Strategic Growth Opportunities in the Global Composites Industry

PRESENTED BY

Lucintel

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Table of Contents

Executive Summary

- **Global composite materials market was estimated at $33.4 billion in 2019**
- **In terms of end products (wind blade, golf shaft, door panels, etc.) made using composites, market was estimated at $93 billion in 2019 and is likely to grow with a CAGR of 2.4% to reach $107.4 billion in 2025**
- **Global composites industry has been hit hard in 2020 due to COVID pandemic and is expected to decline by 15% in 2020**
- **To drive growth in the composites market, industry needs to work in following areas:**
  - Cost reduction in composite parts
  - Development of transformative technologies with reduced cycle time for various markets
  - Development of repair and recycling technologies
  - Enhancement of mechanical, chemical, and conductive properties of fibers and resins
  - Development of Green Composites
- **To win in various markets, there need to be innovations and partnership to address industry challenges**

Table of Contents

Composite Applications and Competing Materials in Major End Segments

Aerospace

- Fuselage
- Wings
- Control surfaces
- Fan blades
- Tail cones
- Interiors

- Aluminum
- Composites
- Steel
- Plastics

Transportation

- Monocoque / Chassis
- Body closures
- Under the body
- Interiors
- Front cabin (train)

- Steel
- Iron
- Aluminum
- Plastics
- Composites

Wind Energy

- Wind blades
- Nacelles
- Spinners

- Steel
- Iron
- Composite

Construction

- Bathtub
- Doors & Windows
- Pultruded profiles
- Swimming pools
- Pole

- Concrete
- Steel
- Iron
- Plastics
- Composites

Pipe & Tank

- Oil & Gas
- Chemical
- Septic
- Waste water, etc.

- Steel
- Plastics
- Concrete
- Composite

Electrical & Electronics

- Printed circuit board
- Electrical enclosure
- Fuses
- Cabinets, etc.

- Plastics
- Metals
- Composite

Consumer Goods

- Golf shafts
- Bicycles
- Tennis rackets,
- Fishing rods
- Hockey sticks
- Surfboard
- Toys

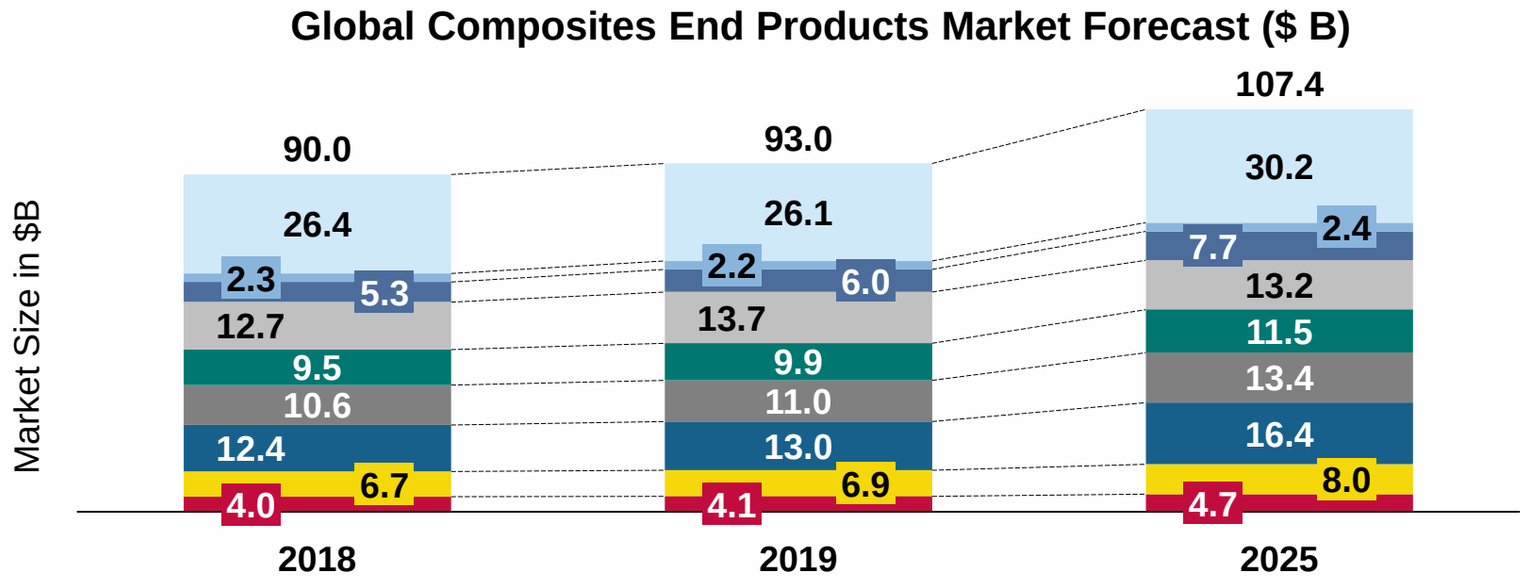
- Plastics
- Aluminum
- Steel
- Composite

Marine

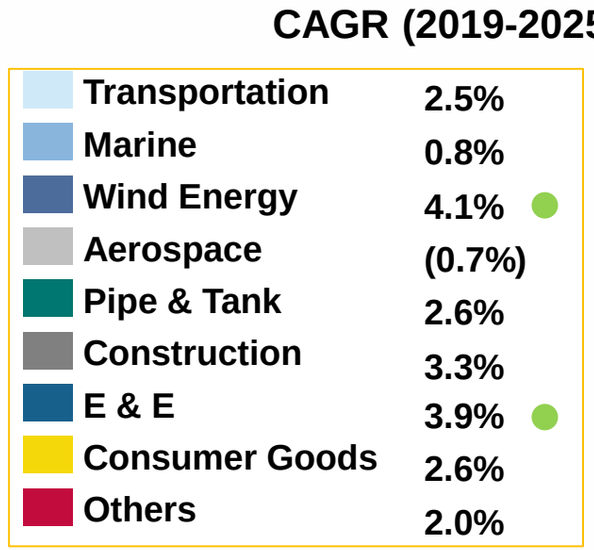
- Hull
- Deck
- Mast

- Composite
- Aluminum
- Steel
- Wood
- Plastics

Composites Consumption in Wind Energy is Expected to Grow at a Healthy Growth Rate in Next Six Years



Source: Lucintel



Green color signifies high growth segments

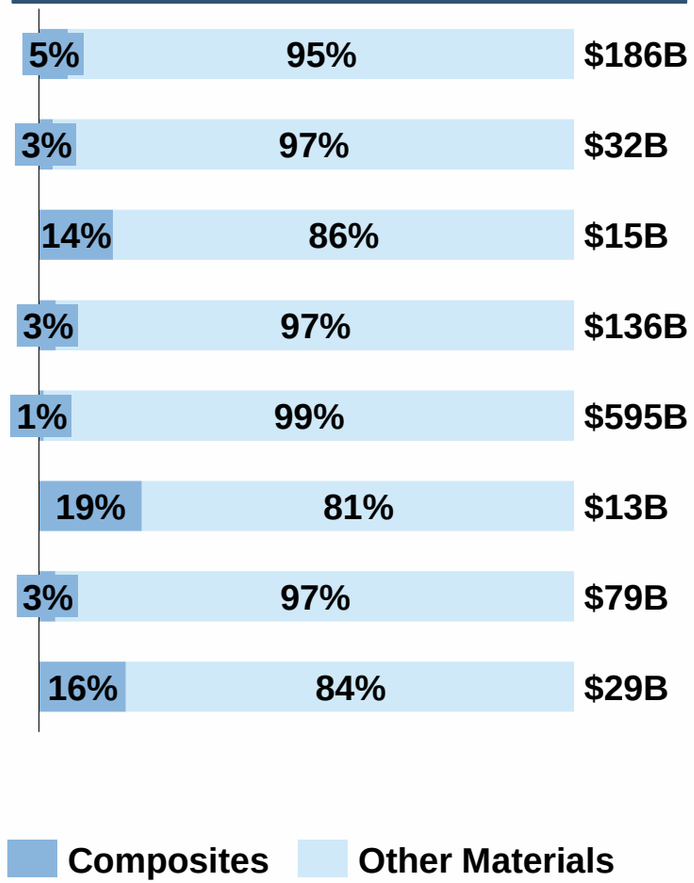
Key Insights

- Wind energy segment is expected to grow with about 4.1% CAGR followed by E&E with about 3.9% in the next six years
- Increasing demand of lightweight materials in transportation, construction, and E&E sectors will drive the composites growth
- Urbanization in developing nations such as China, India, and Brazil will also help composites to grow

Composite Materials Have a Low Market Penetration in All the Segments Reflecting Significant Opportunity for Growth

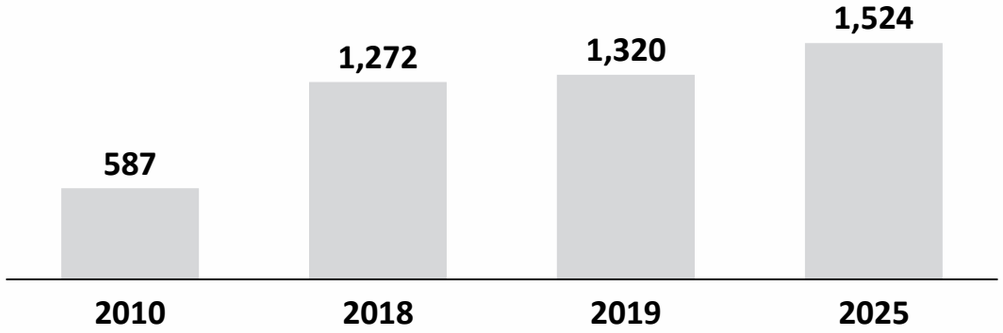
Segments	Global Composite Materials Market in 2019	Global Materials Market in 2019 (Steel, Aluminum, Composites)
Transportation	$10.0 Billion	$186 Billion
Marine	$0.8 Billion	$31.6 Billion
Aerospace	$2.1 Billion	$15.2 Billion
Pipe & Tank	$4.3 Billion	$136.4 Billion
Construction	$5.2 Billion	$595.4 Billion
Wind Energy	$2.4 Billion	$12.5 Billion
Consumer Goods	$2.4 Billion	$78.6 Billion
E & E	$4.7 Billion	$28.9 Billion
Total of 8 Segments	**$31.9 Billion**	**$1,084.6 Billion**

Source: Lucintel

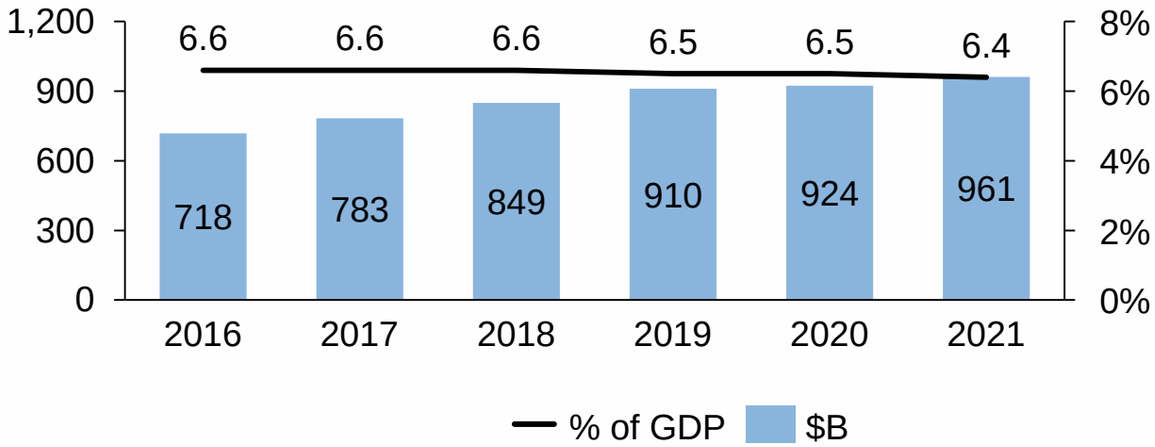


Driver in Construction: Increasing Urbanization and Growing Housing Starts Will Drive Composites Market

US Housing Starts (Single and Multi) Trend and Forecast (No. of House in Thousands)



Construction Industry Value in China



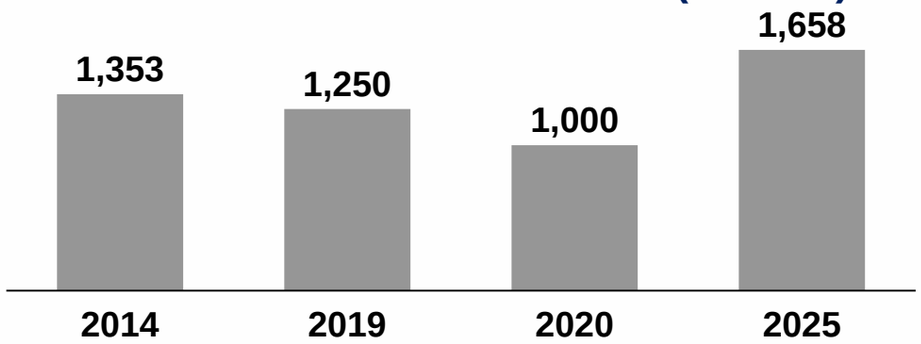
Key Insights

- US housing start grew at 10% CAGR from 2010-18 and is expected to register 2.4% CAGR during 2019-25 due to a hit in construction activities and followed financial crises by COVID outbreak
- China construction industry has started to recover after the downfall for 6 months during the COVID outbreak, the industry is expected to grow at 1.5% during 2020
- Improving infrastructure development, urbanization and economic development in developing Asian countries are likely to increase composites usage in construction industry

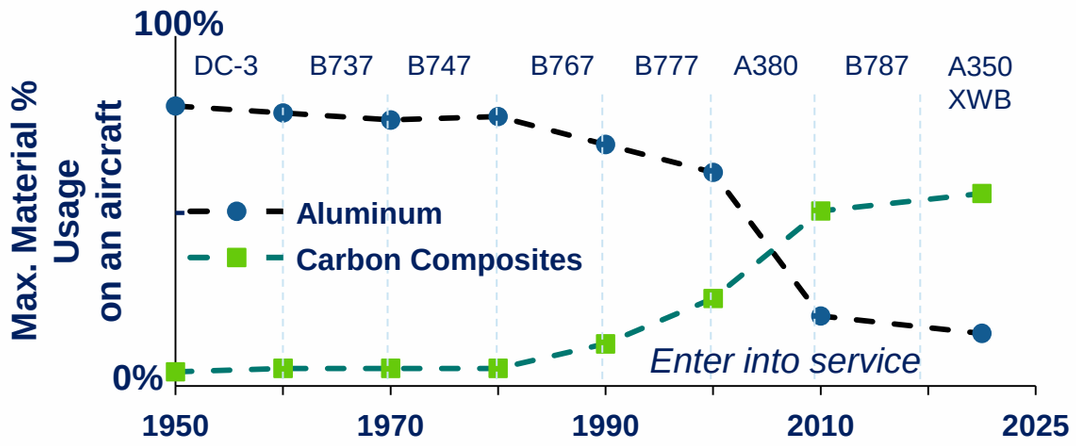
Source: Export Govt. (China), and Lucintel

Aerospace: High Usage of Composites in Various Aircrafts (B787, A380, A350, etc.) Will Drive Significant Growth

Global Commercial Aircraft Production Deliveries Trend and Forecast (In Units)



Source: Boeing, Airbus and Lucintel estimates

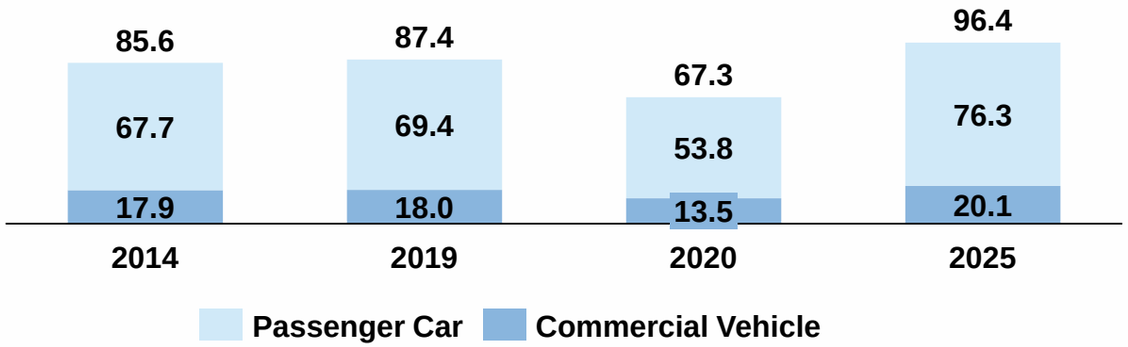


Key Insights

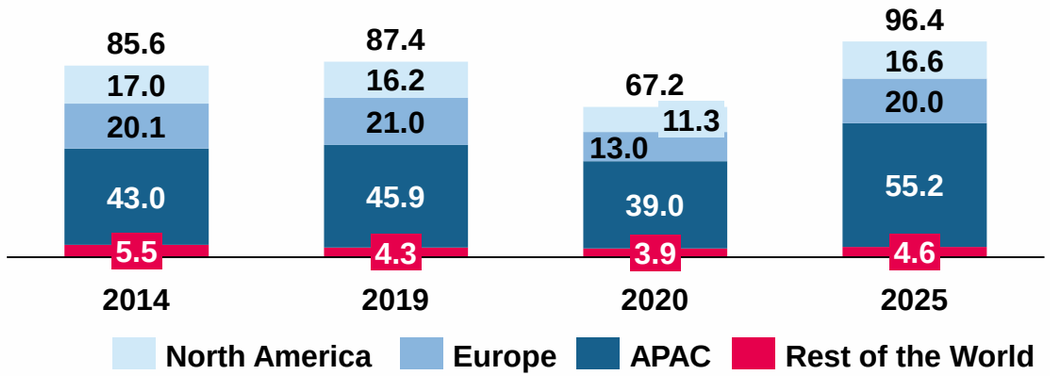
- **High commercial aircraft order backlog**
  - Airbus - 7,557 aircrafts
  - Boeing - 5,733 aircrafts
- **Increasing monthly production rates of commercial aircraft**
  - B 737: 52/month in 2019 to low rates in 2020 with slowly increase in production as per the demand
  - B 787: Production rate is 10/month plans to reduce to 6/month in 2021
  - A320: 42/month in 2015 to 40/month in 2020
  - A350: 5/month in 2015 to 6/month in 2020
  - A380: 15/month in 2017 to 8/month in 2019 and currently production has been shutdown due to COVID

Driver in Automotive: Automotive Market is Anticipated to Grow at 1.6% in the Next Five Years

Global Automotive Production Trend and Forecast by Vehicle Type (In Million Units)



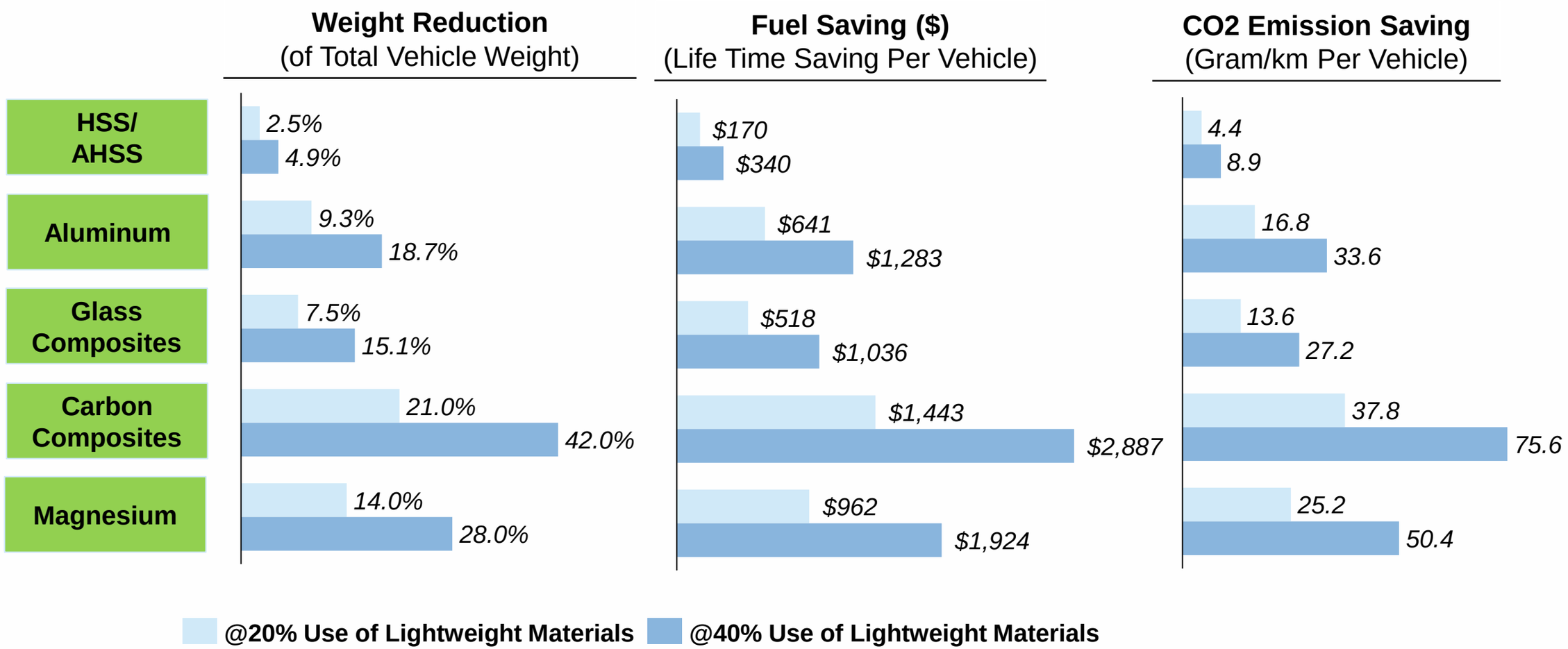
Global Automotive Production Trend and Forecast by Region (In Million Units)



Key Insights

- Global automotive production (passenger car & commercial vehicle) grew at 0.4% CAGR from 2014-19 and it is expected to register 1.6% in next five years (2019-25)
- Asia was the largest automotive market in 2019 followed by Europe
- Automotive demand is mainly driven by
  - Low interest rates
  - Rising disposable income of consumer
  - Increasing trend of replacing older cars

Weight and Fuel Saving Potential in Automotive Industry Utilizing Light Weight Materials

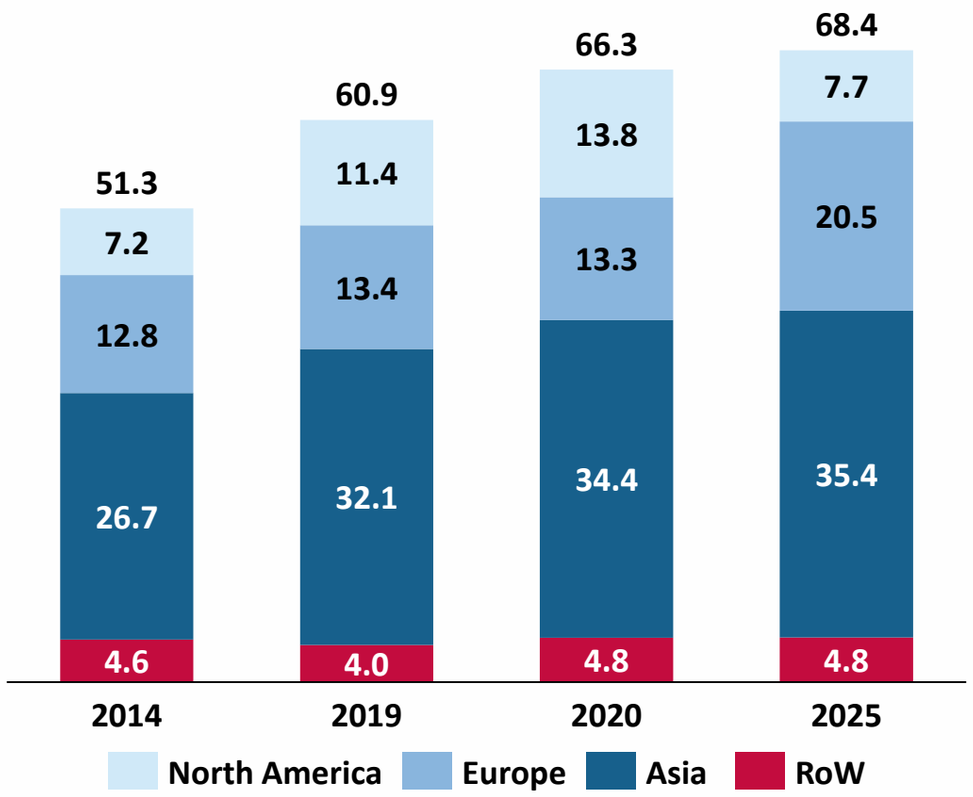


Assumption: Average vehicle weight is 3,962 lbs.
Lightweight replacement is considered in 70% of applications excluding non structural applications, such as glass and rubber.

Source: Lucintel

Wind: Despite Short Term Fluctuations, Wind Energy Market to Grow in Future

Global Annual Wind Turbine Installation Trend and Forecast (In GW)



Key Insights

- Global wind turbine installation grew at 3.5% during 2014-19 and is expected to grow by 2.0% in the next six years (2019-25)
- Asia to remain the largest region in next five years
- China is taking the lead in wind energy with recent developments worth noticing
  - Installation of LM Wind Power's first two sets of LM 66.6 blades
  - GE Renewable Energy has installed its first Haliade 12MW turbines
  - The Fujian Xinghua Gulf multiphase demonstration project will eventually have a total capacity of 79.4MW

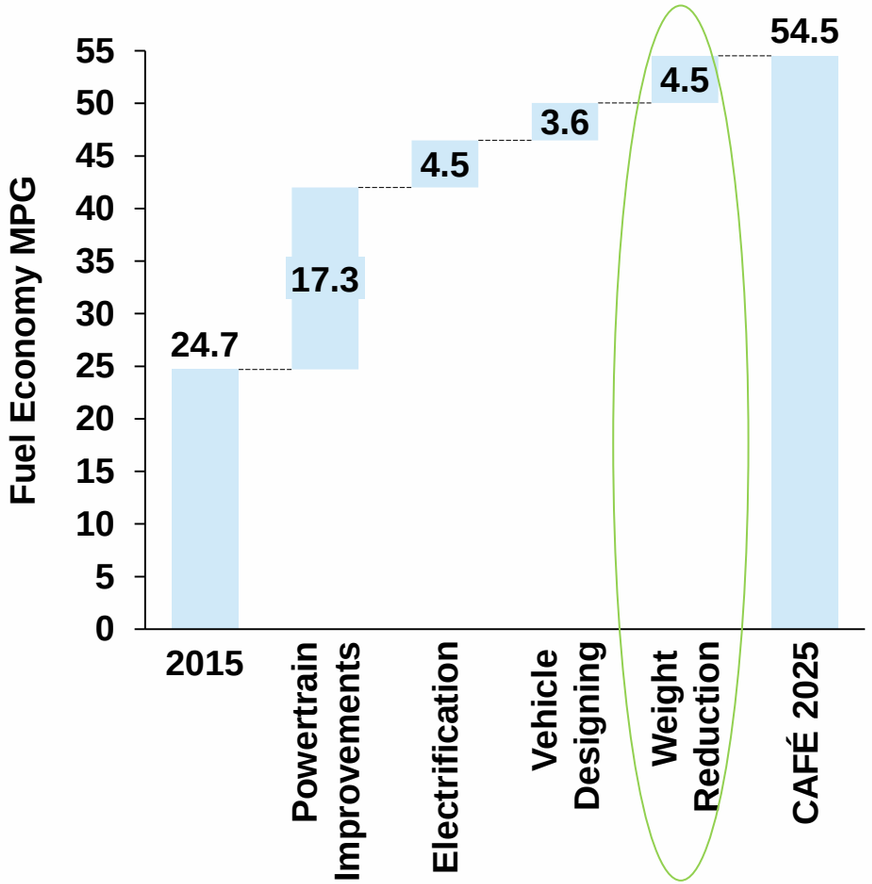
Table of Contents

Automotive Market Needs and its Impact on Composites

Market Needs	Impact on Composites
Light weight: Stringent policies, such as CAFÉ Standards is pushing the OEMs to reduce the vehicle weight to improve the fuel efficiency	Composites offer significant weight saving over the traditional materials. Increasing emphasis on fuel efficiency is driving the use of composites in automotive. Major OEMs are taking weight reduction initiatives in many platforms
Cost Reduction: Lightweight materials are costlier than the traditional material, to be used for mass production there is a need of cost reduction	Carbon fiber composites is one of the promising material with weight saving potential, companies are working together to reduce its price to make it competitive
Aesthetics: Superior aesthetics, and ease of driving are some of the other market needs in the automotive	Increasing complexity and styling requirements are driving composites usage

OEMs focusing 15% of Fuel Saving Targets from Light Weight Materials. About 800 lbs Weight Saving Required per Vehicle

Technologies to Meet CAFÉ 2025 Regulations



Source: Lucintel, NHTSA, EPA

Key Insights

- To meet CAFÉ 2025 regulations automotive OEMs are looking at all different alternatives, such as powertrain improvements, power-train electrification, design improvement, and weight reduction
- Reduction in 10% of curb weight can reduce fuel consumption by 6.5%
- To get extra fuel efficiency of 4.5 MPG, about 25% weight reduction (700 to 900 lbs) is required
- Carbon fiber will play a vital role in achieving this mark of about 25% reduction in the overall vehicle weight along with other lightweight materials in achieving fuel efficiency targets

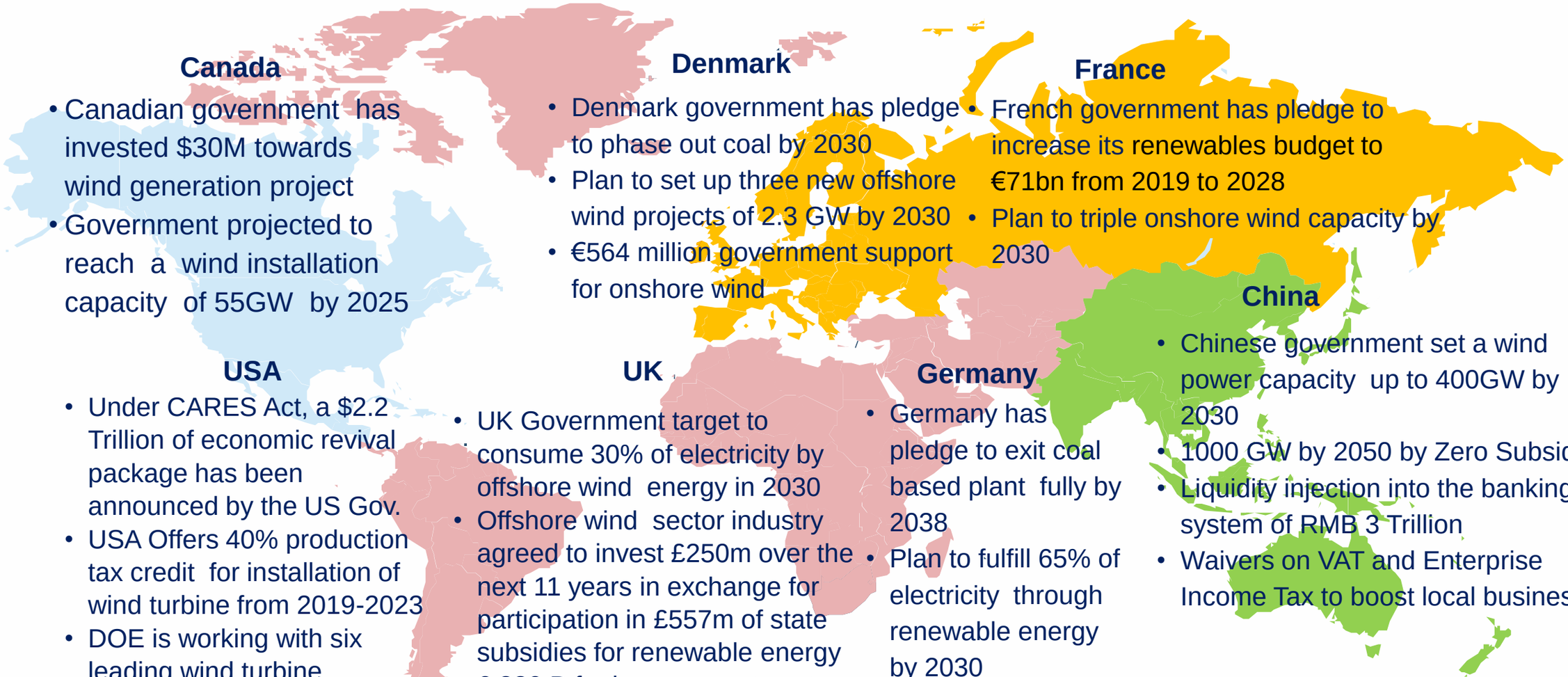
Weight Saving Initiatives by OEMs

S.No.	OEMs	Model Name	Vehicle Type	Year	Vehicle Weight	Lightweight Material Used	Applications
1	BMW	7 Series	Sedan	2015	2633 lbs.	CFRP	B Pillar
2	Audi	R8 Spyder	Super Car	2017	3572 lbs.	CFRP	B Pillar & Rear Wall
3	Audi	A8	Sedan	2017	4673 lbs.	CFRP	Chassis
4	Porsche	911 Turbo S	Sports Car	2017	3527 lbs.	CFRP	Wheel
5	Audi	R8	Sport Sedan	2018	3205 lbs.	CFRP	Engine Bay Brace
6	Audi	A8	Luxury Car	2018	4673 lbs.	CFRP	Rear Wall Panel
7	Honda	FIT	Passenger Car	2015	2573 lbs.	AHSS	Body Structure, Doors, Front Panel
8	Hyundai	RM19	Motor Sports	2020	3120 lbs.	Carbon fiber	Front Lip, Rear Diffuser, & Spoiler, Side Mirror Cover

Wind Energy Market Needs and its Impact on Composites

Market Needs	Impact on Composites
Blade Length and Design: OEMs are targeting to increase blade length so that maximum energy can be produced from single wind turbine whereas designing decides its desired performance	Increasing demand of composites as it provides significant weight saving and ease in achieving increased length and complex design over the traditional materials
Cost Reduction: Technology used to manufacture composite parts are costlier than the other traditional process. There is a significant requirement of cost reduction in this industry	Increasing demand of pultrusion in wind energy market. Pultrusion technology helps in reducing cost compared to prepreg technology without compromising its mechanical properties

Govt. Across the Globe is taking Initiative to build Renewable Energy as Main Source of Energy and Setting Good Targets



Canada

- Canadian government has invested $30M towards wind generation project
- Government projected to reach a wind installation capacity of 55GW by 2025

Denmark

- Denmark government has pledge to phase out coal by 2030
- Plan to set up three new offshore wind projects of 2.3 GW by 2030
- €564 million government support for onshore wind

France

- French government has pledge to increase its renewables budget to €71bn from 2019 to 2028
- Plan to triple onshore wind capacity by 2030

China

- Chinese government set a wind power capacity up to 400GW by 2030
- 1000 GW by 2050 by Zero Subsidy
- Liquidity injection into the banking system of RMB 3 Trillion
- Waivers on VAT and Enterprise Income Tax to boost local business

USA

- Under CARES Act, a $2.2 Trillion of economic revival package has been announced by the US Gov.
- USA Offers 40% production tax credit for installation of wind turbine from 2019-2023
- DOE is working with six leading wind turbine manufacturer to achieve 20% wind power in US by 2030

UK

- UK Government target to consume 30% of electricity by offshore wind energy in 2030
- Offshore wind sector industry agreed to invest £250m over the next 11 years in exchange for participation in £557m of state subsidies for renewable energy
- £ 330 B for loan guarantees to businesses
- £42.0 B for job retention scheme

Germany

- Germany has pledge to exit coal based plant fully by 2038
- Plan to fulfill 65% of electricity through renewable energy by 2030

Major OEMs are Incorporating Carbon Fiber for Larger Wind Blades (1/2)

OEMs	MW	Blade Size (M)	Blade Supplier	CF Usage	Off-Shore/ On-Shore	Status
Siemens Gamesa	5.0	62.5	In-house	Yes	Offshore	Launched
Siemens Gamesa	2.0	43.0	In-house	Yes	Onshore	Launched
Siemens Gamesa	7.0	75.0	In-house	No	Offshore	Launched
Siemens Gamesa	6.0	75.0	In-house	No	Offshore	Launched
Areva	5.0	66.0	In-house	Yes	Offshore	Launched
Guodian United	6.0	66.5	In-house	Yes	Offshore	Launched
GE Energy	4.8	77.0	LM Wind	Yes	Onshore	Launched
GE Energy	5.3	77.0	LM Wind	Yes	Onshore	Launched
Vestas	8.0	80.0	In-house	Yes	Offshore	Launched
Vestas	3.45	57.2	In-house	Yes	Onshore	Launched
Vestas	3.45	66.7	In-house	Yes	Onshore	Launched
Vestas	4.2	73.7	In-house	Yes	Onshore	Launched
Samsung	7.0	83.5	SSP	Yes	Offshore	Launched
Alstom (GE Energy)	6.0	73.5	LM Wind	No	Offshore	Launched

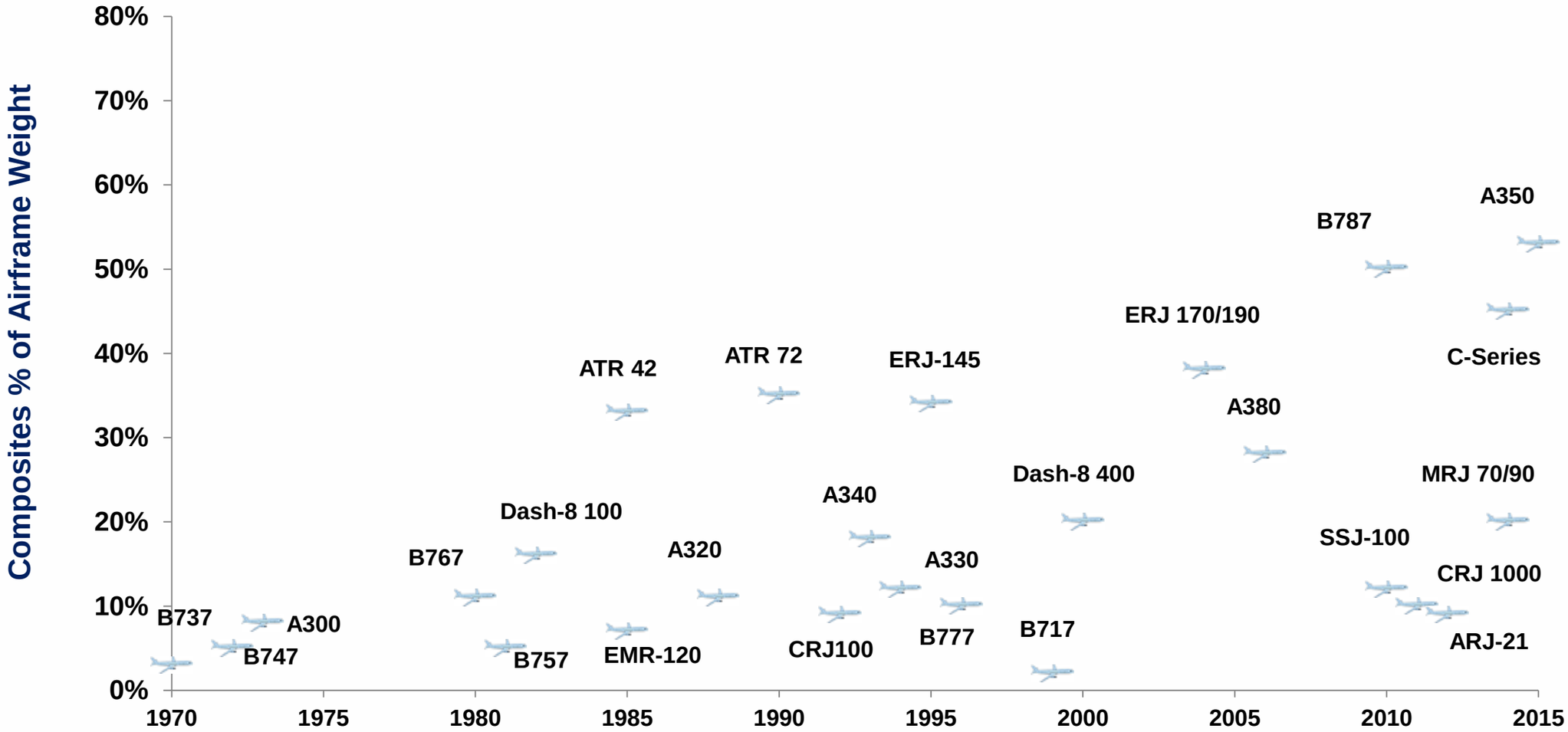
Major OEMs are Incorporating Carbon Fiber for Larger Wind Blades (2/2)

OEMs	MW	Blade Size (M)	Blade Supplier	CF Usage	Off-Shore/ On-Shore	Status
Goldwind	6.0	77.7	Sinoma	Yes	Offshore	Launched
MingYang	6.0	69.0	In-house	Yes	Offshore	Launched
Suzlon	2.6 – 2.8	64.0	In-house	Yes	Onshore	Launched
Nordex	4.0 - 4.5	73.0	In-house	Yes	Onshore	Launched
Siemens Gamesa	10	94	In-house	No	Offshore	Launched
MHI Vestas	9.5	85	MHI Vestas	Yes	Offshore	Launched
MHI Vestas	10	80	MHI Vestas	Yes	Offshore	Launched
GE Energy	12	107	LM Wind	Yes	Offshore	Under Development

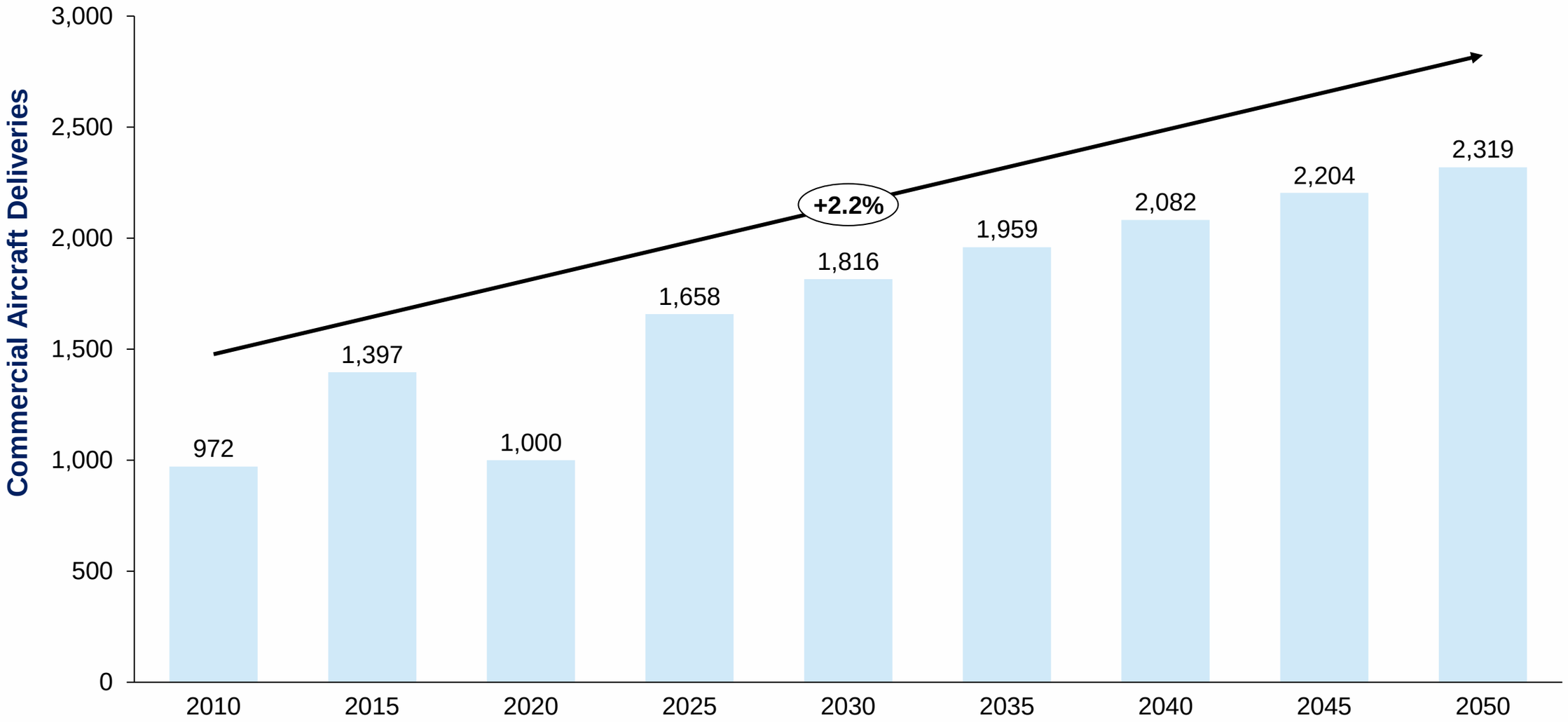
Aerospace Market Needs and its Impact on Composites

Market Needs	Impact on Composites
Light Weight: Airbus and Boeing are trying to reduce weight of their aircrafts. There are various stringent certification and qualification are required in the aerospace industry	Increasing demand of composites with increasing demand of light weight and fuel efficiency as it provides 40%-50% structural weight saving with required strength and performance
Safety : Passenger safety or human safety is the major critical factor. Demand for the stronger and lighter materials are high	Increasing emphasis on safety concern drive the composites usage as composite materials are not only light weight but also the strongest material which can be used to light weight without effecting its safety measures

Evolution of Composite Materials in Aerospace Industry



Global Commercial Aircraft Delivers Projection from 2010 to 2050



Construction Market Needs and its Impact on Composites

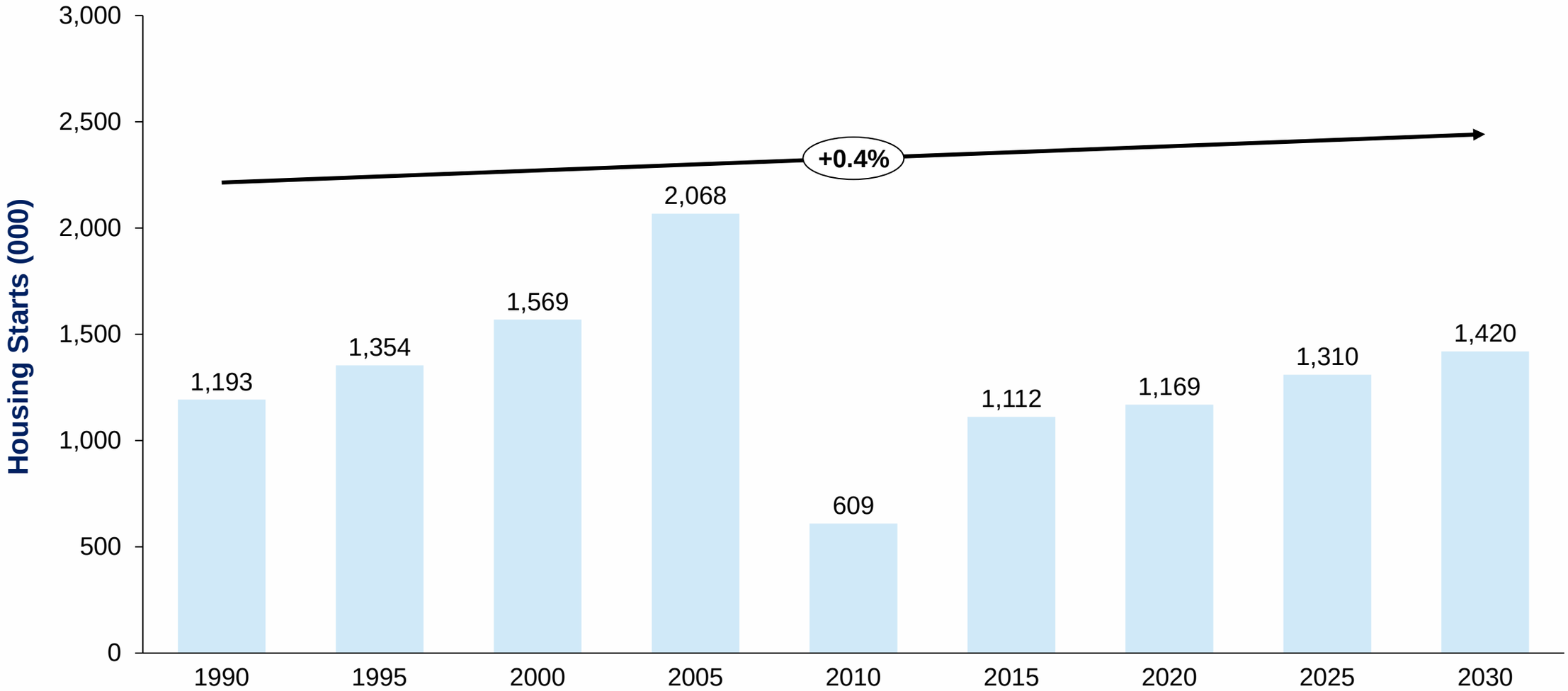
Market Needs

Corrosion Resistance and Durability : Corrosion resistivity and long life cycle are the main criteria for the construction industry for selecting any material

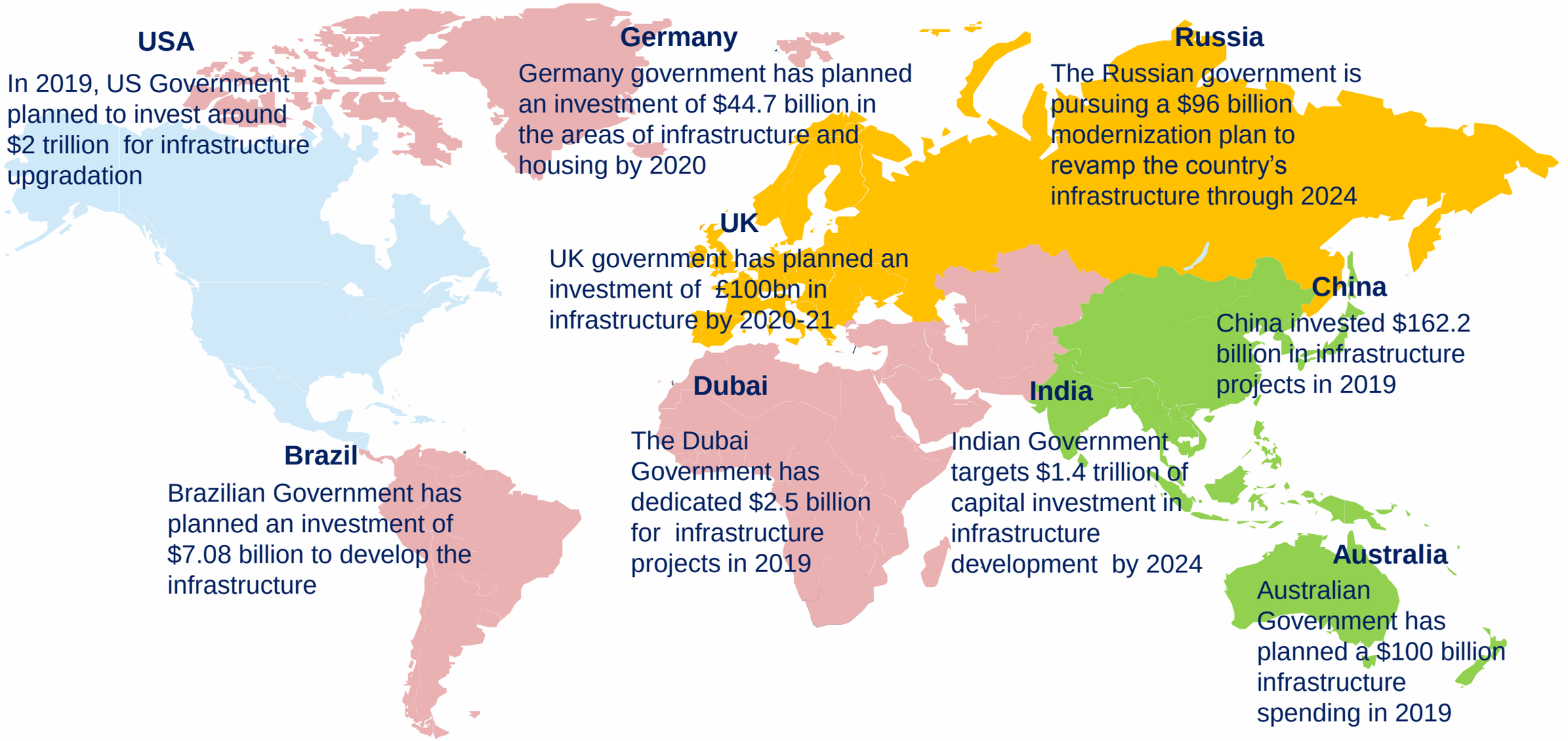
Impact on Composites

Increasing demand of corrosion resistance and durability is one of the major driving factor for composites growth in construction. Composites offer better corrosion resistance and life cycle durability than competing materials such as steel and aluminum

US Housing Starts from 1990 to 2030



Govt. Across the Globe are Spending more on Infrastructure which will drive the Demand of Composites



USA

In 2019, US Government planned to invest around $2 trillion for infrastructure upgradation

Germany

Germany government has planned an investment of $44.7 billion in the areas of infrastructure and housing by 2020

Russia

The Russian government is pursuing a $96 billion modernization plan to revamp the country's infrastructure through 2024

UK

UK government has planned an investment of £100bn in infrastructure by 2020-21

China

China invested $162.2 billion in infrastructure projects in 2019

Dubai

The Dubai Government has dedicated $2.5 billion for infrastructure projects in 2019

India

Indian Government targets $1.4 trillion of capital investment in infrastructure development by 2024

Brazil

Brazilian Government has planned an investment of $7.08 billion to develop the infrastructure

Australia

Australian Government has planned a $100 billion infrastructure spending in 2019

Innovation Areas to Drive Composites Growth

		Impacts on Composites Growth
A Cost Reduction	• Cost reduction in composites, especially in carbon composites parts	Huge growth opportunity in mass volume vehicles
B Light Weighting	• Light weighting trends driven by government regulations on fuel efficiency	Increased usage of CFRP and CNRP in Automotive, Aerospace, & Wind Energy
C Low Cycle Time	• Development of transformative technologies with low cycle time for mass production vehicles	Huge growth opportunity in mass volume vehicles
D Hybrid Composites	• Parts made with a mix of metals and composites enabling best property utilization of both	Increased penetration hybrid composites applications in Automotive, A&D, Construction
E Green Composites	• Development of environmental friendly resin and fiber systems and betterment of mechanical properties of natural composites	Increased usage of natural composites in Automotive
F Cradle to Grave	• Development of repair and recycling technologies for composites	Huge opportunity for recycled composites in Automotive, Aerospace, Construction

Issues of Composites to Deliver Better Solutions

Issues	Industry Expectations
High Materials Cost	• Carbon fiber price reduction by 50%-60% (~$5/lb) • Glass fiber price reduction by 10%-30% • Resin price reduction by 10%-40%
Lack of High Volume Process for Structural Parts	• More than 30,000 parts annually using continuous fiber composites • Part manufacturing cycle time 1-2 minutes • Materials layup rate up to 150 kg/hr
Print Thru	• Class A surface finish for exterior applications
Machining & Joining	• Improved machining and joining technologies for composites
Repair and Recyclability	• Improved technologies for composite part repairing and recycling

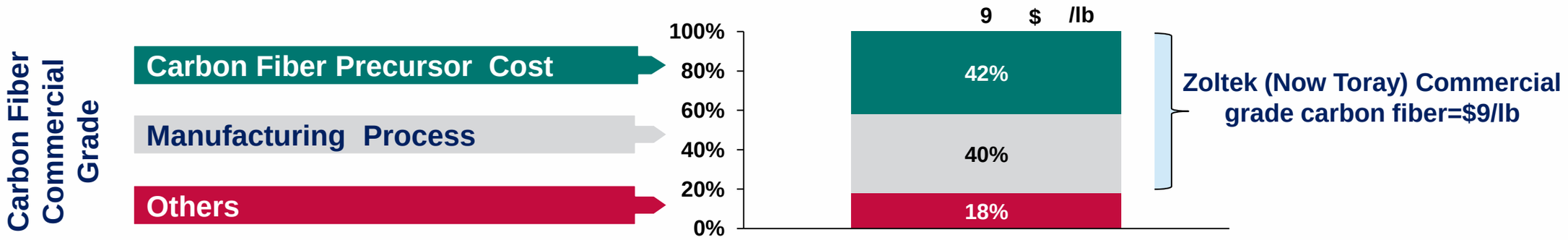
Table of Contents

Major Future Disruptions in the Composites Industry

Major Disruptions	Enablers	Impacted Industries
Cost Reduction in Carbon fiber	Alternative precursors, such as lignin, olefin, textile PAN, etc. Someone will launch low cost carbon fiber ($3 - $6 per lb) in future	• Automotive
Improvement in Productivity	Low cure resins and faster and dependable technologies. Part manufacturing process with cycle time of 1 to 2 minutes for mass production	• Automotive • Aerospace
Mass Customization - 3D Printing Enabler	3D printing for different composites applications especially in automotive and healthcare	• Aerospace • Automotive • Healthcare

"Mobile phones disrupted landlines, Apple iPod disrupted music industry. Similarly, composites will disrupt traditional materials in various industries. Shift to composites will potentially help the environment, OEMs, and end users"

Disruption 1: Development of Low Cost Carbon Fiber Using Alternative Precursors and Manufacturing Process



Current carbon fiber price is very high. Auto Industry is looking for price in the range of $5-$6/lbs

Major Areas of Carbon Fiber Cost Reduction

Alternative Precursors

- Commercial grade PAN
- Textile grade PAN
- Lignin based
- Polyolefin based

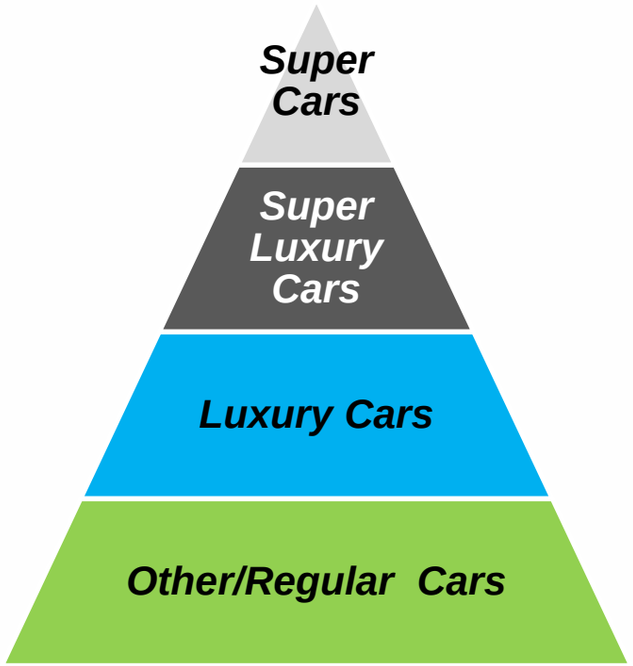
Cost Reduction Potential 20%-30%

Manufacturing Process

- Advanced Oxidative Stabilization
- MAP Carbonization
- Advanced Surface Treatment & Sizing
- Tow Splitting

Cost Reduction Potential 40%-60%

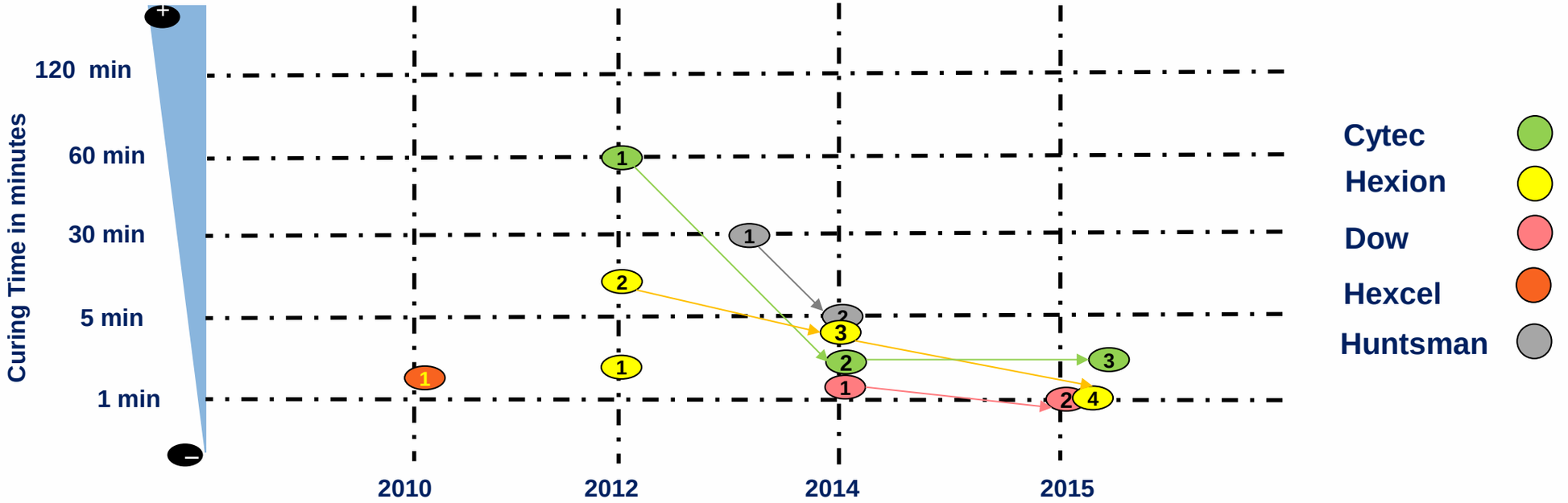
Reduction in Carbon Fiber Costs could double Revenues from the Automotive Industry



Global Light Vehicles Production Forecast by Car Type in 2025		Expected Demand of CF @ Current Price in 2025			Expected Demand of CF @ $5/lb in 2025		
		CF Usage in % of cars	Demand in M lbs	$M	CF Usage in % of cars	Demand in M lbs	$M
Super Cars	*9,700*	*100%*	*2.4*	*24.3*	*100%*	*2.4*	*12.1*
Super Luxury Cars	*855,000*	*95%*	*65.0*	*649.8*	*100%*	*128.3*	*641.3*
Luxury Cars	*4.7 Million*	*55%*	*65.1*	*651.3*	*80%*	*277.4*	*1,137.2*
Other/Regular Cars	*91.9 Million*	*3%*	*4.1*	*41.1*	*15%*	*138.2*	*691.0*
Global Light Vehicles Production in 2025	*97.5 Million*		*136.1*	*1,366.5*		*496.3*	*2,481.6*

Source: Lucintel

Disruption 2: Major Players are Developing Shorter Cure Time Epoxy Resins to Reduce the Production Cycle Time



Product	Resin
1	HexPly® M77
1	CYCOM 823 RTM
2	XMTR50
3	XMTR750

Product	Resin
1	VORAFORCE 5300 ultra-fast epoxy resin
2	VORAFORCE 5300
1	Araldite MY 0610
2	Araldite LY 3585

Product	Resin
1	EPIKOTE 05475
2	EPIKOTE 04695-1
3	EPIKOTE Resin 06465
4	EPIKOTE TRAC 06170

Source: Lucintel

Composites Industry is Targeting on HP-RTM and CFRTP Processes for Reaching the Desired Cycle Time of 1-2 Minutes

BMW	HP-RTM	Cycle Time: <10 Minutes
Lamborghini	HP-RTM	Cycle Time: <10 Minutes
Lexus	Forged Composites, RTM	Cycle Time: 6 to 10 Minutes
Ford (Go Further)	Prepreg Layup, RTM, SMC	Cycle Time: Unknown
GM	CFRTP	Cycle Time: Unknown
McLaren	CFRTP	Cycle Time: 1 Minute
Aston Martin	HP-RTM	Cycle Time: <3 Minutes

TORAY Innovation by Chemistry
SGL GROUP THE CARBON COMPANY
Callaway
TORAY Innovation by Chemistry
DOW
TohoTenax
CARBO TECH Mubea Carbo Tech
Gurit

Disruption 3: Evolution of Designing and Manufacturing of 3D Printing Allows Mass Customization in Composites Applications

Aerospace and Defense

- Fuselage
- Wings
- Spars
- Fan Blades
- Interior parts

- Hollow composite parts
- Drone Rotor Support Arm
- Propellers, etc.

Automotive

- Car Body
- Air Intake
- Airfoil
- Roof parts, etc.

Healthcare

- Orthopedic implants
- Prosthetics
- Hearing aids , etc.

Impact on Industries

So far, 3D printing has emerged as a viable process for prototypes, demonstration units and small volume production.

- Improved customization
- Parts on demand
- Little to no scrap
- Short lead time

- Possibility to use new materials
- Part count reduction

Major Barriers

Cost, skill requirements, and access to specialized machinery

Source: Lucintel

Table of Contents

Growth Opportunity Analysis Seeks Focus on the Right Applications, and Technologies in the Right Markets….

Your Core Strength

- Your company's core competencies – technology, application, and region
- Skill set: problems your company best at solving?

Addressable Opportunity

- Addressable market based on your company core competencies
- Growth prospects
- Attractive markets for your company (e.g. rail, automotive, construction)
- Sustainability
- Competitive Intensity

Attractive Applications

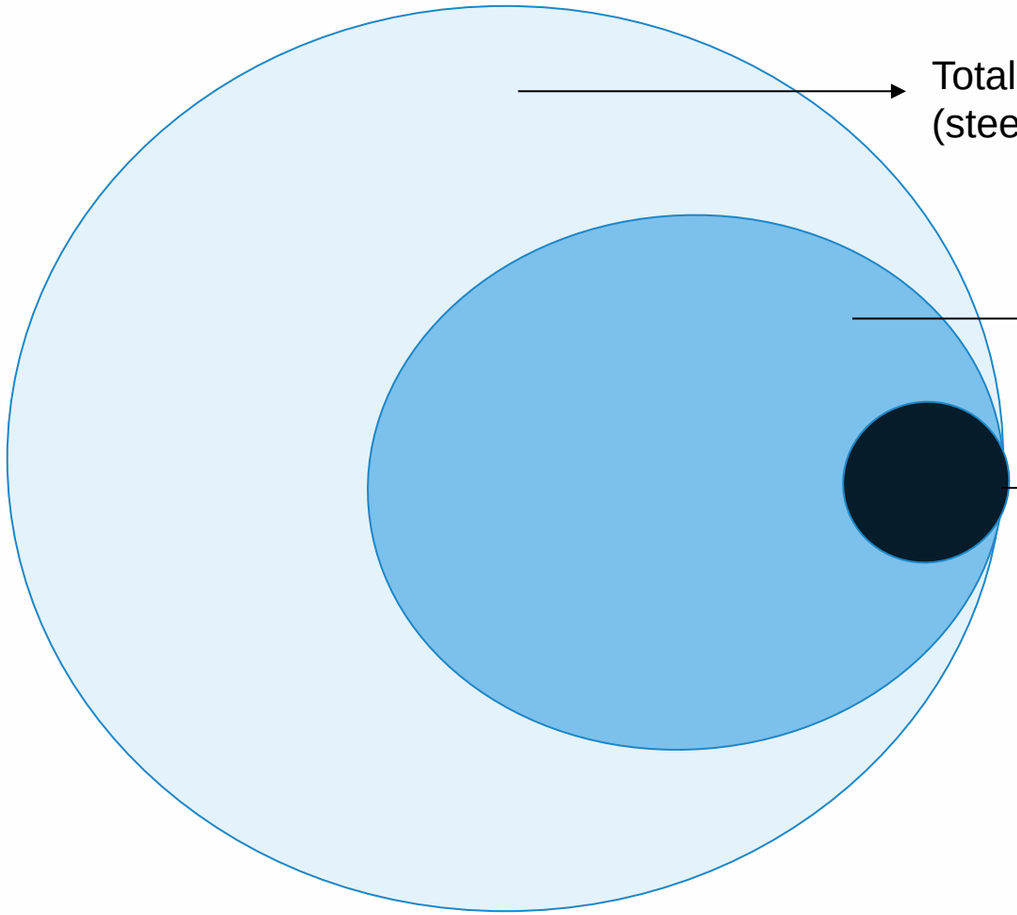
- Develop screening criteria
- Identify opportunities based on your company core competencies
- Rank opportunities
- Identify attractive regions, technologies and applications in select markets

Partnership Opportunity

- List potential companies in attractive applications
- Rank companies using screening criteria
- Adjacent technology acquisition potential
- Recommend top targets for potential JV / acquisition

How can Your Company Drive Competitive Advantage? → Which Segments / Markets to focus? → Which are the best opportunities for your company? → Why and how a partnership improve your company position?

Carefully Identify Addressable Market for Your Business



Total Market Opportunity including competing materials (steel and aluminum) : **$AA Billion**

Total Composites Related Market Opportunity in your Market Segments: **$BB Billion**

Total addressable market for Your Company based on core competency: **$CC Billion**

Case Study 1: Growth Opportunity for a Leading Prepreg Manufacturer

Challenge

- A leading prepreg supplier wanted to know about the opportunity for glass and carbon fiber prepreg in Europe and North America across various sectors

Objectives

- To estimate growth opportunities for glass and carbon fiber prepreg across sectors including rail, marine, construction, automotive, defense, infrastructure, and sporting goods in NA and Europe
- Find out prepreg consumption by molders in each sector by application and prepreg type
- Conduct ***Voice of Market analysis and Go To Customer List*** in North America and Europe

Solutions

- Lucintel identified the most attractive target applications in each region for the client based on the client's core competency
- Lucintel conducted interviews with **>700 companies** to find out their prepreg consumption patterns and provided Go To Customer List of **>250 molders**
- Lucintel developed short, medium & long term strategy in the most attractive markets with action plan

Results

- The **company's sales** for the relative growth segments grew by **25%** over **2 years**

Case Study 2: Growth Opportunity for a Leading Pipe Manufacturer in Composite Pipes

Challenge

- A leading FRP pipe manufacturer in the US wanted to know about the opportunity existing for them in composite pipes applications in the US and Canada

Objectives

- To identify total opportunity for FRP pipe and steel pipes
- Identify the addressable market (new/replacement) for FRP pipes for the client based on their core competencies (Diameter, pressure rating, etc.)
- Conduct market share analysis, price vs performance analysis with competing materials, customer identification, and customer requirement analysis in various diameter ranges

Solutions

- Lucintel identified addressable market opportunity based on client core competencies and looked into competing materials performance over the last 10 years
- Lucintel provided Go To Customer List with **$50 million dollar sales opportunity in next 10 years**
- Lucintel developed short, medium and long term strategy with detail actionable plan

Results

- The **company's sales** grew by **35%** over **2 years**

Lucintel - At a Glance

- **Premier management consulting and market research firm. Founded in 1998.**
- **Deep global insights into major industries. Team of over 120 analysts / consultants across globe**
- **Management comprised of PhDs, MBAs, and subject matter experts. Head quarter in Dallas, USA.**

Conducted 500+ consulting projects across industries for 3M, Audi, Dupont, Carlyle, GE, etc.

Consulting Services

Why Lucintel

Trusted insights: Reliable insights. Widely cited in Wall Street Journal, Financial Times, Forbes, etc.

Clients we serve: Over 1000 clients from 70 countries – Fortune 500 companies

Strategic advice: Over 20 years of proven global strategic management consulting experience

Industries Served

1000+ Clients in 70 Countries Value Our Service

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