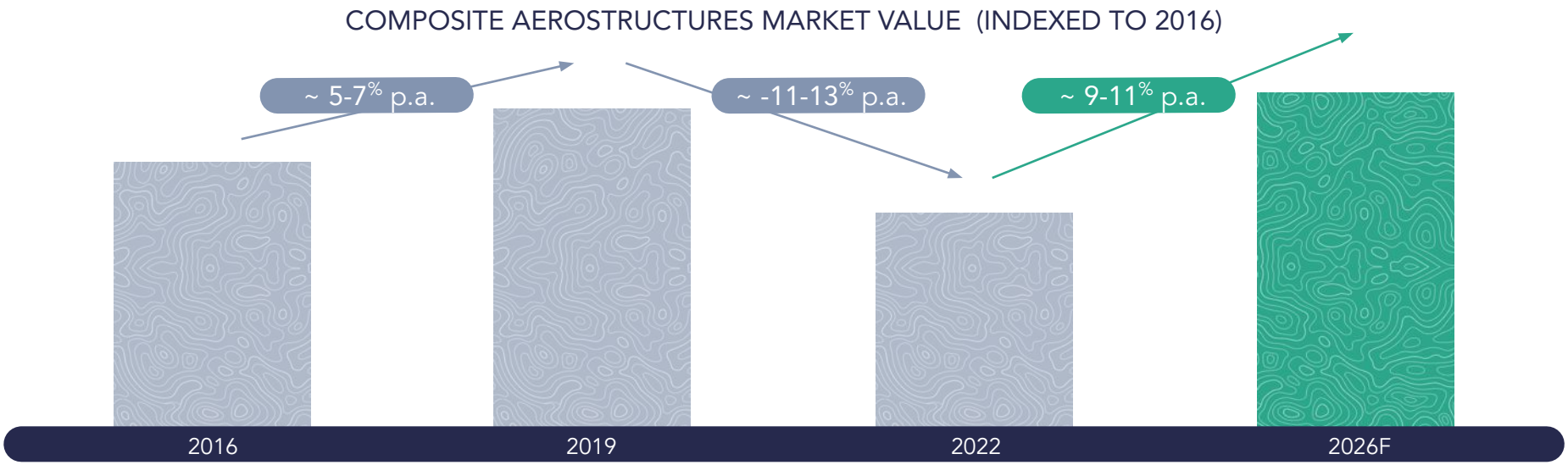
Carmelo Lo Faro

President, Materials Segment

Double digit market growth outlook, supported by post COVID rebound

Attractive market growth outlook

Aero industry recovery is underway following a period of decline



Key market drivers

Market growth driven by higher build rates and introduction of new programs

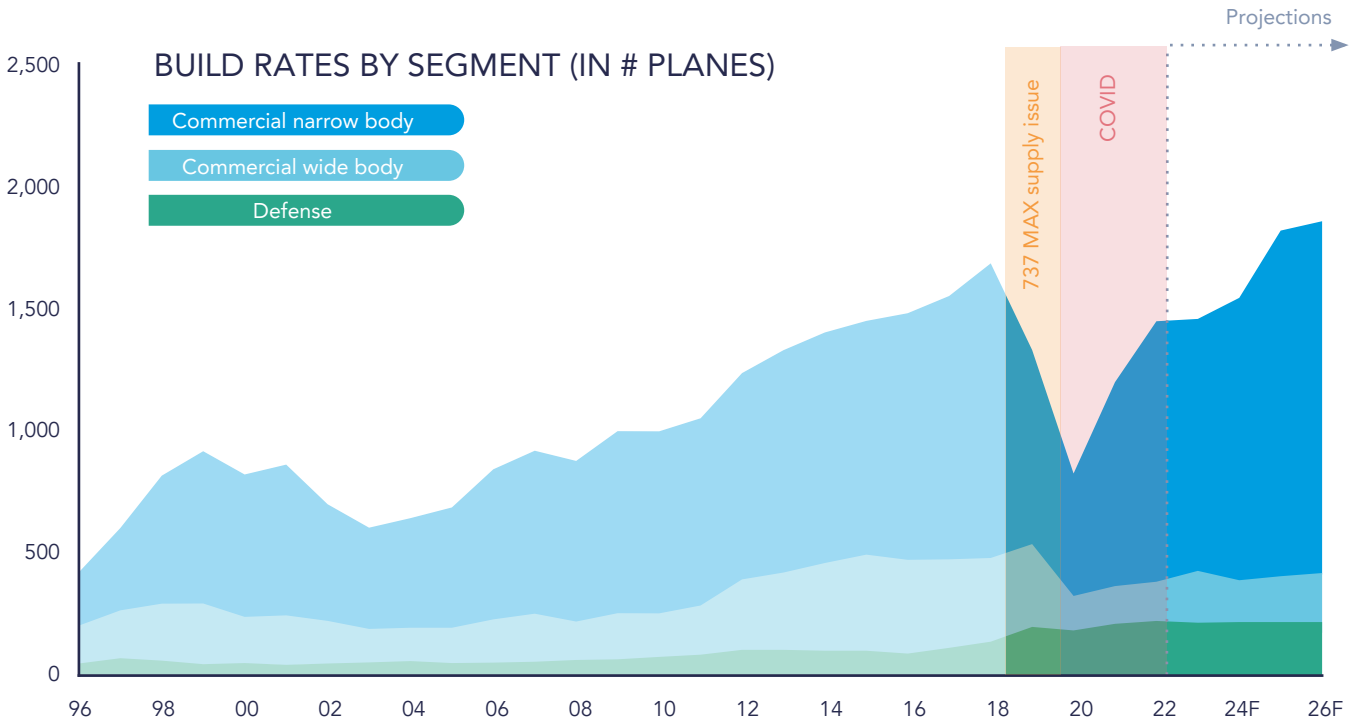
Decrease due to narrow body build rate slowdown (*i.e.*, 737MAX) followed by COVID crisis

Increasing build rates, supported by a COVID recovery, and increasing advanced material penetration

Source: External market reports

Build rates

Strong outlook, supported by post COVID rebound and mainly driven by narrow-body airplanes



Commercial narrow body
Long-term high single digit growth
6-7% p.a.

Commercial wide body
Long-term low single digit growth
1-2% p.a.

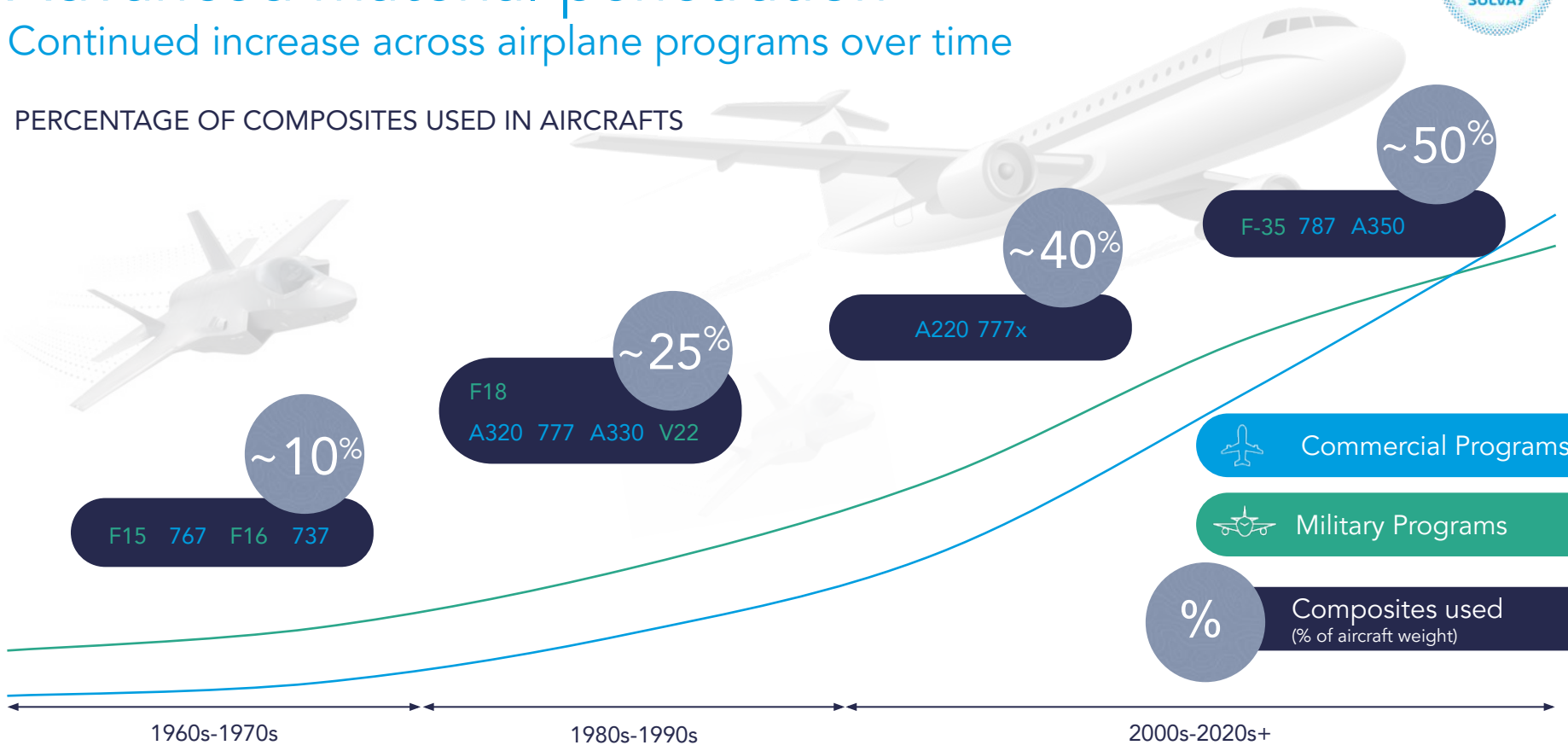
Defense
Highly resilient long-term mid-single digit growth, 4-5% p.a.

Note: Build rates of main Commercial aviation & Defense programs shown
Source: Solvay internal data; External market reports

Advanced material penetration

Continued increase across airplane programs over time

PERCENTAGE OF COMPOSITES USED IN AIRCRAFTS



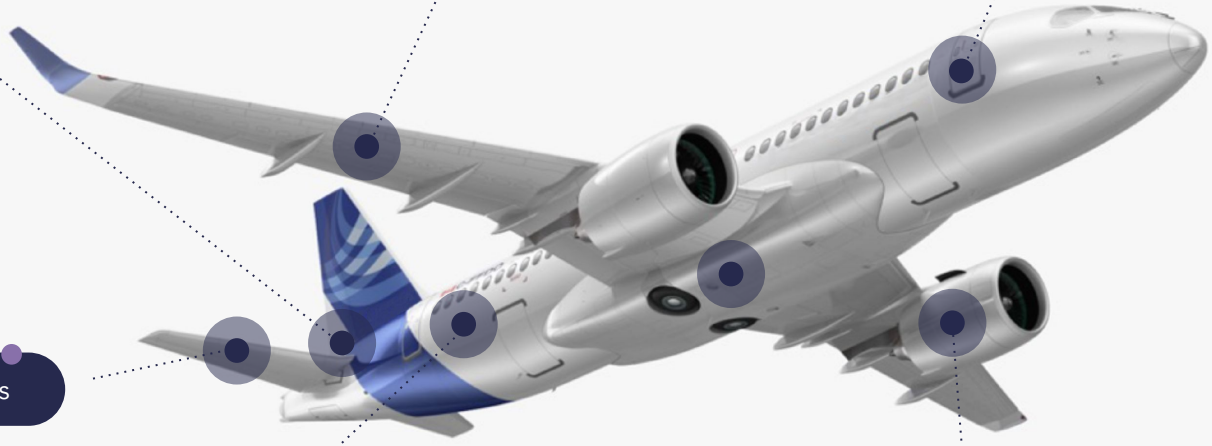
Note: Programs shown are examples only
Source: Solvay internal data

Our technology is integral to many parts of an airplane

Primary structures
(*e.g.*, empennage, fuselage)

Secondary structures
(*e.g.*, engine nacelles, fairings)

Bonding



Surface coatings

Interiors & galleys

Engines

OUR PRODUCTS

TSC
Thermoset composites

TPC
Thermoplastic composites

ADH
Adhesives & surfacing

SpP
Specialty polymers

Attractive business with broad portfolio and high barriers to entry affording stable growth

Solvay maintains leadership in this attractive market

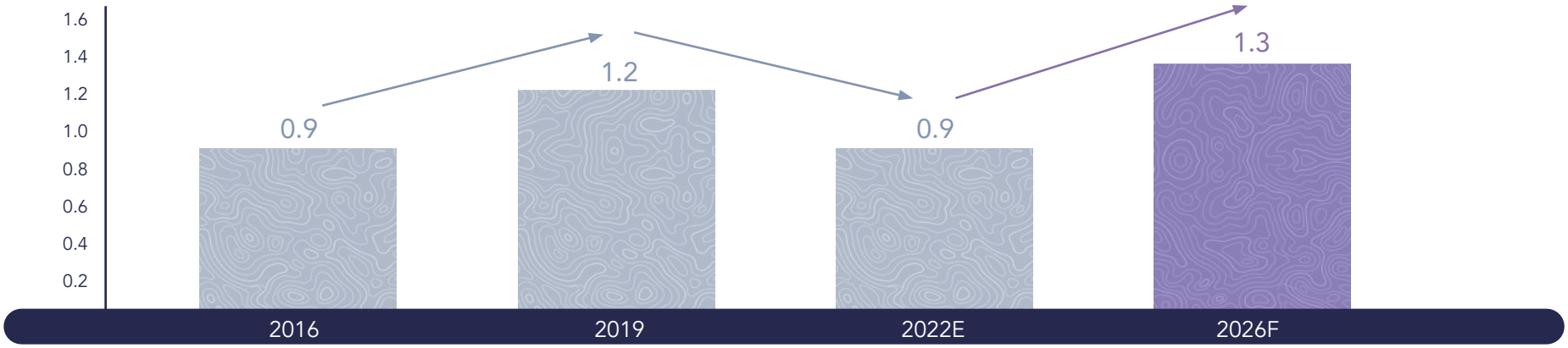
with double-digit growth expected in the mid-term

Solvay	Market
11% p.a.	5-7% p.a.

Solvay	Market
-9% p.a.	-11-13% p.a.

Solvay	Market
~10% p.a.	9-11% p.a.

Solvay A&D net sales (€ bn)



Protected by High barriers to entry

- Broad Portfolio
- Specified on all major programs
- Long-standing customer relationships
- Certified Global Assets

Commercial Aviation

Solvay is specified in all main airplane programs

SPECIFIED IN KEY AIRPLANE & ENGINE PROGRAMS

Solvay value per shipset	Key airplane programs	Order backlog (Dec '22)
>$1m	BOEING 777x	~440
	COMAC C919	~100
	BOEING 787	~575
$0.5-$1m	AIRBUS A220	~550
	BOEING 737	~4,200
<$0.5m	AIRBUS A350	~410
	BOEING 767	~120
	AIRBUS A330	~200
	AIRBUS A320	~6,100

Strong visibility on long-term orderbook of our main customers, worth ~€5bn

KEY EXAMPLES

Major supplier of primary & secondary structures for A220

Primary and secondary structures for Biz Jets

Secondary structures, structural adhesives and surfacing films for A350 and 787 family

Trusted long-term advanced material supplier of Safran for engine & nacelle programs

Defense
Long-standing partnerships with key OEMs

LEADING POSITION IN
THE U.S. DEFENSE MARKET

- **Leading position** with strong heritage and over 50 years of industry experience
- Supplying **hundreds of products** across all main defense programs (*e.g.*, Black Hawk, Osprey, Apache, F-35, F-18, F-16, A400M)
- Offering **customized high performance material solutions**, with strong focus on heat exposed parts
- **Access to main OEMs & tier 1 suppliers**
  (*e.g.*, >30 year-long partnership with Lockheed Martin)

EXAMPLE
PRIMARY SUPPLIER FOR F-35

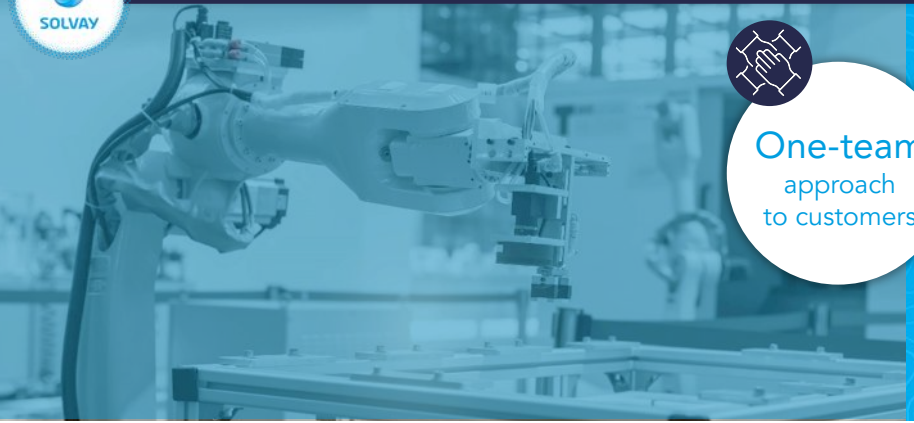
SUPPLYING THE HIGHEST COMPOSITE
DEFENSE PROGRAM BY TOTAL VALUE

Strong customer co-development
across the entire lifecycle of the aircraft programs

Years ····· Decades

Design → Prototyping → Test & Certification → Industrialization → Operating life

Virtual engineering | Part manufacturing | Material & part testing | Continuous support of the airplane program



One-team approach to customers

SOLVAY INNOVATION CENTERS

5	6	3
AMERICAS	EMEA	ASIA

>100 Researchers

BOEING
Co-development case example

CYCOM® EP2750

>3 years of closed collaboration to develop a next generation composite material

- Allows 10-20x increased manufacturing rate on the back of reduced curing time
- Reduced production cost, making composite parts cost competitive with metals

JEC WORLD INNOVATION AWARDS FINALIST

Agile and evolving footprint

STRONG AEROSPACE & DEFENSE FOOTPRINT*
CLOSE TO OUR MAIN CUSTOMERS

AGILE & EVOLVING FOOTPRINT

Footprint optimization program launched before COVID

Accelerated through COVID (3 sites closed) to adapt cost structure in line with market needs (annual cost reduction of ~€70M)

Continuous optimization of agile footprint

*Selection of sites shown.

Actively pursuing next-gen solutions leveraging our unique innovation capabilities

Deep industry expertise and understanding of our customers' needs

Industrialization and Productivity

Need for faster and lower-cost production

Greener transportation

Reduction of emissions and increasing importance of sustainability

New and more demanding applications

Focus on primary structures and new market segments

Enabling the next generation of aircrafts

Innovation themes

R&D timing: '50s-'70s	'70s-'00s	'00s-'20s	2020+
Fiberglass based composites Thermoset prepregs	Carbon fiber based composites Adhesives & Sealants	Resin infusion technologies Out-Of-Autoclave technologies	Resin Infusion Bonding technology Multi-functionality Thermoplastic composites

Target markets

Initial adoption in space & launch and expansion into tertiary parts in airplanes (*e.g.*, interior parts)	Adoption in secondary airplane structures (*e.g.*, spoilers, rudders, ailerons, flaps)	Adoption in primary airplane structures (*e.g.*, fuselage, wings)	Next-gen of space & launch Advanced air mobility
 	 	 	 

Driving innovation for the future of Commercial Aviation

KEY MARKET DRIVERS

- Lighter weight and lower emissions
- Greater productivity efficiencies
- Sustainability and circularity

~€3bn

Addressable market[1] by 2040

Developing the innovations required for next-generation aircraft with breadth and depth of technical expertise and a legacy of innovation

Continue to drive adoption of composite materials by replacing metal in primary structures

Meet customers needs for faster, more cost-effective production processes with lighter-weight materials that do even more

Innovation Themes

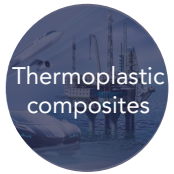
- Increased production efficiency
- Improved quality control
- Lower cost
- Lower energy consumption

- Improved reliability & performance
- Light weighting
- Faster assembly
- Increased design freedom

- Structural integration & performance
- Manufacturing flexibility: compatible with in/out of autoclave curing
- Lower recurring manufacturing costs

Next level of materials performance providing:

- Electrical conductivity
- Vibration/noise dampening
- Embedded sensors
- Antimicrobial surfaces



Next generation composite materials providing:

- Faster and simpler production processes
- Similar/superior mechanical performance
- Potentially recyclable

1) Addressable materials market for primary structures

Actively accelerating technology for Space market

KEY MARKET DRIVERS

- Commercialization of space
- More small launch vehicles for growing satellite network
- Focus on reusability of launch vehicles

€1bn[1]
Addressable market by 2040

Solution provider for innovative and high performance lightweight materials for space applications (*e.g.*, composite fairings, nozzle ablatives, adhesives)

Innovation via new manufacturing techniques, to lower cost of launch vehicles (*e.g.*, Out-Of-Autoclave, Automated Fiber Placement)

Strong track record with >50 years of experience

- 1965 — Gemini
- 1969 — Apollo 11
- 1970s - 2011 — NASA Space Shuttle SRB
- 2021 — Long-term agreement for Vega programs
- 2021 — Arianne rocket - James Webb telescope

Proud supplier of ablative materials for use in the Artemis mission's solid rocket motor (SRM) nozzles, successfully launched on 16th November 2022

Note: (1) Composites market for Space.
Source: External market reports

Pioneer in developing Advanced Air Mobility market

KEY MARKET DRIVERS

- Concentration of population in urban areas
- Need for sustainable transportation solutions
- Mobility as a Service (MaaS) acceleration

~€6bn
Addressable market by 2040

Ideal material supplier for AAM with a comprehensive portfolio and strong legacy, able to assist with technical challenges through all stages of the process

Scale AAM vehicle production through innovative composite technologies

Solving the AAM industry's most critical challenge: light weighting

MULTIPLE RELATIONSHIPS ESTABLISHED

Electric air-taxi program
VX4

Hybrid water landing aircraft
Seagull

Indoor inspection drone
ASIO

Thermoplastic Composites Platform

Potential to reinvent how to produce and recycle composite resins

Addressable market by 2035

>€1bn[3], thereof ~€400m Aero&Def

Note:
(1) (1) Compared to thermoset composites
(2) (2) Compared to metal components
(3) (3) High temperature Thermoplastic composites total market

Ongoing TPC adoption across industries drives the experience curve

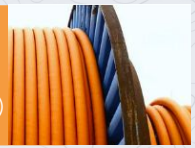
1980 → 2020 → 2030+ →

Electronics & Other

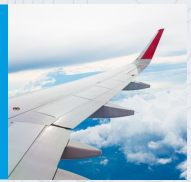
Automotive
(*e.g.*, carbon wrapped eMotors)

Expansion to Energy transition
(*e.g.*, onshore applications, hydrogen tanks)

Translation of capabilities to Energy
(*e.g.*, offshore risers, flexible pipes)

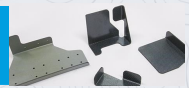


Expansion to Primary structures
(*e.g.*, wings, fuselage)
and Adv. Air Mobility



Continued penetration in Secondary structures
(*e.g.*, window frames)

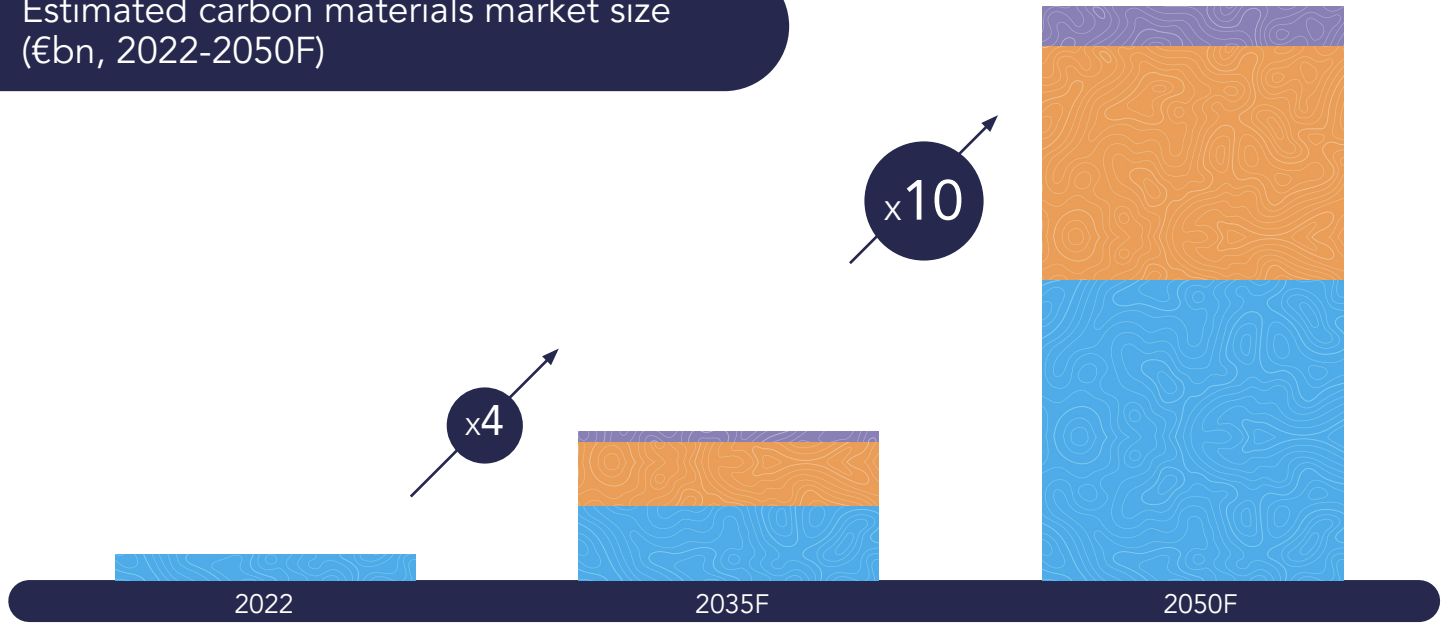
First adoption in A&D
(penetration from military to commercial programs)

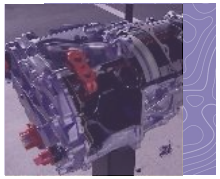


A&D Energy Automotive Electronics & Other

High-end composite materials market expected to grow 4x by 2035, and >10x by 2050

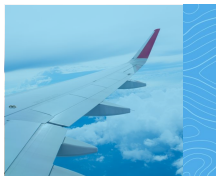
Estimated carbon materials market size (€bn, 2022-2050F)





Automotive

Energy



A&D

Recap: Aerospace & Defense key takeaways

Double digit market growth outlook, supported by post COVID rebound

- Growth driven by higher build rates in commercial narrow body
- Increasing advanced material penetration across all segments

Attractive business with broad portfolio and high barriers to entry affording stable growth

- Broadest product portfolio to meet all customer needs
- Specified into all main commercial & defense programs
- Visibility on €5bn customer order book backlog
- Long-standing customer relationships with a high degree of co-development

Actively pursuing next-gen solutions leveraging our unique innovation capabilities

- Market maker posture to drive innovation and focus on supporting the industry in solving its main challenges
- Actively supporting the development of new market segments: commercial launch and advanced air mobility

Q&A