

Nonmetallic

Building & Construction Workshop

Business Opportunities

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Workshop Agenda

No.	Title of the Investment Opportunity
-	Introduction
1	Asphalt Polymer Modifiers (APM)
2	Miscellaneous Structural Components (MSC)
3	Polymer Concrete
4	Offshore Mooring
5	Elastomeric Insulation
6	Polypropylene Fiber for Concrete Reinforcement
7	Concrete Admixture
8	Composite Cladding
9	Doors & Windows
10	Flooring
11	Roofing
12	Self Insulated HVAC Ducting
13	Wood Plastic Composite Furniture (WPC)
-	Closing remarks

iktva Program Overview (1/2)

The In-Kingdom Total Value Add (iktva) program is designed to drive increased investment, economic diversification, job creation, and workforce development within the Kingdom

Saudi Aramco aims to achieve 70% local content




iktva in Procurement

2000+ Service contracts	290+ Corporate purchase agreements
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Business Opportunities

12 Sectors	200+ Business Opportunities	\$28 bn Annual Market Size
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Anchor Projects

6 Anchor projects

IMI	SPARK	Tuwaiq
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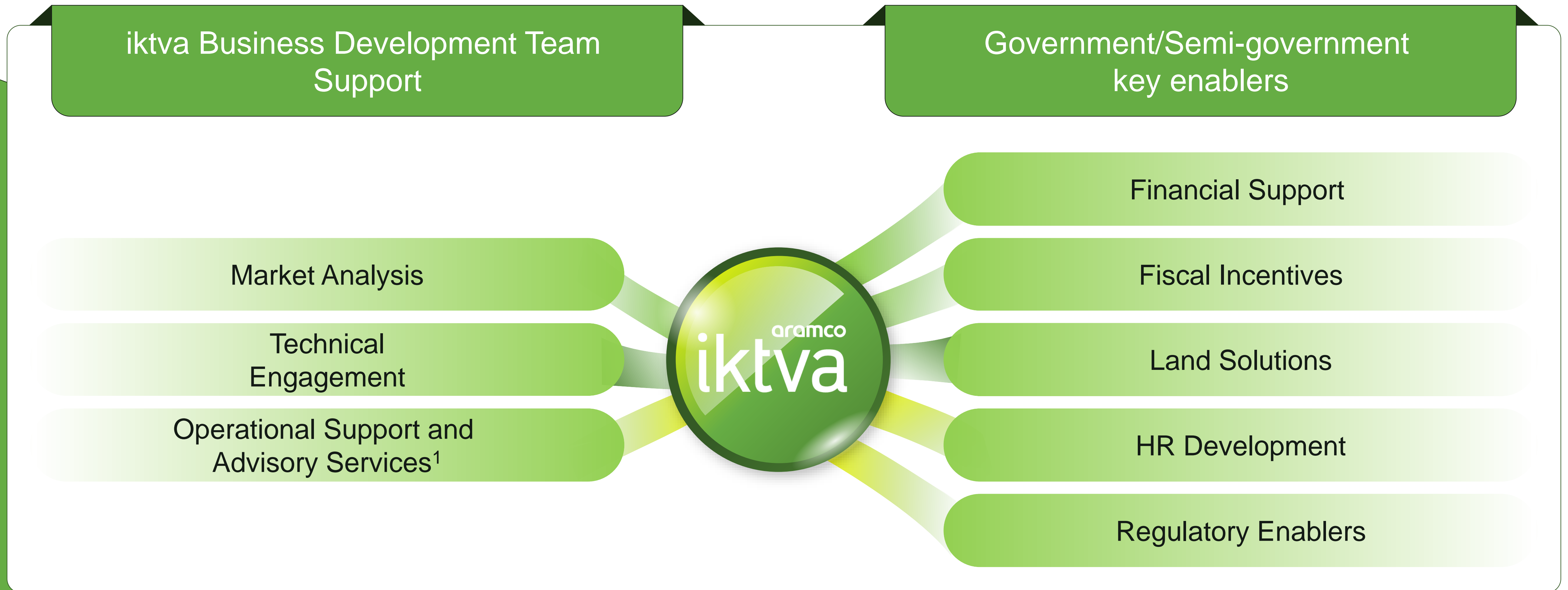
Local Workforce Development

16 National training centers	90+ Programs
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Driving Prosperity

Note: IMI = International Maritime Industries; SPARK = King Salman Energy Park











Driving Prosperity

1. Includes broad range of support services provided by the team: user requirements, advisory on available financial and fiscal incentives, guidance on localization process in line with local regulations and standards, action plan development etc.

Why invest in KSA?

Non-exhaustive

 Strong GDP growth and healthy economy	 Big market and game-changing opportunities	 Government incentives and enablers	 Ease of doing business	 Strategic global location	 Favorable demographics
Top 20 economies globally	5 Special Economic Zones drive innovation	\$1.3T+ invested in private sector by 2030	 one of world's most rewarding tax systems	12-15% of global trade passes via Red Sea	17% population growth from 2013-2023
GDP growth among highest projected in 2025 in top economies	6 giga projects driving urbanization and industry	5.7% contribution of FDI to GDP by 2030	Top 5 in the MENA region for ease of doing business	 KSA container ports are among the most efficient globally	67% of population below the age of 35

Driving Prosperity

Note: FDI = Foreign Direct Investment
 Source: IMF; MISA; Vision 2030 Key Performance Indicators; Shareek Program; World Bank

Non-exhaustive

1 Subsidies and financial programs
 Loans financing up to 75% of the industrial project provided by SIDF to foster industrial development

2 Tax incentives and exemptions
 Tax exemptions for earnings from exports and up to 50% tax credit on Saudi nationals' payroll and training costs for 10 years

3 Industrial Zones and Economic Cities
 Industrial zones like KAEC provide specialized infrastructure and logistical services essential for nonmetallic materials production

4 Customs and import duty reductions
 MoCI offers zero import duties for localization of selected raw materials, machinery, & equipment

5 Visa and legal support
 Streamlined visas for investors and skilled workers, with legal support via MISA for fast business setup and compliance



Driving Prosperity

Note: SIDF - Saudi Industrial Development Fund; MoCI = Ministry of Commerce and Industry; MISA = Ministry of Investment Saudi Arabia
 Source: SIDF; ZATCA; KAEC; MoCI; MISA

How do we define what is an opportunity?



Growing market

High growth high spend markets



**Limited local players
& import driven**

*Markets with few local contributors
and high import resilience*



**Technological
& labor feasibility**

*Markets with accessible or
standardized technology and
available skilled labor*

Key demand drivers for the KSA non-metallic building materials market



Vision 2030

- Saudi Arabia's Vision 2030 aims to diversify the economy and develop infrastructure, leading to large-scale projects like NEOM city and the Red Sea Project. These initiatives drive significant demand for building materials, including non-metallic components.



Sustainable construction practices

- There is a growing emphasis on sustainable building materials, such as energy-efficient insulation and eco-friendly paints, driven by environmental awareness and regulatory incentives. This shift promotes the adoption of non-metallic materials in construction.



Corrosion resistance needs

- Industries like oil and gas are increasingly using non-metallic materials to combat corrosion, reduce maintenance costs, and enhance durability. This trend extends to the construction sector, where non-metallic materials offer advantages in harsh environments.

Nonmetallic Building & Construction Market Overview

KSA NM Building & Construction market

\$5947MM
 6% CAGR¹

2024 KSA market size for opportunities
 in today's workshop

Thirteen opportunities to be discussed today

- 1 Asphalt Polymer Modifiers (APM)
- 2 Miscellaneous Structural Components (MSC)
- 3 Polymer Concrete
- 4 Offshore Mooring
- 5 Elastomeric Insulation
- 6 Polypropylene Fiber for Concrete Reinforcement
- 7 Concrete Admixture
- 8 Composite Cladding
- 9 Doors & Windows
- 10 Flooring
- 11 Roofing
- 12 Self Insulated HVAC Ducting
- 13 Wood Plastic Composite Furniture (WPC)

Driving Prosperity

1. 5-year forecasted KSA CAGR (2024-2029)

Note: NM = Nonmetallic

Source: Team analysis

Asphalt Polymer Modifiers (APM)

Opportunity profile - Asphalt Polymer Modifiers

1

KSA needing APM to meet demand of ongoing mega projects



Synthetic polymers



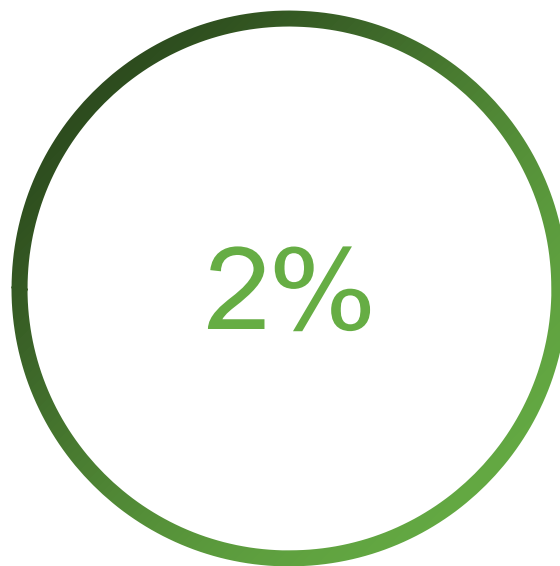
Natural polymers

2

KSA APM market is niche with stable outlook in coming years



Estimated 2024 KSA market size



Forecasted 5-year CAGR

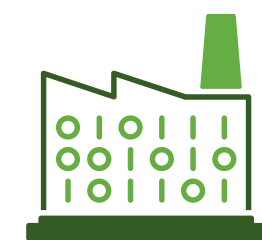
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Attractive opportunities in the APM value chain

KSA value chain opportunities



Raw material



Manufacturing

KSA enablers

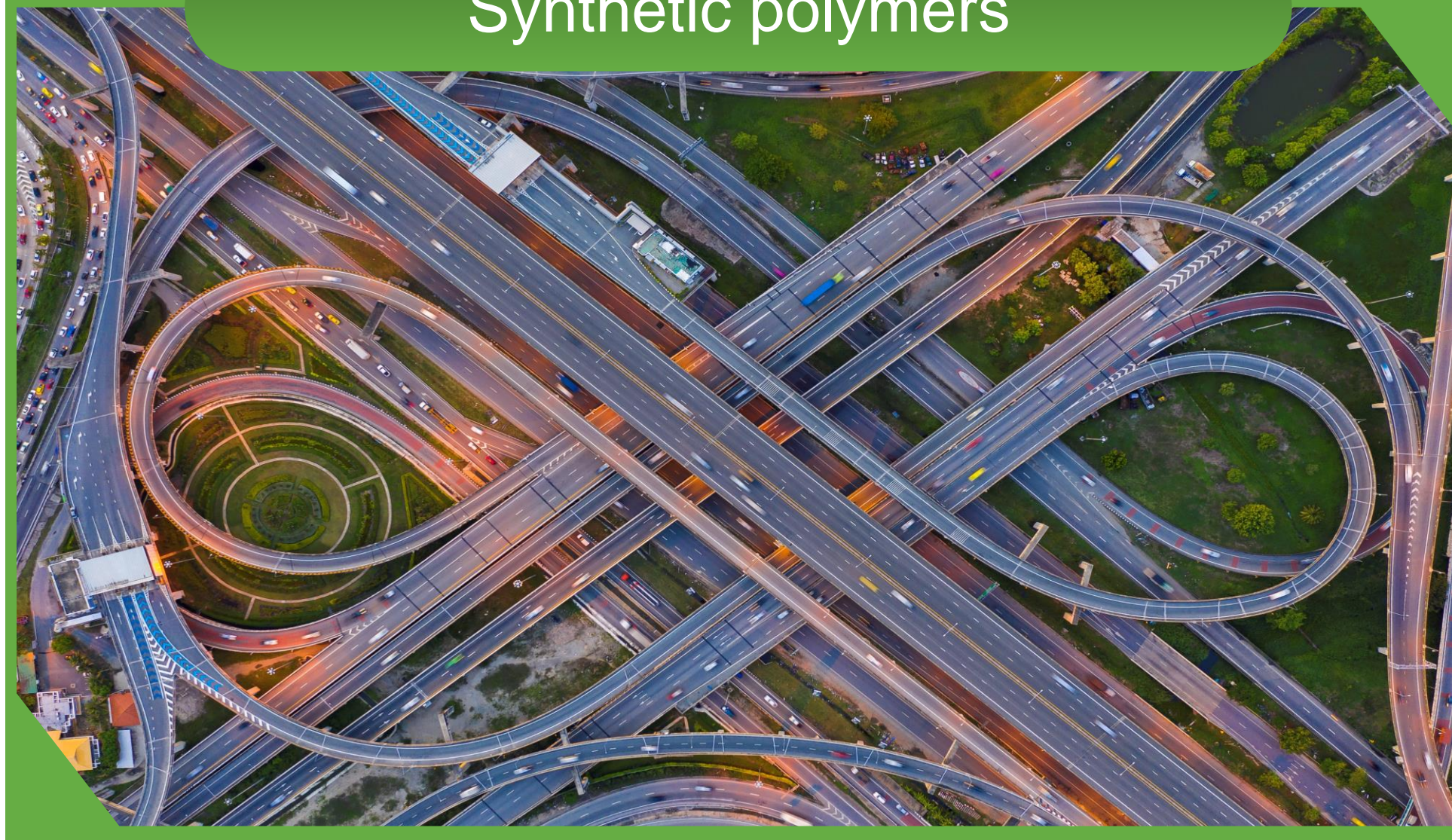
- Financial support
- Infrastructure enablers
- Investment support

Driving Prosperity

Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Freedonia; Team analysis

Potential Asphalt Polymer Modifiers localization categories

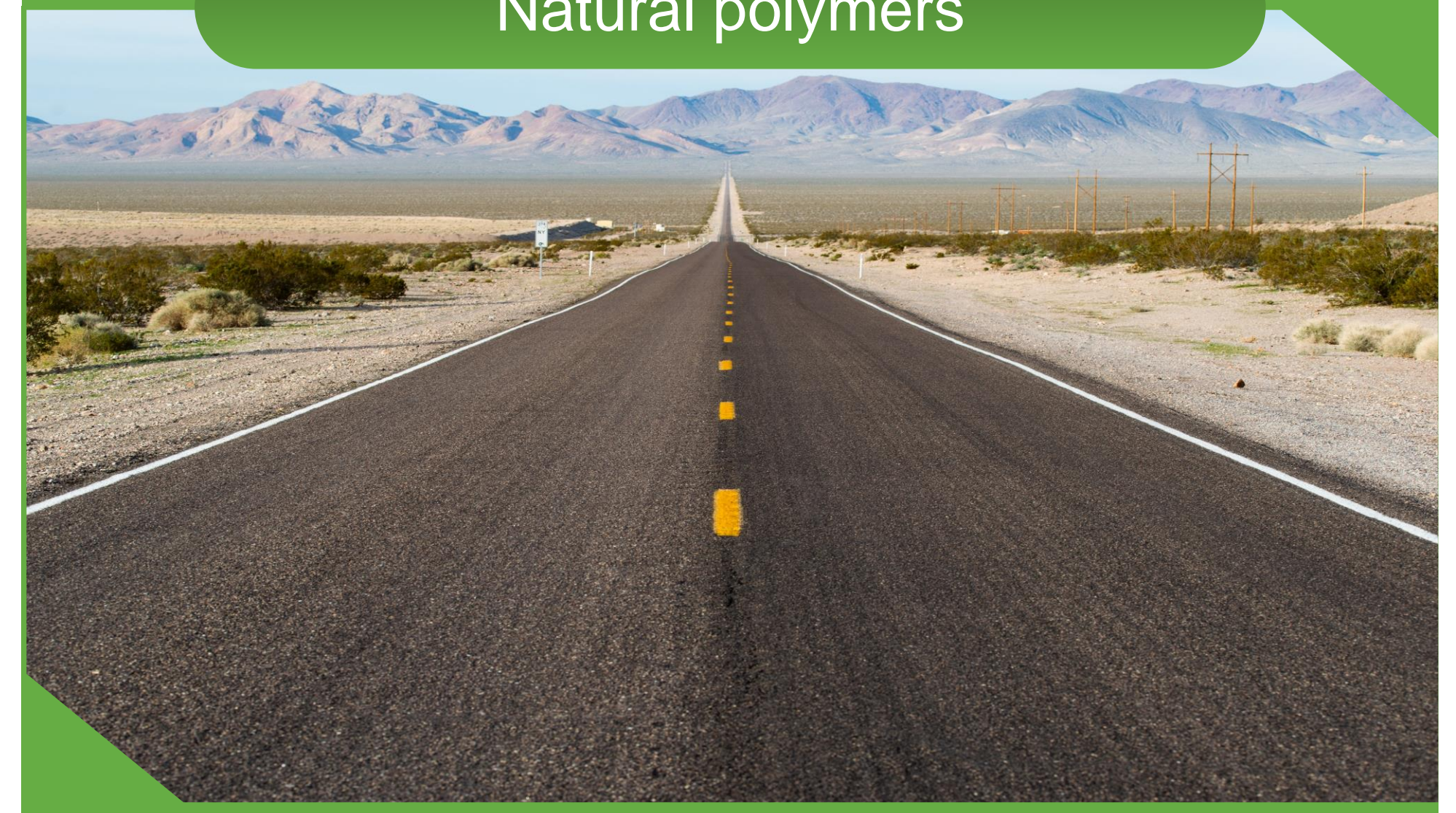
Synthetic polymers



Applications

- Highways
- Industrial zones
- Airports

Natural polymers

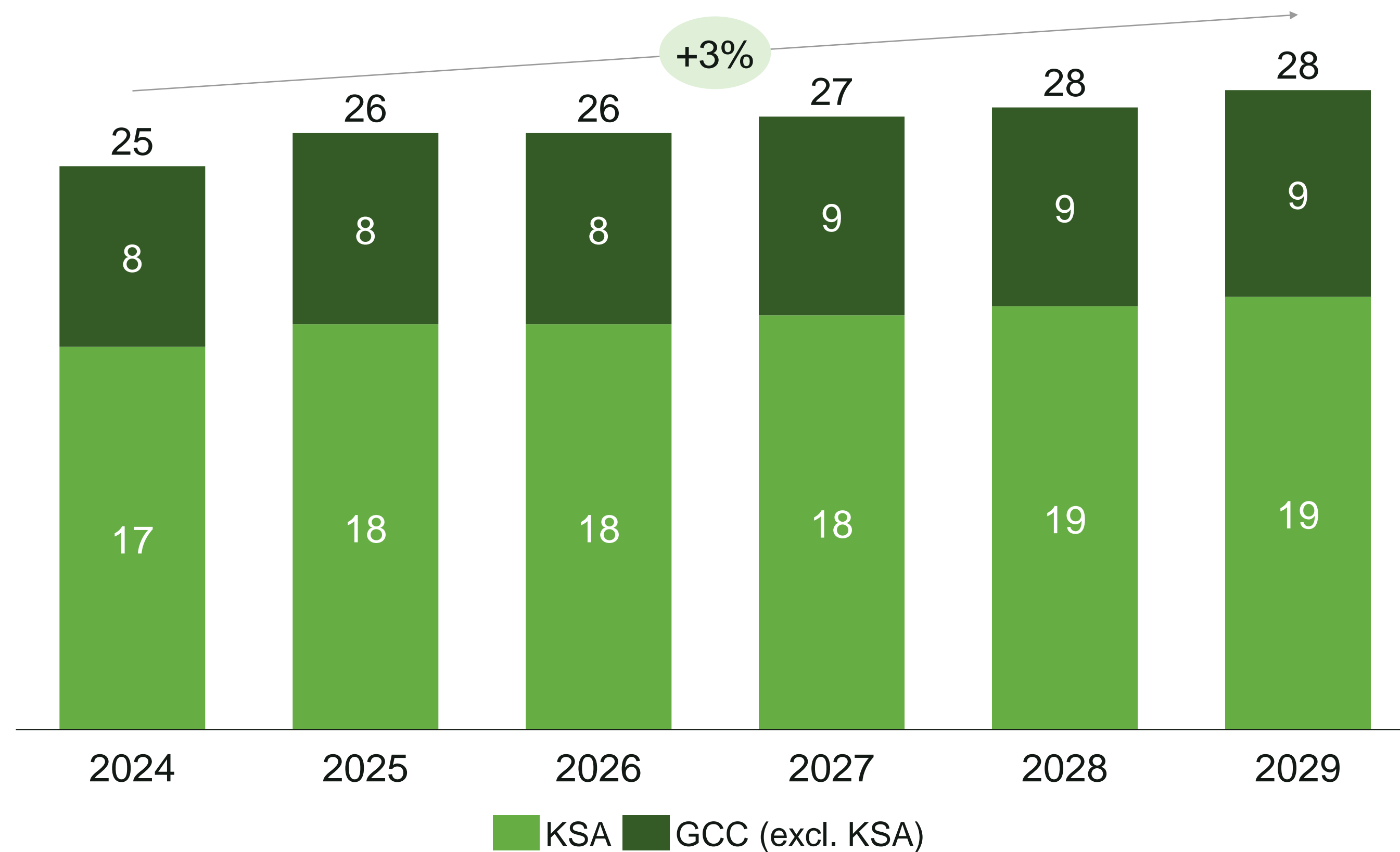


- Rural roads

Asphalt Polymer Modifiers demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC Asphalt Polymer Modifiers market 2024-2029 (\$MM)



Typical APM customers in KSA

- Road construction companies
- Airport developers
- Logistics centers

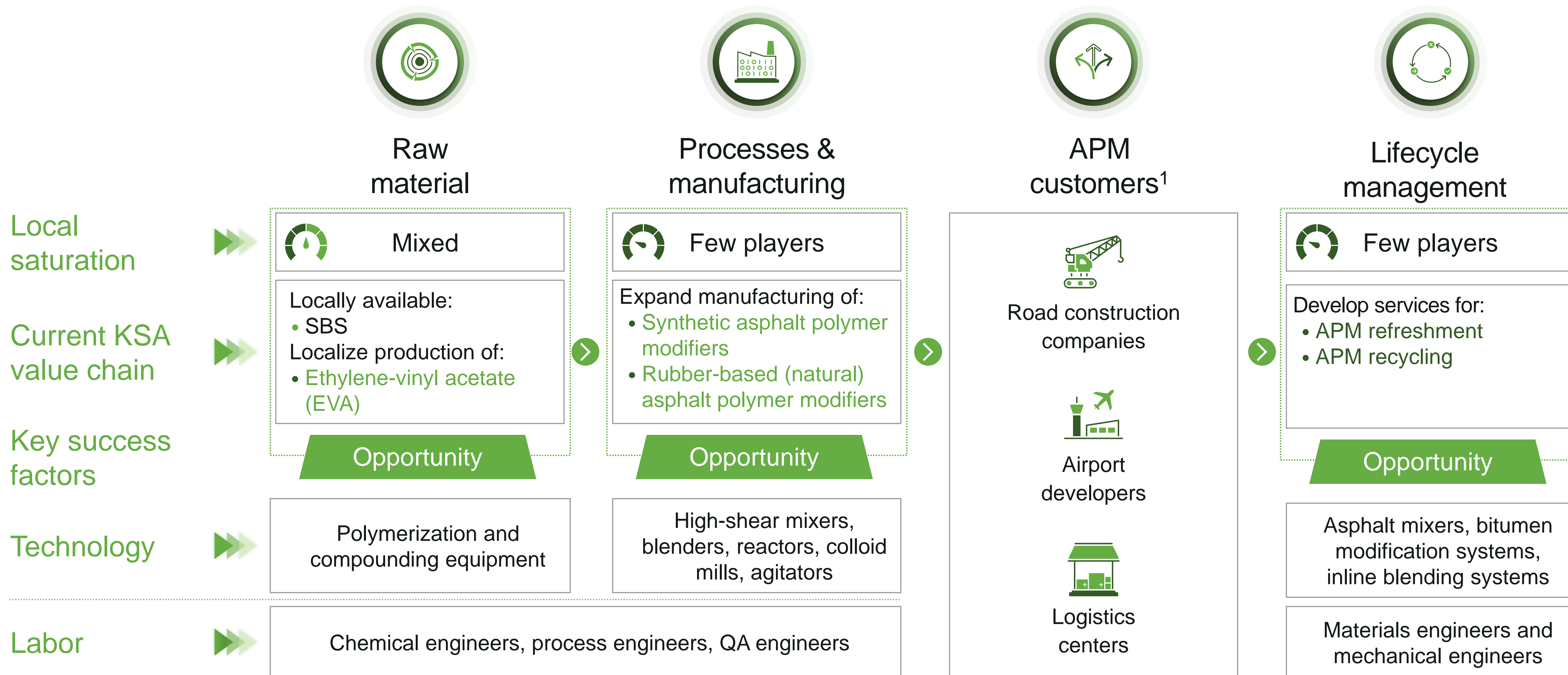
Key KSA demand drivers

- Construction expansion:** Mega projects such as Trojena and Amaala project requiring APM to ensure durable transports and communications
- Growing traffic volume:** Asphalt polymer modifiers needed to accommodate increasing wear on infrastructure from increasing number of cars (23% YoY 2023)

Driving Prosperity

Note: YoY = Year-on-year
Source: Freedonia; Team analysis

Value chain and key localization opportunities



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Driving Prosperity

1. Non-exhaustive
Note: SBS = Styrene-Butadiene-Styrene
Source: Team analysis

Investment opportunity and enablers

Key enablers in KSA to drive success



Financial Support: Access to subsidized loans from SABIC's NUSANED program for plant setup, equipment, and feedstock



Infrastructure enablers: Subsidized land lease options for chemical manufacturing in designated zones like Jubail Industrial City II



Investment support: Accelerated extension of investor license through MISA and investor support center on a regional level



Workforce Enablers: Specialized training programs by TVTC in chemical engineering and plant operations/production

Where is the opportunity



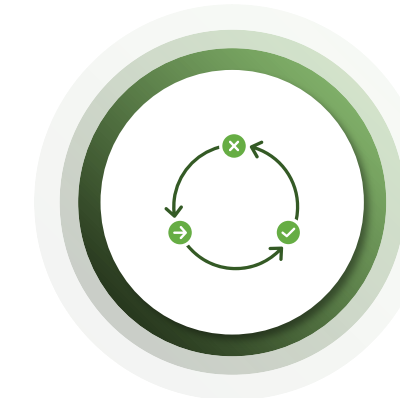
Raw material

Localize manufacturing of ethylene-vinyl acetate



Manufacturing

Opportunity to establish facility for production of asphalt polymer modifiers



Lifecycle management

Develop services for asphalt polymer modifiers refreshment and recycling

Driving Prosperity

Note: MISA = Ministry of Investment Saudi Arabia; TVTC = Technical Vocational Training Corp.
 Source: Government websites; Team analysis

Miscellaneous Structural Components (MSC)

Opportunity profile – Miscellaneous Structural Components (MSC)

1

KSA needing nonmetallic MSC to meet current infrastructure demands



Gratings



Railings



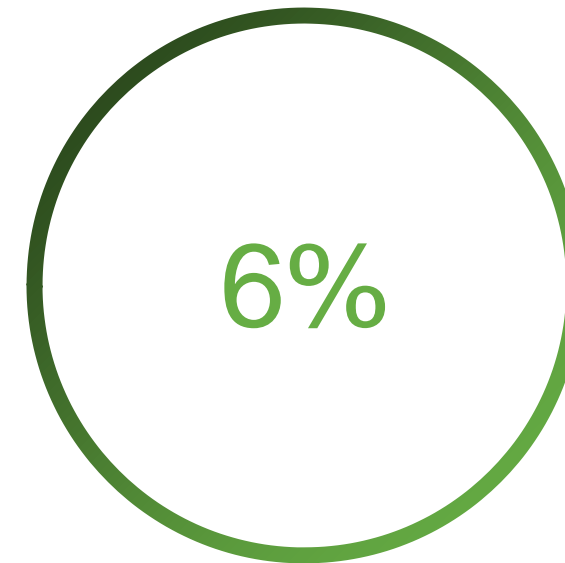
Ladders

2

Nonmetallic MSC market is sizeable with forecasted continued growth



Estimated 2024 KSA market size



Forecasted 5-year CAGR

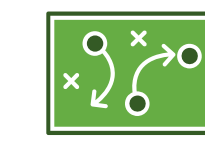
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Attractive investment opportunities in the value chain

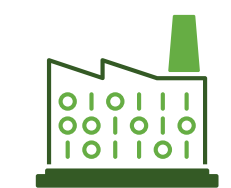
KSA value chain opportunities



Raw material



Intermediate



Manufacturing

KSA enablers

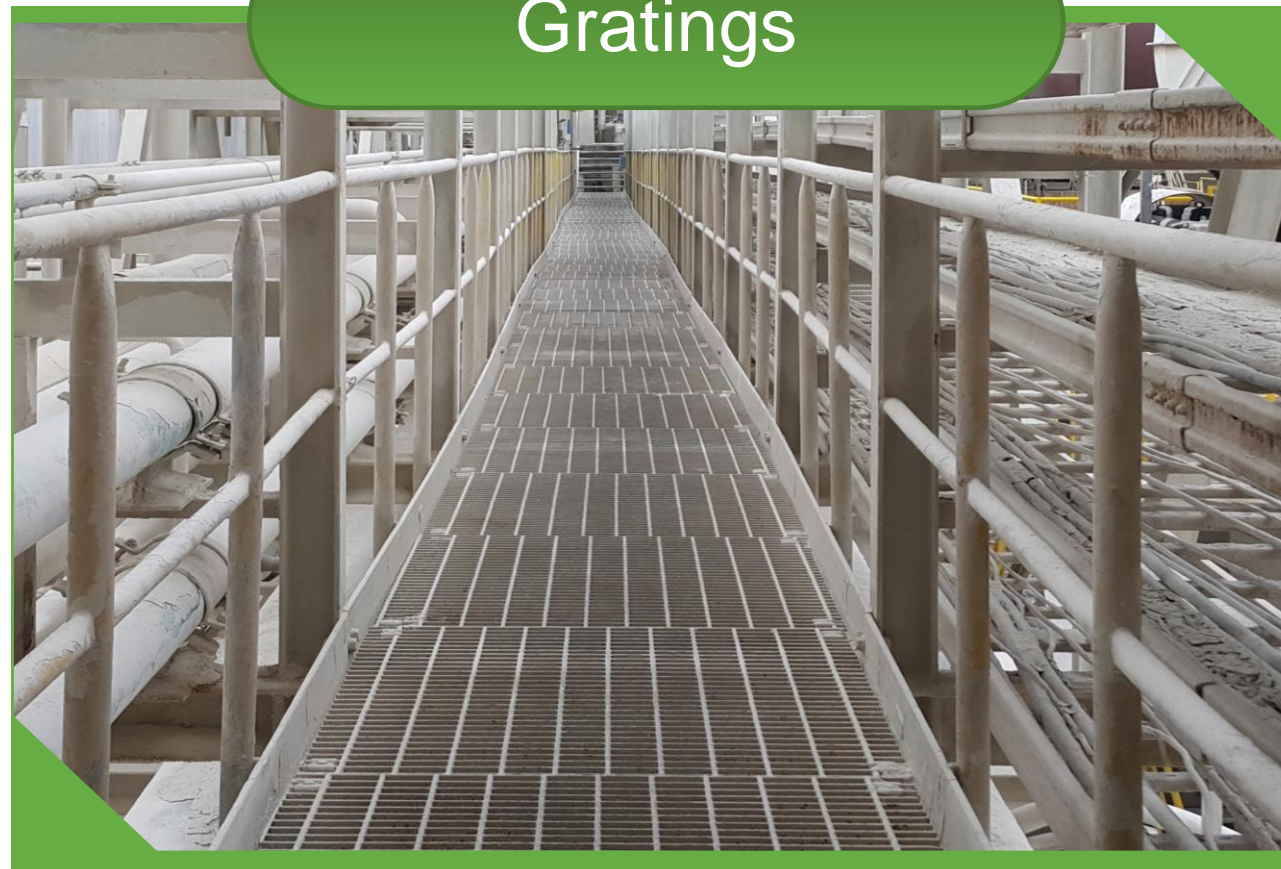
- Customs duty exemptions
- Procedural support for exports
- Subsidized land for plant setup

Driving Prosperity

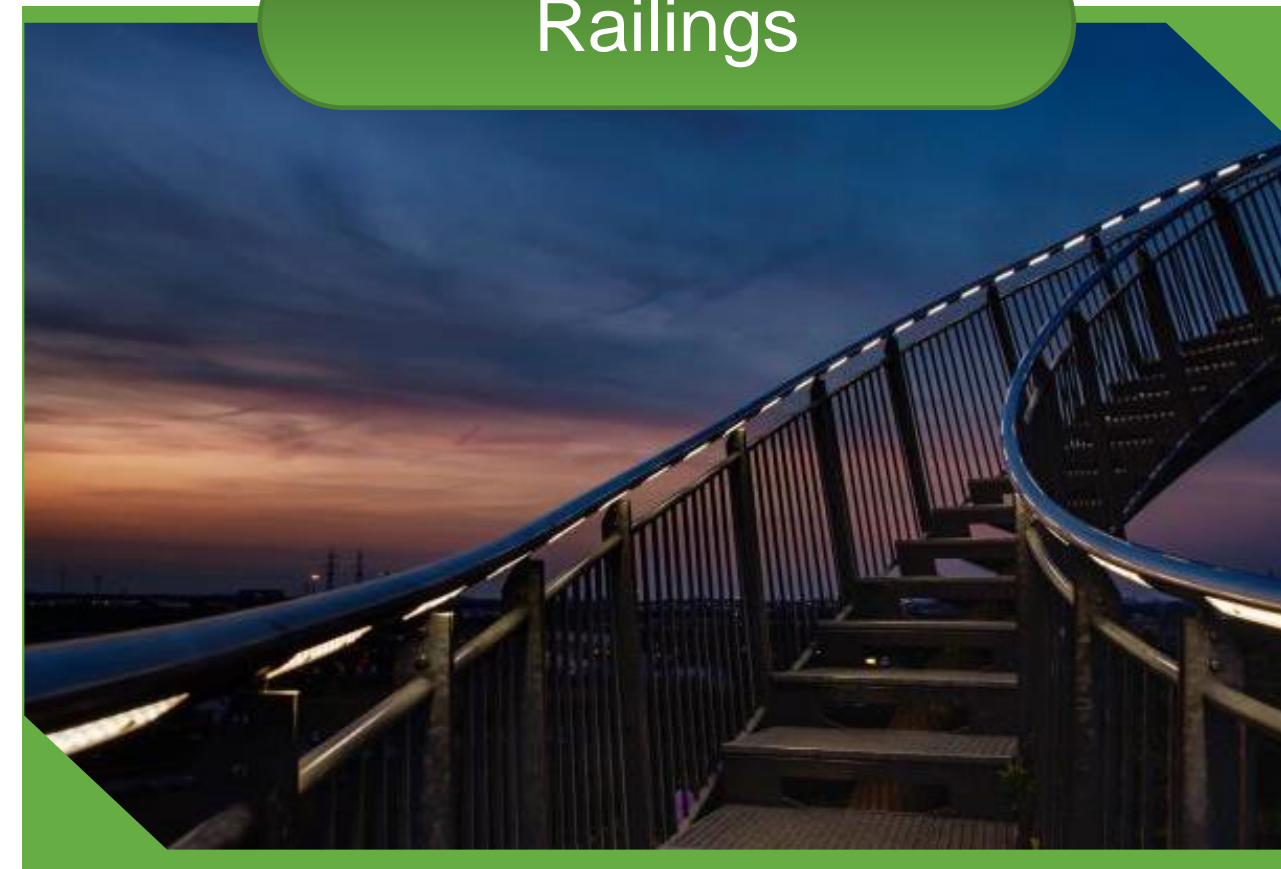
Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Mordor intelligence; Markets and markets; Grand view research; Team analysis

Potential Miscellaneous Structural Components localization categories

Gratings



Railings



Ladders



Applications

- Corrosion-resistant ventilation and drainage
- Non-conductive gratings in proximity to power equipment
- Offshore infrastructure

- Railings for balconies and staircases
- Handrails for walkways and safety zones
- Offshore infrastructure

- Marine ladders for ship decks
- Cage ladders for sterile areas like chemical production

Driving Prosperity

Note: Only considering products from nonmetallic materials such as FRP, CFRP, or composites

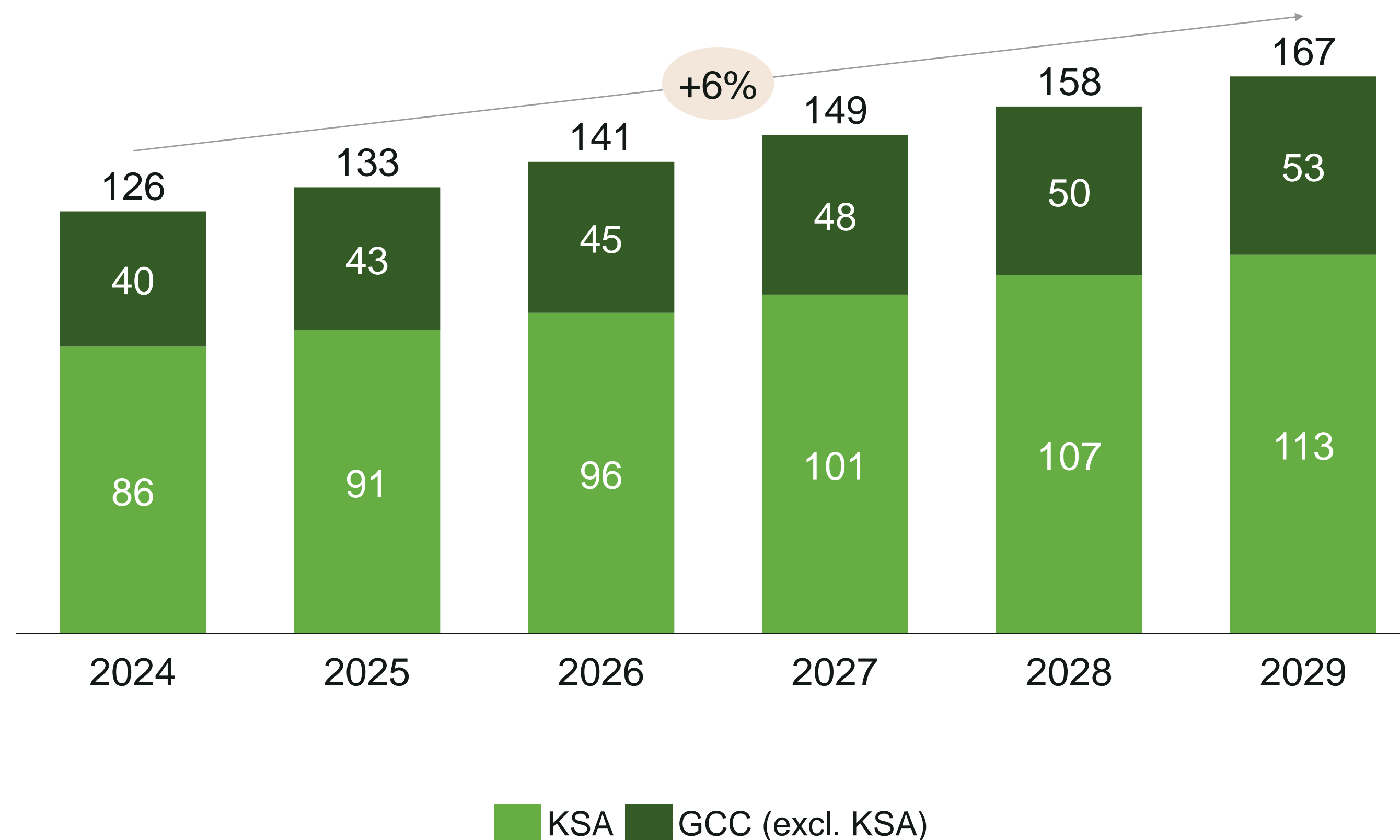
Aramco/International standards: ANSI/ACMA/FMGC; ASTM F3059; 12-SAMSS-023; BS 4592-6; SASO-2052; ASTM D4726-24; BS 7412; ASTM D7745-19

Source: Team analysis

Nonmetallic MSC demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC nonmetallic MSC market 2024-2029 (\$MM)



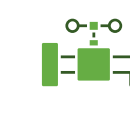
Typical customers in KSA



Oil & gas sector



Construction & industrial



Water and chemicals industry

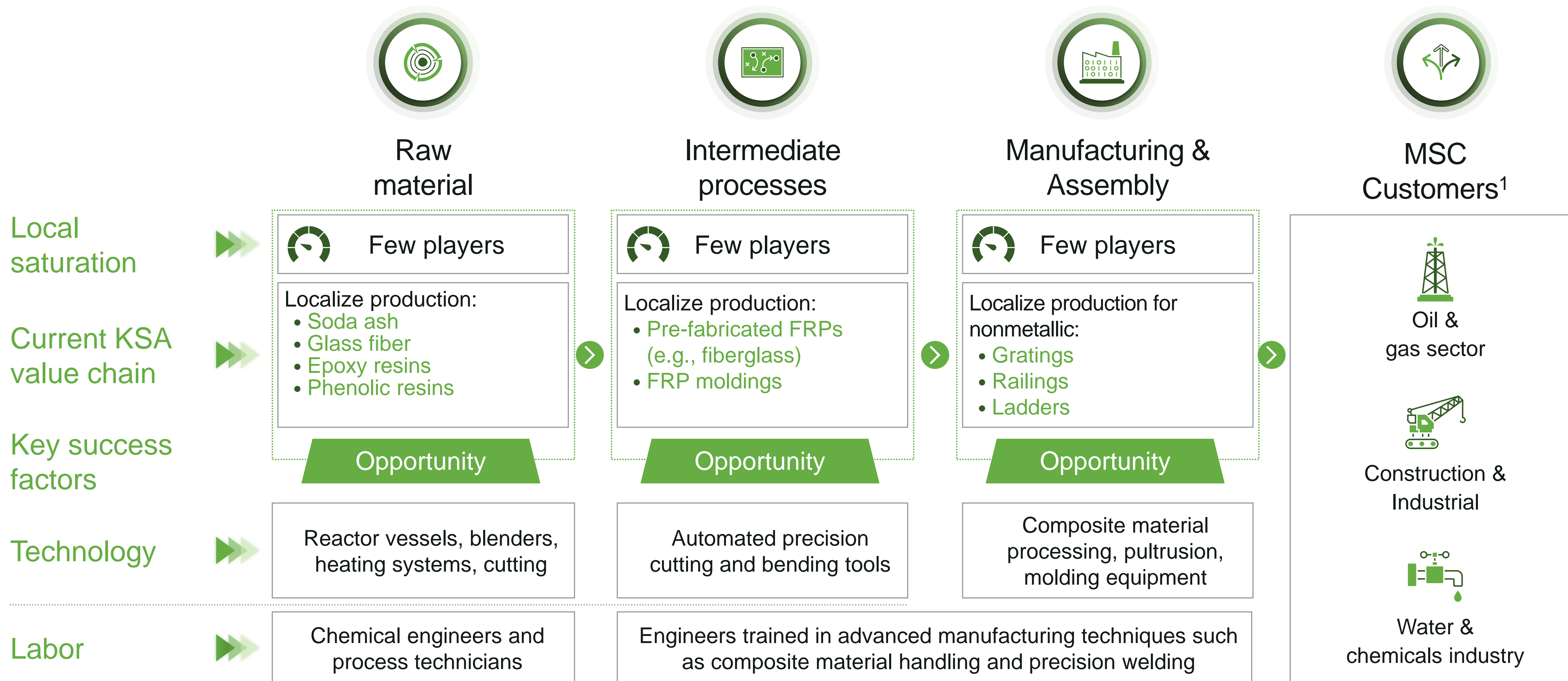
Key KSA demand drivers

- **Environmental conditions:** Nonmetallic MSC offer high resistance to corrosion, fading, and negative environmental impact in rising temperatures and UV exposure
- **Industry trends:** Rapid expansion of industrial facilities, oil and gas plants, and infrastructure projects creates a growing need for gratings, railings, and ladders

Driving Prosperity

Note: MSC = Miscellaneous Structural Components
Source: Mordor intelligence; Markets and markets; Grand view research; Team analysis

Value chain and key localization opportunities



Driving Prosperity

1. Non-exhaustive
Notes: MSC = Miscellaneous Structural Components; FRP = Fiber reinforced polymer
Source: Team analysis

Investment opportunity and enablers

Key enablers in KSA to drive success



Fiscal enablers: Expediated production establishment with custom duty exemptions on materials, machinery, and equipment



Export enabler: Financing, insurance, and trade facilitation support to ease procedural hurdles for exports



Land access: Subsidized land for plant setup across industrial zones under Modon, Royal Commission for Jubail and Yanbu, etc.



Workforce development: Fully covered or subsidized training programs by HRDF for production operations

Where is the opportunity



Raw material

Localize production of soda ash, epoxy and phenolic resins, and glass fiber



Intermediate processes

Localize production and molding of pre-fabricated FRP and FRP molding



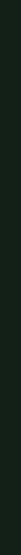
Manufacturing

Production and assembly of nonmetallic gratings, railings and ladders

Driving Prosperity

Note: FRP = Fiber reinforced polymer; HRDF = Human Resource Development Fund
 Source Expert interviews; government interviews; Team analysis

Polymer Concrete



Opportunity profile – Polymer Concrete

1

KSA needing polymer concrete to meet current infrastructure demands



Structural applications



Industrial applications



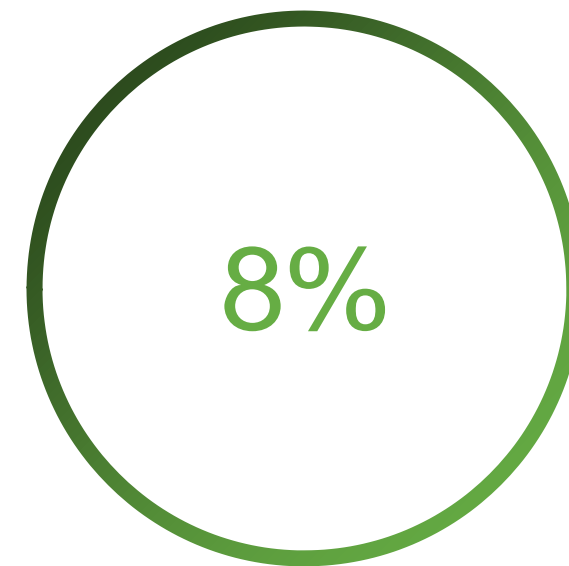
Architectural applications

2

Polymer Concrete market is sizeable with forecasted continued growth



Estimated 2024 KSA market size

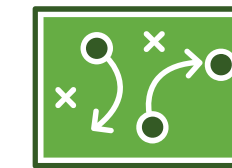


Forecasted 5-year CAGR

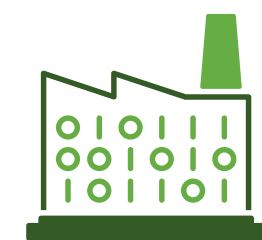
3

Attractive investment opportunities in the polymer concrete value chain

KSA value chain opportunities



Intermediate



Manufacturing

KSA enablers

- Competitively priced raw materials
- Subsidized land and setup costs
- Local investment support

Driving Prosperity

Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Mordor intelligence; Freedonia; Team analysis

Potential Polymer Concrete localization categories



Applications

- Bridge repairs and overlays
- Airport runways and taxiways
- Urban infrastructure such as manholes and utility vaults

- Chemical resistant flooring
- Heavy-duty industrial equipment bases
- Storage tanks and secondary containment structures

- Decorative facades and panels
- High end furniture and countertops
- Public art installations and monuments

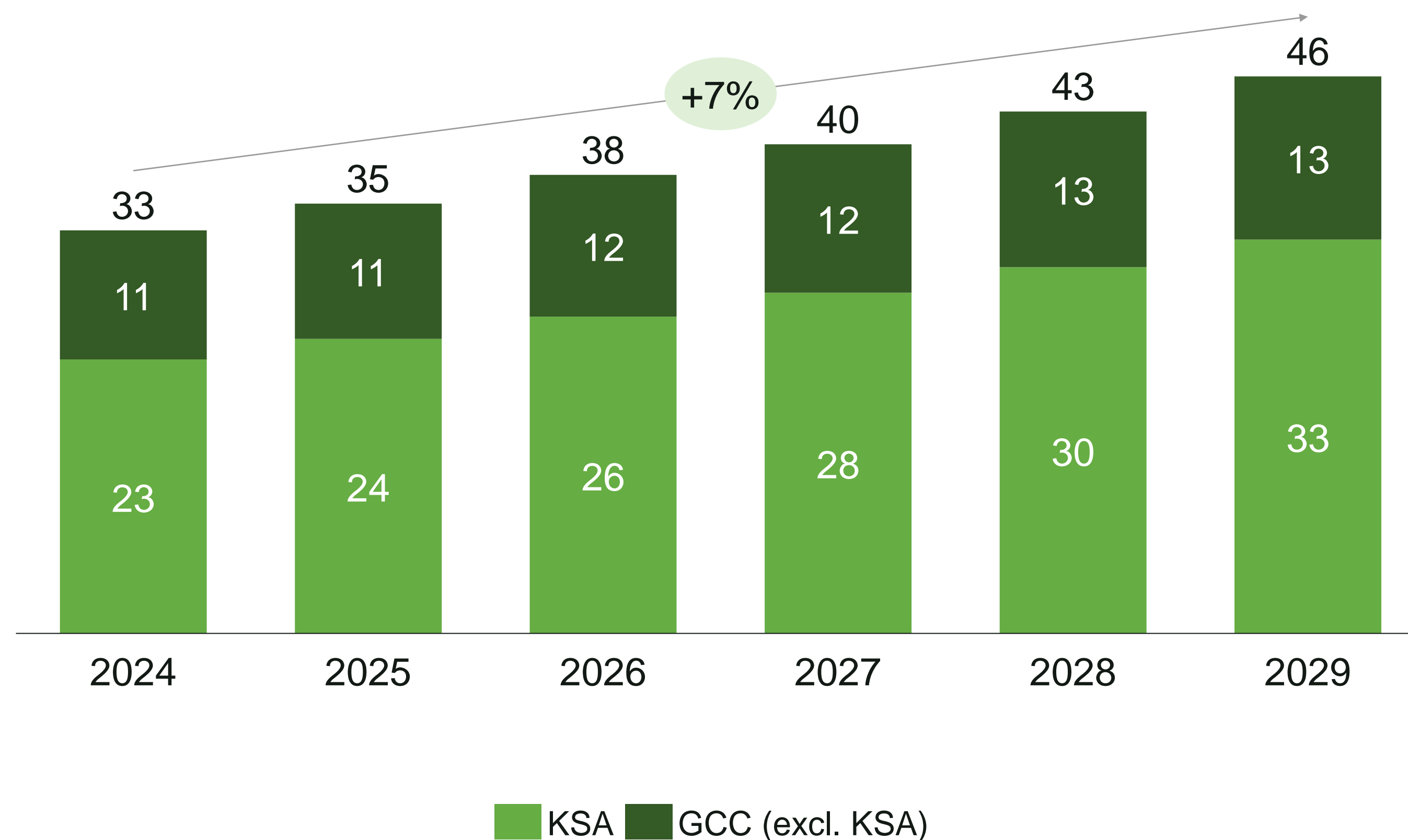
Driving Prosperity

Note: Subject to ISO 178, 527, 2818, 604, 16770, 62, 1920-10, and 1920-11; ACI 548.6; ASTM C579; ASTM-D6783
Source: Team analysis

Polymer Concrete demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC Polymer concrete market 2024-2029 (\$MM)



Typical customers in KSA



Oil & gas entities



Office building developers and maintenance firms



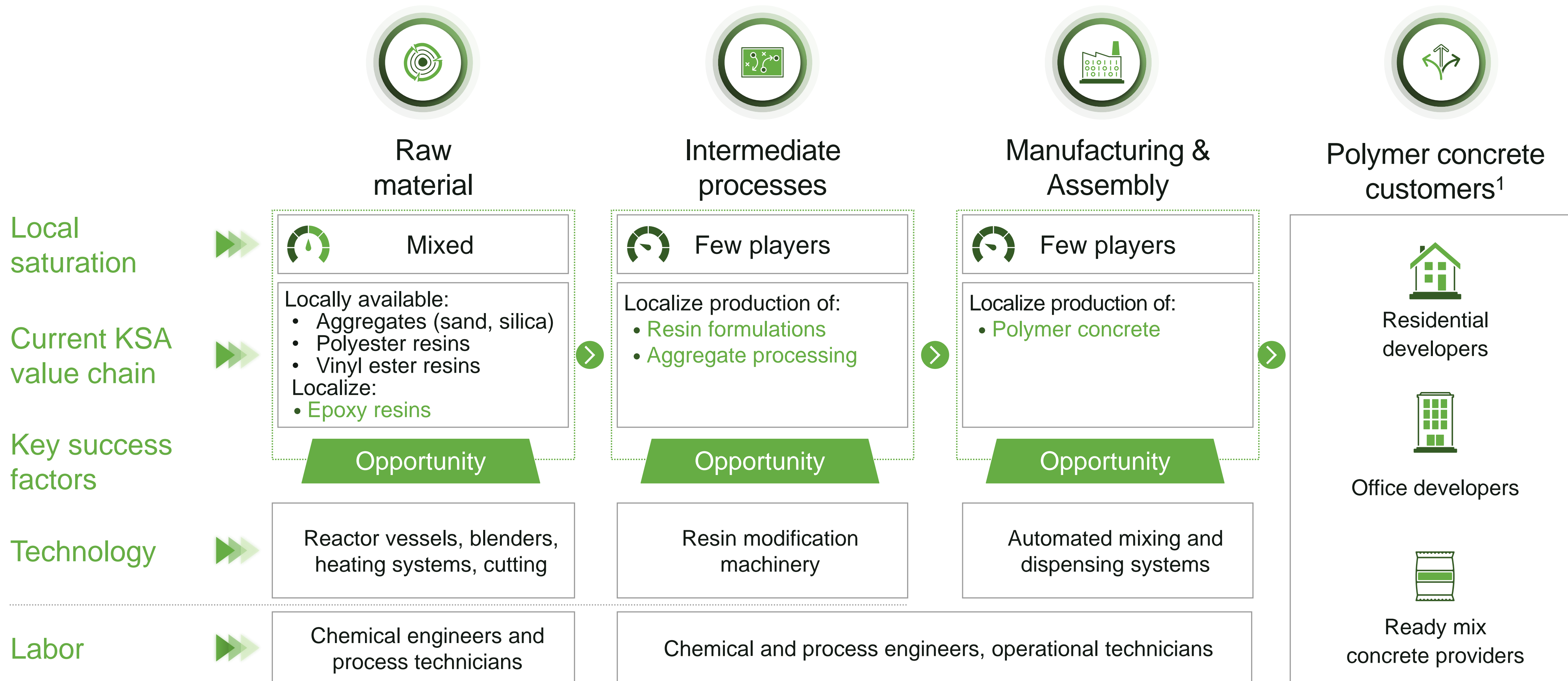
Ready mix concrete providers

Key KSA demand drivers

- **Increased adoption:** Increasing demand for chemical-resistant construction materials expected to fuel market growth
- **Construction expansion:** Growing need for polymer concrete due to infrastructure development across megaprojects and Vision 2030 initiatives

Driving Prosperity

Value chain and key localization opportunities



Driving Prosperity

1. Non-exhaustive
Source: Team analysis

Investment opportunity and enablers

Key enablers in KSA to drive success



Competitively priced raw materials:
 Competitively priced raw materials enable manufacturing competitive advantage



Financial support: SIDF CAPEX and working capital loans for financing of production facility



Industrial lands: Subsidized lease options in specialized industrial zones with advanced logistics and infrastructure



Investment support: Accelerated extension of investor license through MISA and investor support center on a regional level¹

Where is the opportunity



Raw material

Localize production of epoxy resins



Intermediate processes

Localize production of resin formulations and aggregates processing



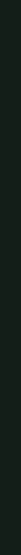
Manufacturing

Opportunity to establish facility for production of polymer concrete for structural, industrial, and architectural applications

Driving Prosperity

1. Currently availability in Al Madinah
 Note: SIDF = Saudi Industrial Development Fund; MISA = Ministry of Investment Saudi Arabia
 Source: Governmental websites; Team analysis

Offshore Mooring



Opportunity profile – Offshore Mooring

1

KSA needs Offshore Mooring to meet expansion in offshore and maritime



Nylon rope



Polyester rope



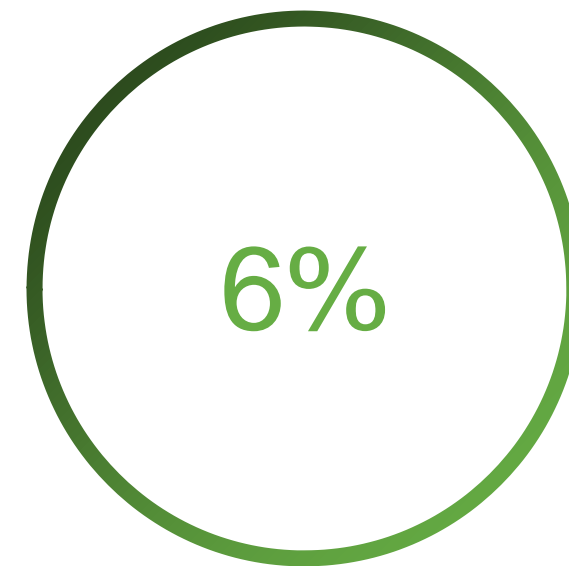
Polypropylene rope

2

Offshore Mooring market is sizeable with forecasted continued growth



Estimated 2024 KSA market size

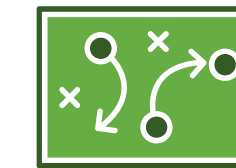


Forecasted 5-year CAGR

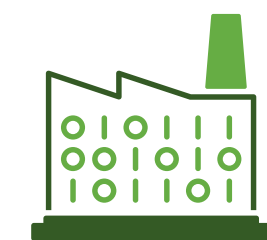
3

Attractive investment opportunities in the Offshore Mooring value chain

KSA value chain opportunities



Intermediate processes



Manufacturing

KSA enablers

- Custom duty exemption on machinery
- Land and loan programs
- Maritime training centers

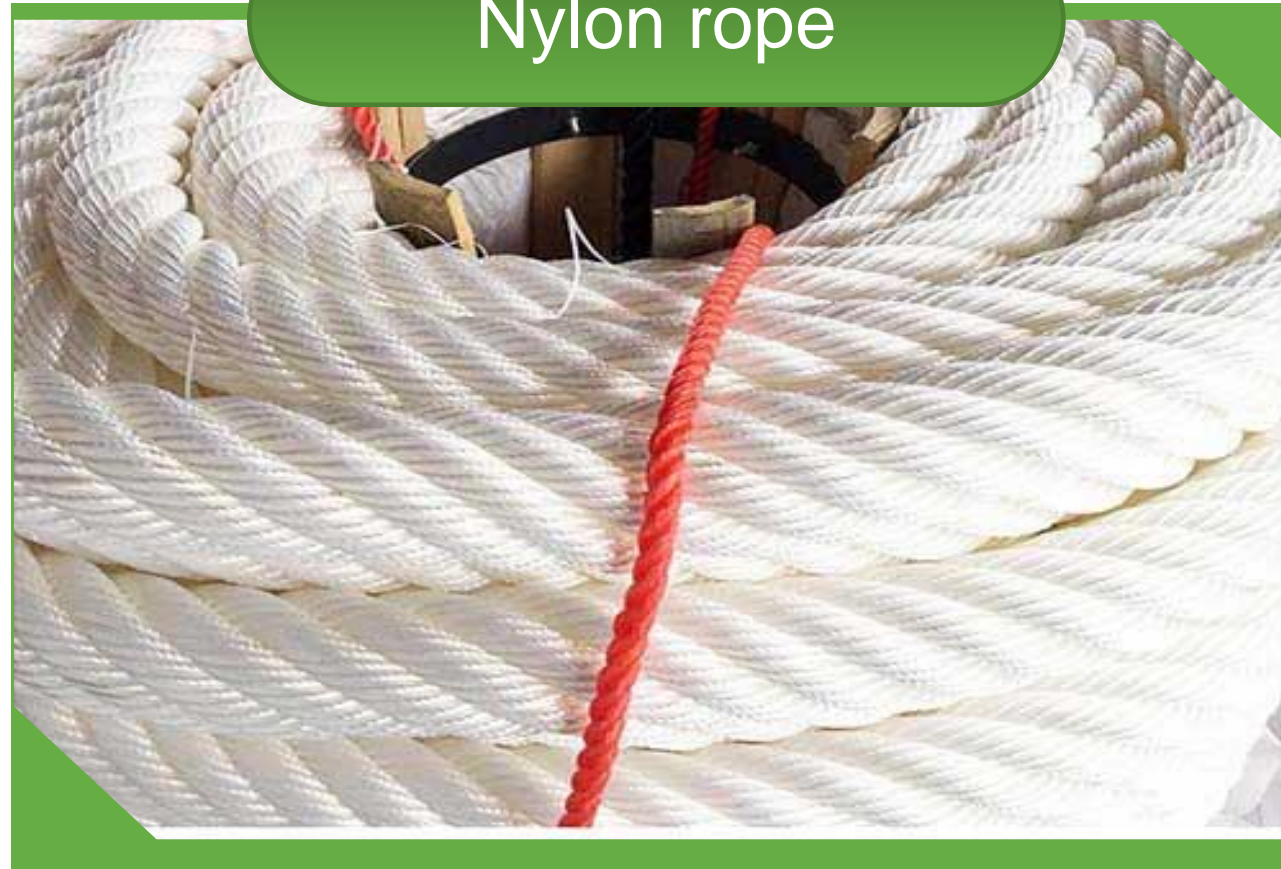
Driving Prosperity

Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Fortune Business Insights; Team analysis

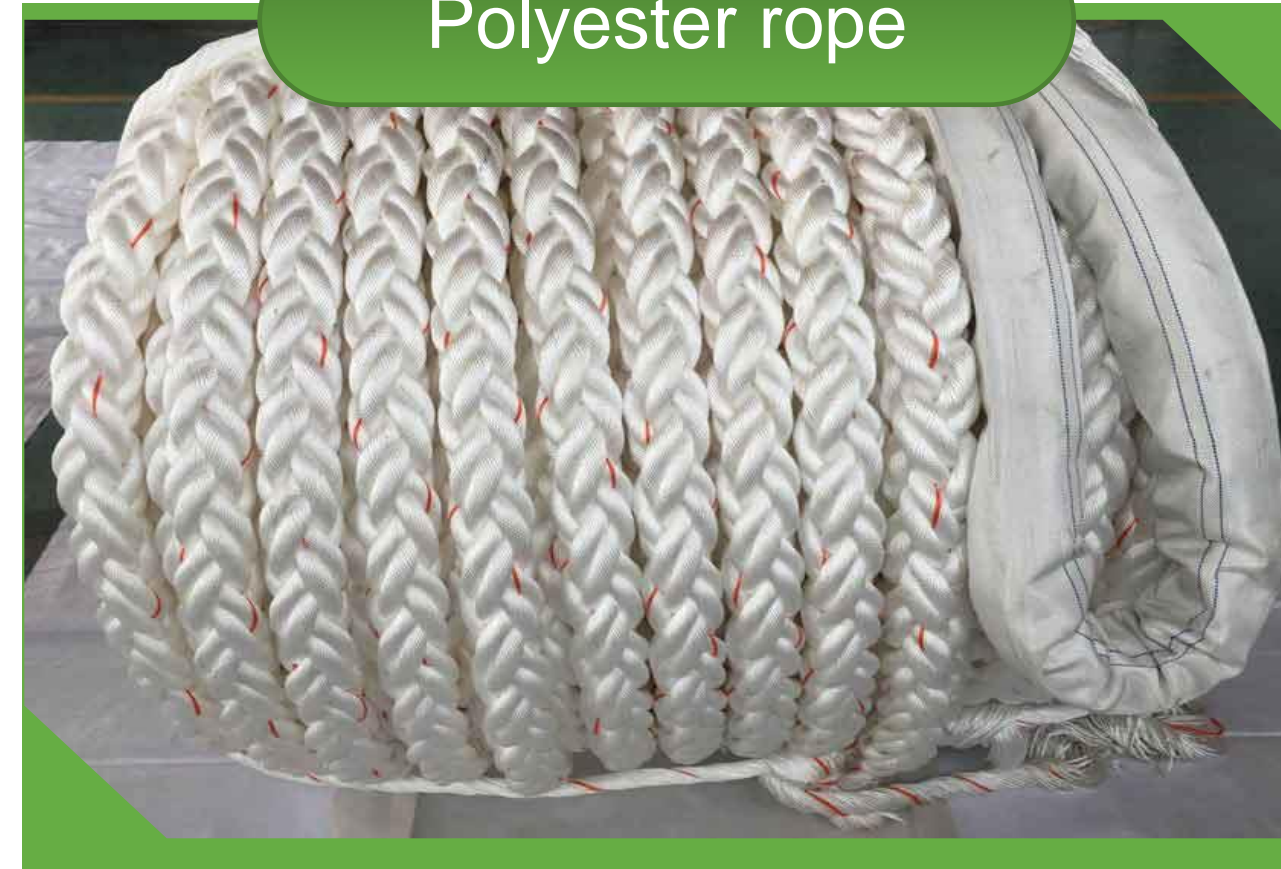
Potential Offshore Mooring localization categories

Non-exhaustive

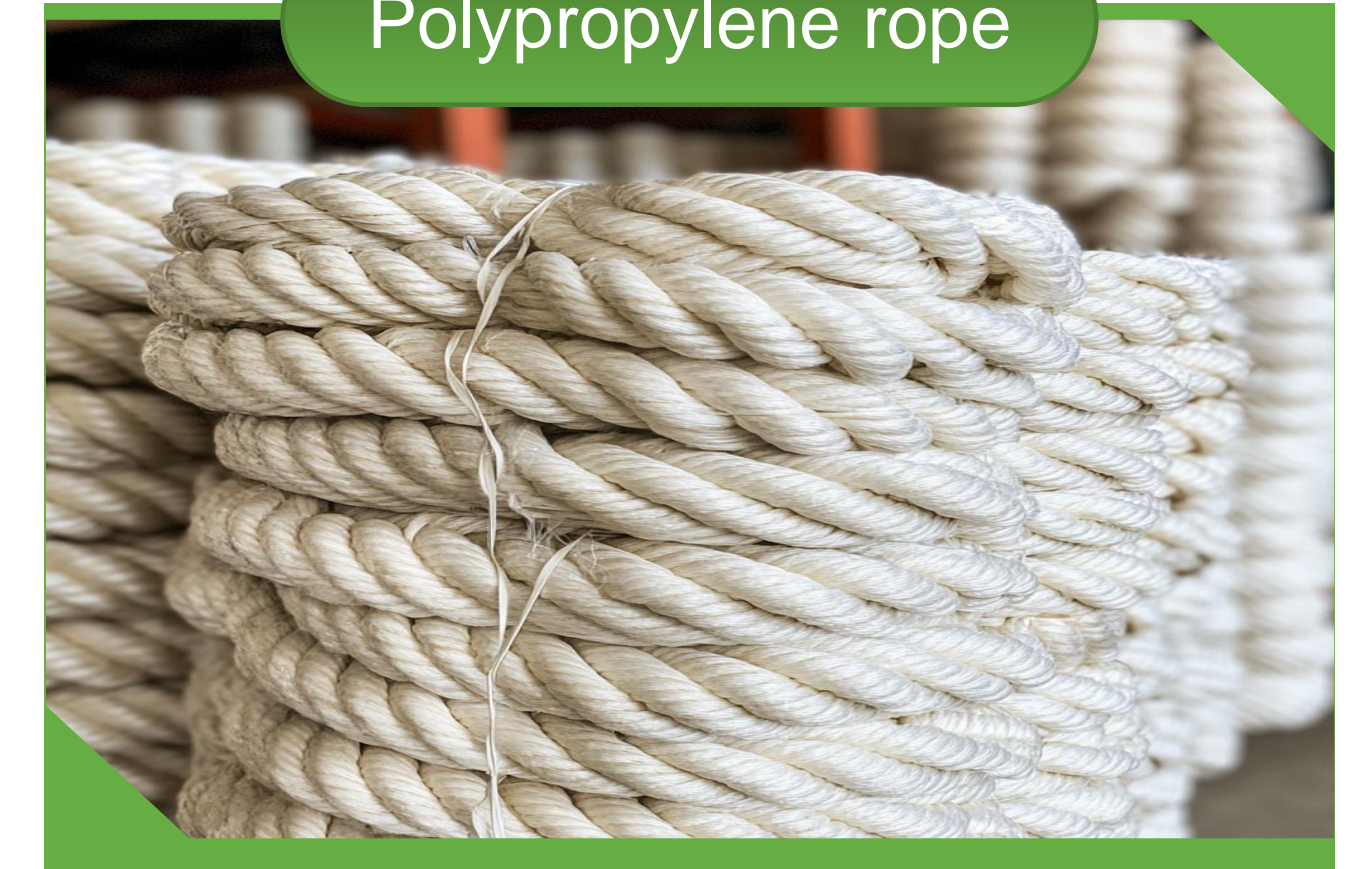
Nylon rope



Polyester rope



Polypropylene rope



Applications

High strength and elasticity for:

- Docking lines
- Mooring in areas with variable conditions

High strength with low stretch for:

- Static mooring lines where consistent tension is required

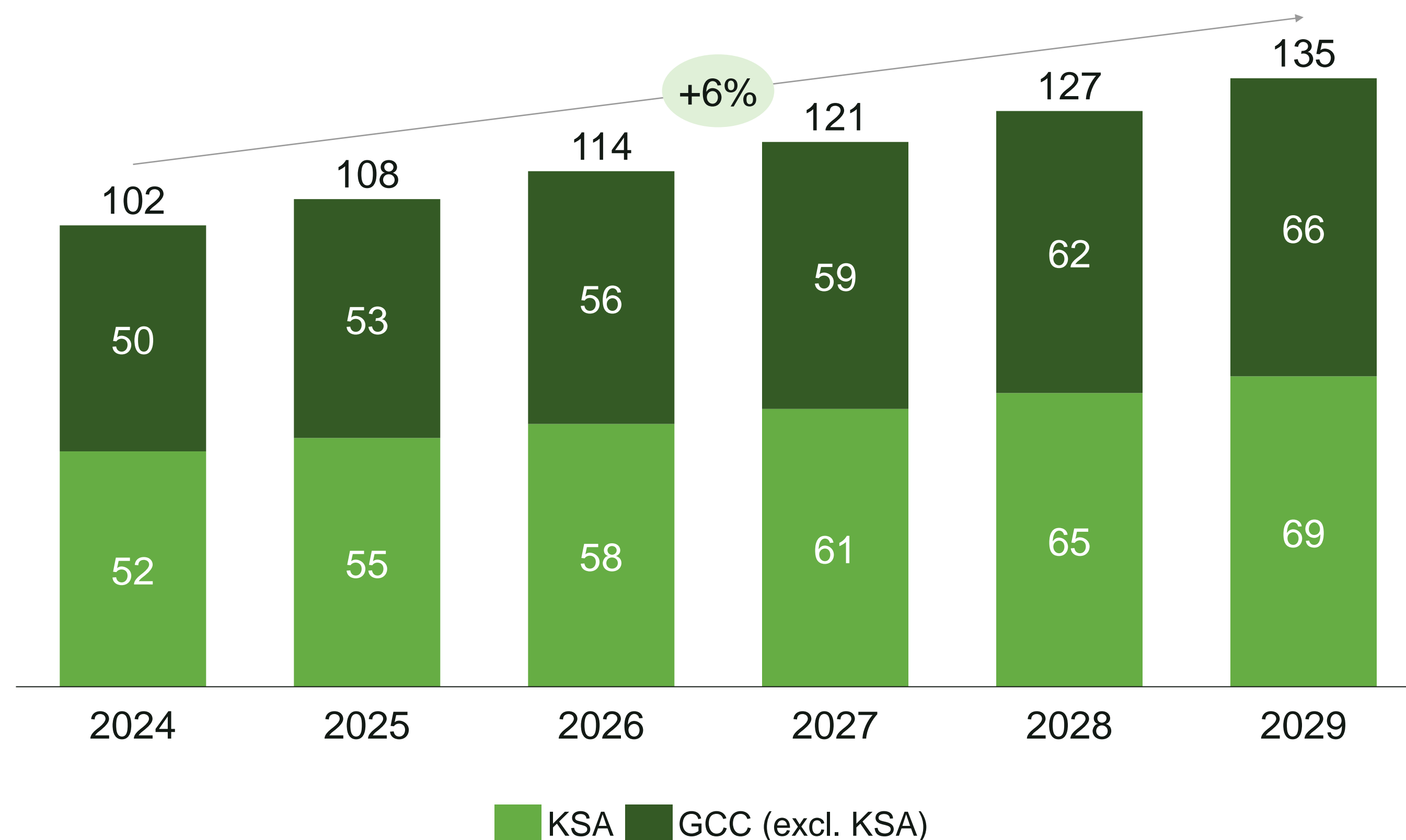
Lightweight and buoyant for:

- Temporary mooring
- Vessels

Offshore Mooring demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC offshore mooring market 2024-2029 (\$MM)



Typical customers in KSA



Oil & gas sector



Maritime



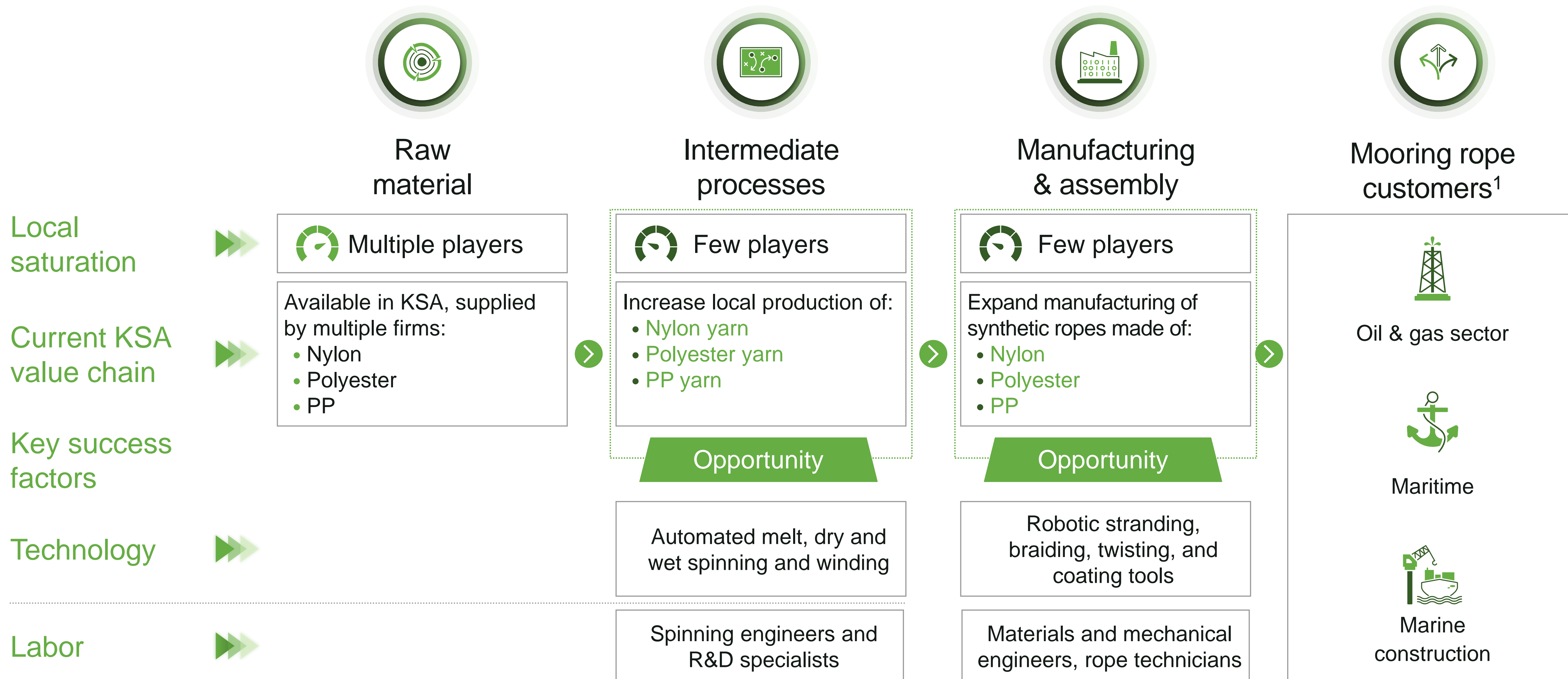
Marine construction

Key KSA demand drivers

- **Industry trends:** Major offshore energy projects aim to increase crude production, necessitating extensive use of mooring ropes for offshore platforms and vessels
- **Shipping fleet expansion:** Purchase of new vessels underscores the growing maritime activities requiring robust mooring systems

Driving Prosperity

Value chain and key localization opportunities



Driving Prosperity

1. Non-exhaustive
Source: Team analysis

Investment opportunity and enablers

Key enablers in KSA to drive success



Customs enablers: Custom duty exemption from MoCI on machinery and equipment for establishment of mooring rope production



Capital enablers: Regional land and loan programs from SIDF and industrial land authorities such as KAEC for plant setup



Investment support: Accelerated extension of investor license through MISA and investor support center on a regional level



Human capital enablers: National Maritime Academy offering specialized training courses for offshore mooring systems

Where is the opportunity



Intermediate processes

Increase local production of yarn from nylon, polyethylene and PP



Manufacturing

Expand manufacturing of synthetic ropes made of nylon, polyester and polypropylene

Driving Prosperity

Note: MoCI = Ministry of Commerce and Industry; SIDF = Saudi Industrial Development Fund; KAEC = King Abdullah Economic City; MISA = Ministry of Investment Saudi Arabia
 Source: Team analysis

Elastomeric Insulation

Opportunity profile – Elastomeric Insulation

1

KSA needing Elastomeric Insulation to meet current infrastructure expansion

2

Elastomeric Insulation market is sizeable with stable growth to 2029

3

Attractive investment opportunities in the Elastomeric Insulation value chain

KSA value chain opportunities



Closed-cell



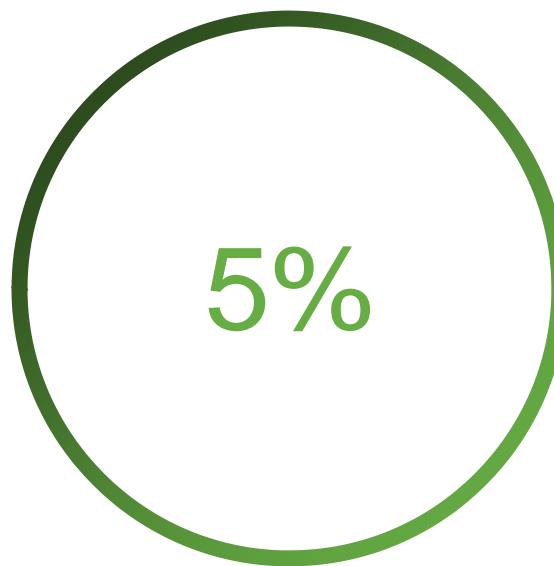
Open-cell



Coated and composite



Estimated 2024 KSA market size



Forecasted 5-year CAGR



Manufacturing

KSA enablers

- Financing available
- Subsidized land and setup costs
- Production operations training available

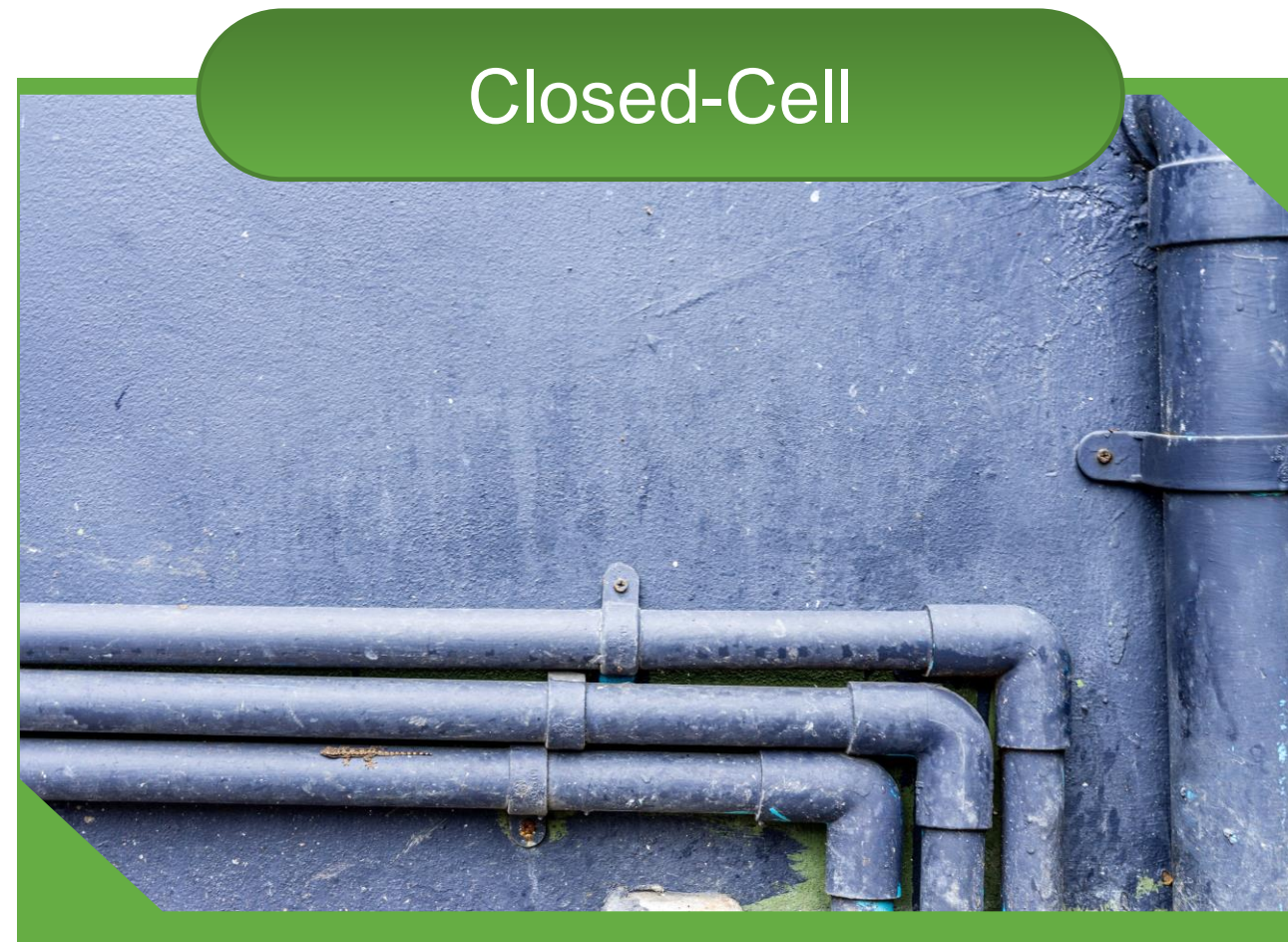
Driving Prosperity

Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Global Market Insights; Grandview; Stellar; IMARC; Team analysis

Potential Elastomeric Insulation localization categories

Definition

Flexible, synthetic material used to insulate pipes, ducts, and equipment that is available in tubes, sheets or rolls



Closed-Cell



Open-Cell



Coated and Composite

Advantages

- Thermal insulation
- High moisture resistance

- Sound absorption
- Flexible – useful for irregular shapes

- Thermal insulation
- Enhanced durability

Applications

- HVAC
- Refrigeration

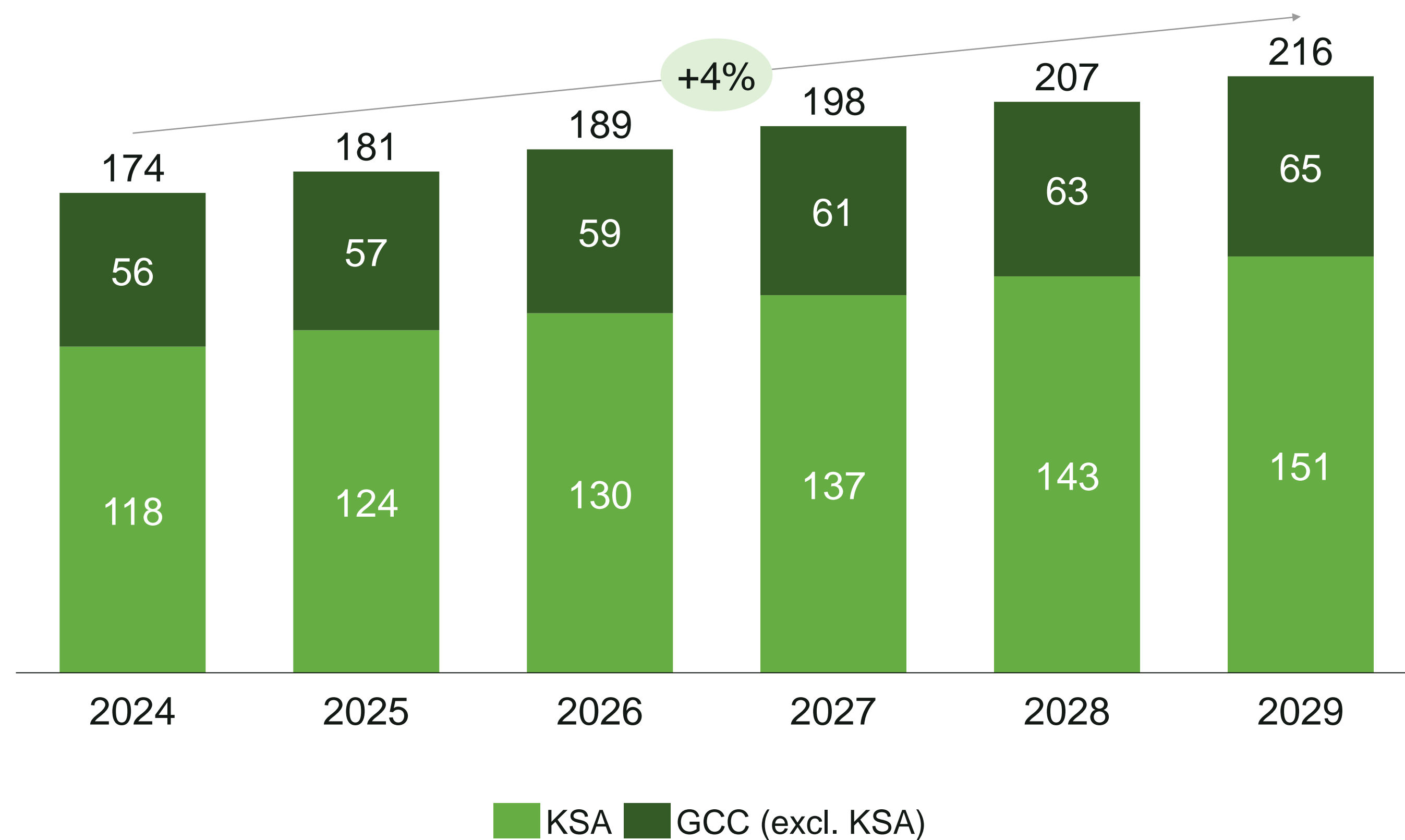
- Acoustic insulation usage
- Vibration dampening

- Outdoor piping
- Hygienic environment

Elastomeric Insulation demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC elastomeric insulation market 2024-2029 (\$MM)



Typical customers in KSA

Residential developers

Office building developers and maintenance firms

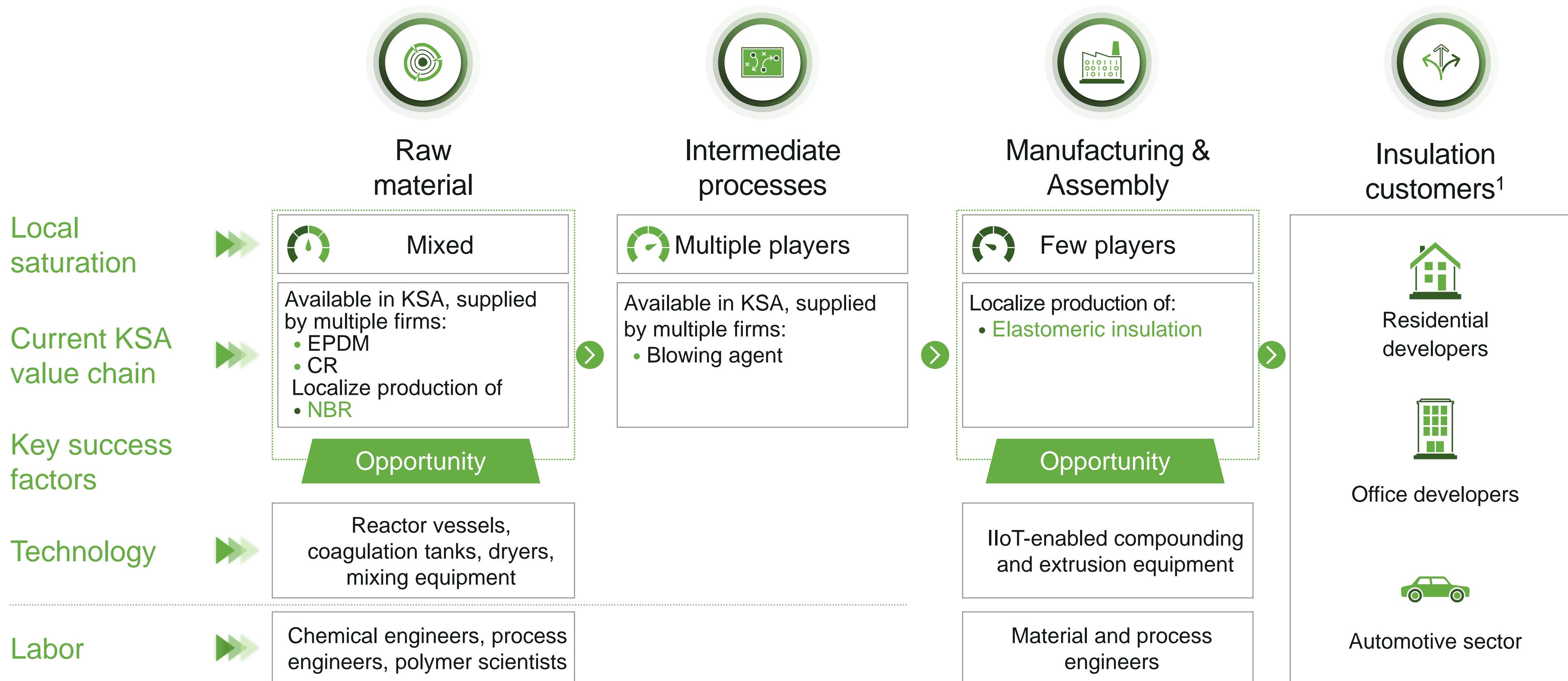
Vehicle manufacturers

Key KSA demand drivers

- **Industry trends:** Further elastomeric insulation required to enable megaproject and overarching Vision 2030 initiatives-based infrastructure development
- **Sector expansion:** Elastomeric insulation needed to match rapidly growing construction sector – expected to reach \$91B by 2029

Driving Prosperity

Value chain and key localization opportunities



Driving Prosperity

1. Non-exhaustive
Note: EPDM = Ethylene Propylene Diene Monomer; CR = Chloroprene Rubber; NBR = Nitrile Butadiene Rubber
Source: Team analysis

Investment opportunity and enablers

Example KSA enablers to drive success



Financial incentives: SIDF offers working capital loans in the initial phase and benefits for SMEs under Afaq program for plant setup



Land and infrastructure: Subsidized land and infrastructure in special economic zones such as Ras Al Khair reduces setup costs



Workforce development: Fully covered or subsidized training programs by HRDF for productions operations

Where is the opportunity



Manufacturing

Localize manufacturing of elastomeric insulation

Driving Prosperity

Note: SIDF = Saudi Industrial Development Fund; HRDF = Human Resource Development Fund
 Source: Global Market Insights; Grandview; Stellar; IMARC; Team analysis

Polypropylene Fiber for Concrete Reinforcement

Opportunity profile – Polypropylene Fiber for Concrete Reinforcement

1

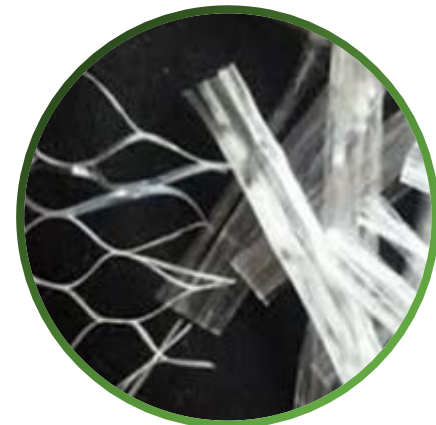
KSA needing PP Fiber for Concrete to meet construction demand



Microfibers



Macrofibres



Fibrillated Fibers

2

PP Fiber for Concrete Reinforcement market experiences strong growth



Estimated 2024 KSA market size

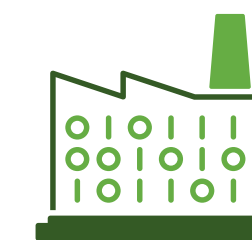


Forecasted 5-year CAGR

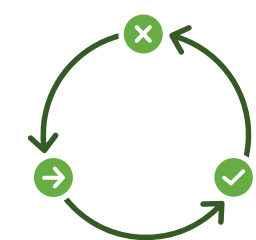
3

Attractive investment opportunities in the PP Fiber value chain

KSA value chain opportunities



Manufacturing



Support services

KSA enablers

- Competitively priced raw materials
- Land and infrastructure subsidies
- Technical training programs

Driving Prosperity

Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Grand View Research; Construction World; Future Market Insights; Team analysis

Potential Polypropylene Fiber for Concrete Reinforcement localization categories

Non-exhaustive

Microfibers



Macrofibres



Fibrillated Fibers



Applications

- Residential concrete (e.g., driveways, patios)
- Thin concrete overlays
- Precast products
- Ultra high-performance concrete

- Industrial floors and heavy-duty slabs
- Bridge decks and pavements
- Tunnels and retaining walls

- Roadways and highways
- Shotcrete for tunnel linings
- Precast elements with complex shapes

Driving Prosperity

Industry standards: ASTM D7508/D7508M-20, ASTM C1116/1116M, ASTM C1818-22, EN 14889-2, ACI 544.3R-08, ACI 544.4R-18
 Source: Team analysis

End product visualization

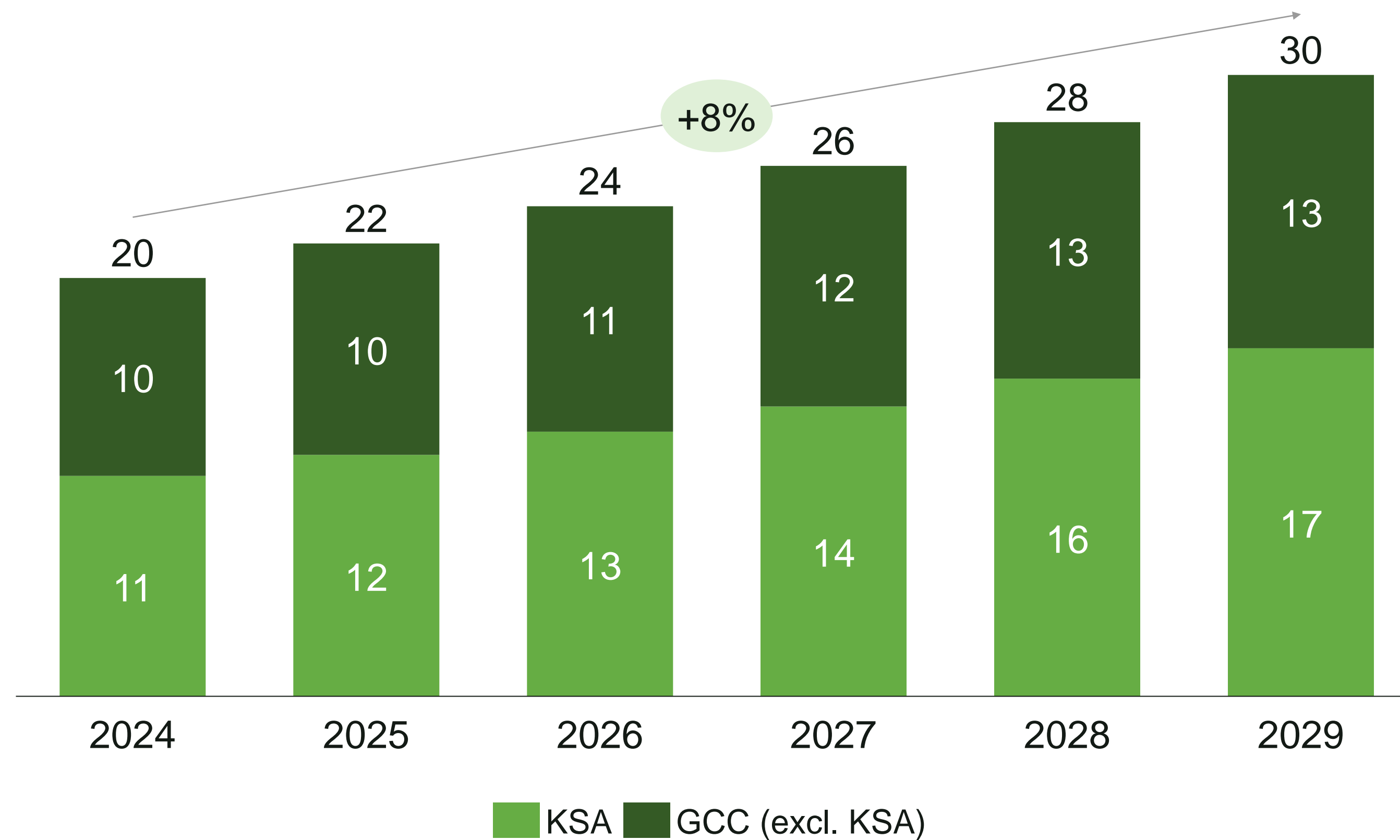
Polypropylene Fiber for Concrete Reinforcement



Polypropylene fiber for concrete reinforcement demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC PP fiber for concrete reinforcement market 2024-2029 (\$MM)



Typical customers in KSA

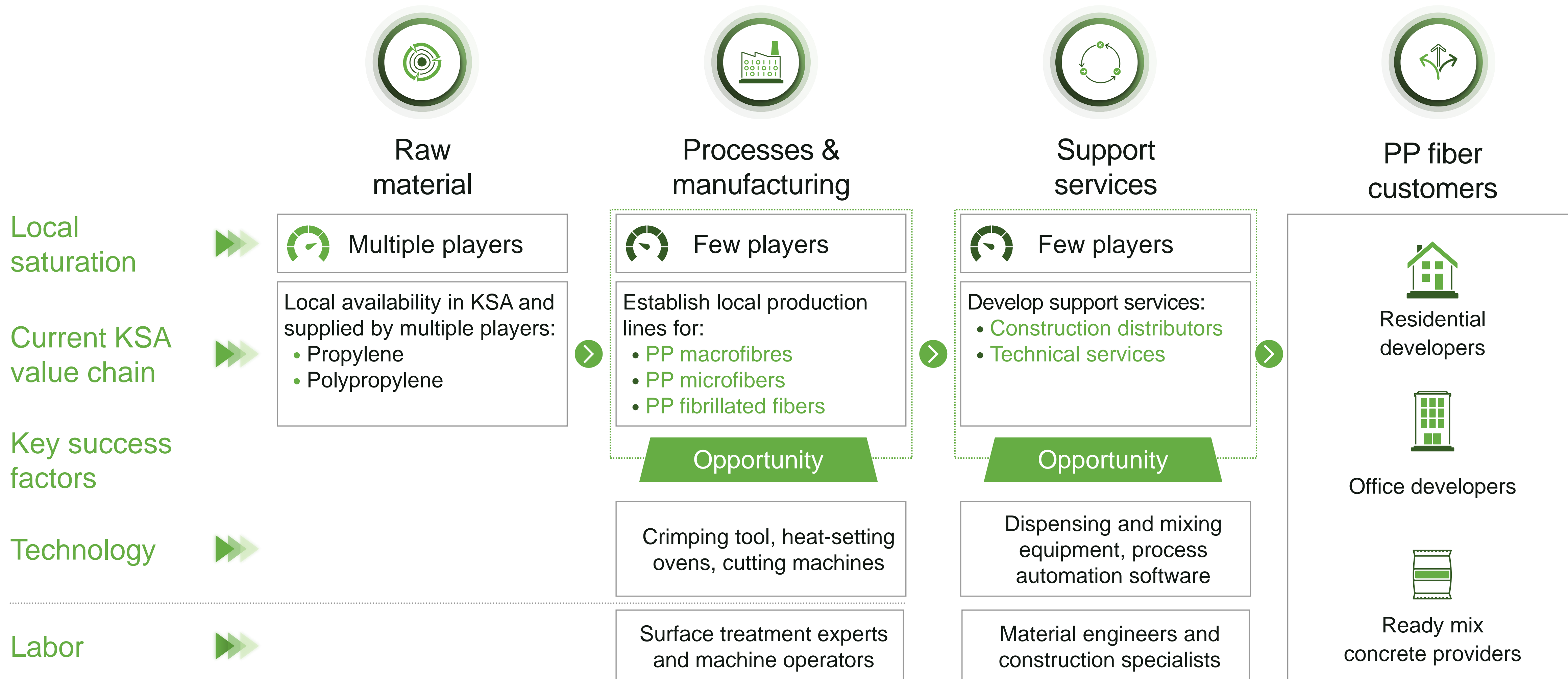
- Residential developers
- Office building developers and maintenance firms
- Ready mix concrete providers

Key KSA demand drivers

- **Transportation networks:** Expansion of highways, bridges, and rail systems necessitates durable concrete solutions, where PP fibers play a crucial role
- **Megaprojects:** Projects like NEOM, The Line, and the Jeddah Central Project drive strong demand for advanced construction materials, including PP fibers

Driving Prosperity

Value chain and key localization opportunities



Driving Prosperity

Note: Non-exhaustive value chain
Source: Team analysis

Investment opportunity and enablers

Key enablers in KSA to drive success



Competitively priced raw materials:
 Competitively priced Polypropylene through SABIC drives manufacturer cost advantage



Land and infrastructure: Subsidized land and infrastructure in economic zones such as those provided by MODON reduces setup costs



Customs enablers: Custom duty exemption from MoCI on machinery and equipment for establishment of local PP fiber production



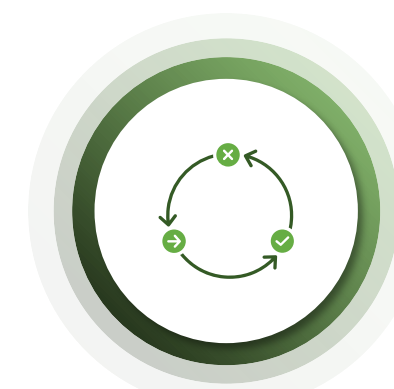
Human capital enablers: NITI training programs to skill technicians and machinists to produce PP fibers

Where is the opportunity



Processes & Manufacturing

Establish local production lines for PP macrofibres, microfibers, and fibrillated fibers



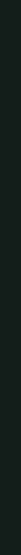
Support services

Develop support services for the application of PP fibers into concrete mixes

Driving Prosperity

Note: MODON = Saudi Authority for Industrial Cities and Technology Zones; MoCI = Ministry of Commerce and Industry; NITI = National Industrial Training Institute
 Source: Team analysis

Concrete Admixture



Opportunity profile – Concrete Admixture

1

KSA needing concrete admixture to meet construction expansion

2

KSA concrete admixture is sizeable with forecasted strong growth

3

Attractive investment opportunities in the concrete admixture value chain



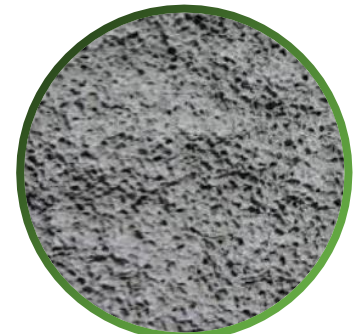
Plasticizers



Accelerators



Retarders



Air-entraining agents



Estimated 2024 KSA market size

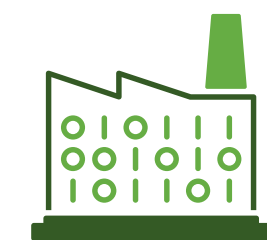


Forecasted 5-year CAGR

KSA value chain opportunities



Raw material



Manufacturing

KSA enablers

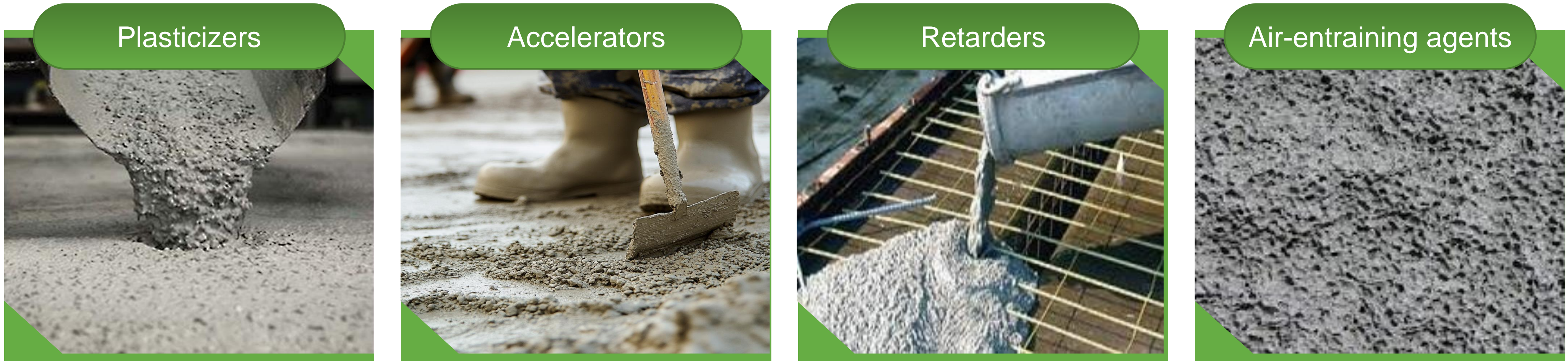
- Competitively priced raw materials
- Tax credits on R&D investments
- Quality assurance training

Driving Prosperity

Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Fortune Business Insights; Team analysis

Potential Concrete Admixture localization categories

Non-exhaustive



Advantages

- Improve workability without adding water
- Speed up curing process
- Slow down setting time
- Introduce tiny air bubbles into concrete

Applications

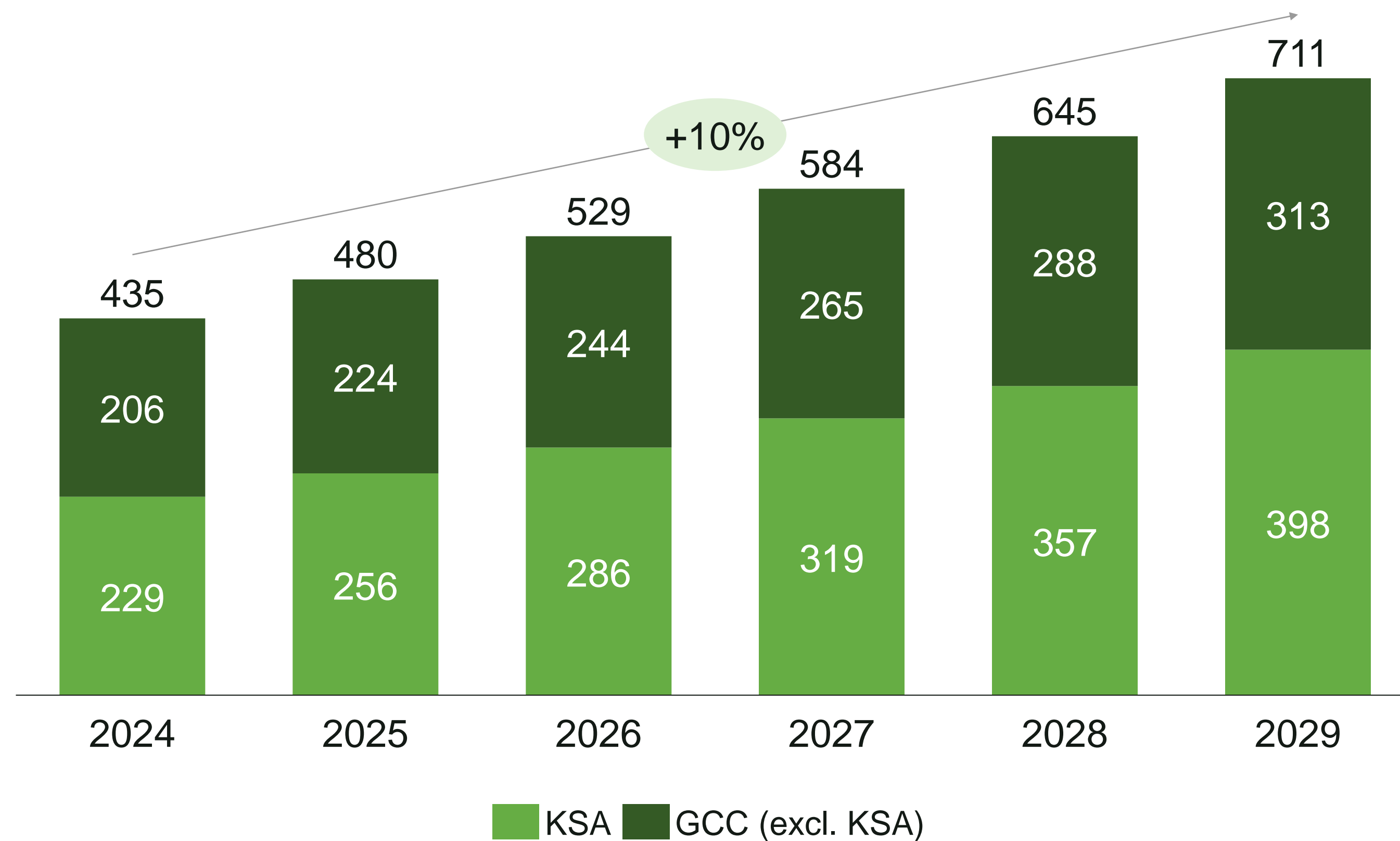
- Allow for reduced water-cement ratios, enhancing strength
- Useful in cold-weather concrete or when early strength is needed
- Used in hot weather or for large pours where more working time is needed
- Improve resistance to freeze-thaw cycles and durability

Driving Prosperity




Concrete Admixture demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC Concrete Admixture market 2024-2029 (\$MM)



Typical customers in KSA

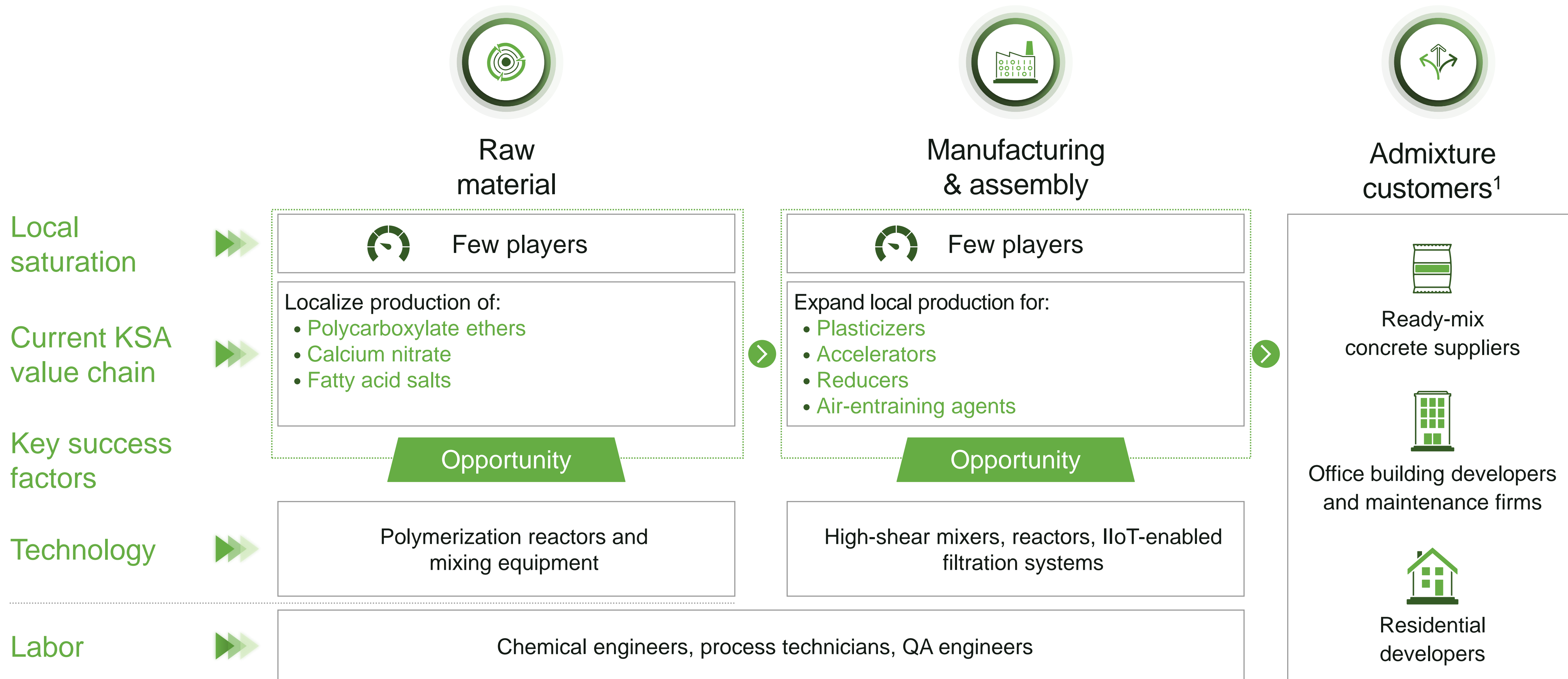
-  Ready mix concrete providers
-  Office building developers and maintenance firms
-  Residential developers

Key KSA demand drivers

- **Transportation networks:** Expansion of highways, bridges, and rail systems requires concrete with specific properties
- **Megaprojects:** Projects such as NEOM, and the Jeddah Central Project drive demand for advanced construction materials, including concrete admixture

Driving Prosperity

Value chain and key localization opportunities



Driving Prosperity

1. Non-exhaustive
Source: Team analysis

Investment opportunity and enablers

Key enablers in KSA to drive success



Competitively priced raw materials: Competitively priced raw materials enable manufacturing competitive advantage



Customs enablers: Custom duty exemption from MoCI on machinery and equipment for establishment of local admixture production



Corporate tax reduction: Tax credits on R&D investments to encourage local innovation capabilities for specialized production



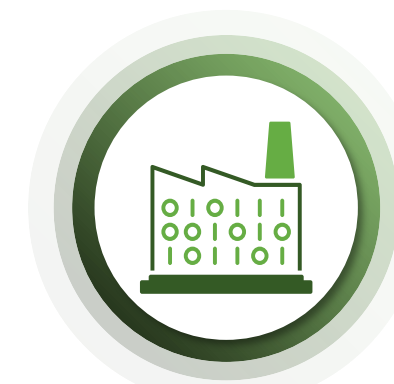
Quality assurance: Specialized trainings for Saudi nationals by SPSP on chemical quality standards used in KSA

Where is the opportunity



Intermediate processes

Localize production of polycarboxylate ethers, calcium nitrate, and fatty acid salts



Manufacturing

Expand local production for plasticizers, accelerators, reducers, and air-entraining agents

Driving Prosperity

1. Currently availability in Al Madinah

Note: SIDF = Saudi Industrial Development Fund; KAEC = King Abdullah Economic City; MoCI = Ministry of Commerce and Industry; SPSP = Saudi Petroleum Services Polytechnic

Source: Governmental websites; Team analysis

Composite Cladding

Opportunity profile – Composite Cladding

1

KSA needing composite cladding to meet construction expansion



Aluminum composite panels



Decorative cladding



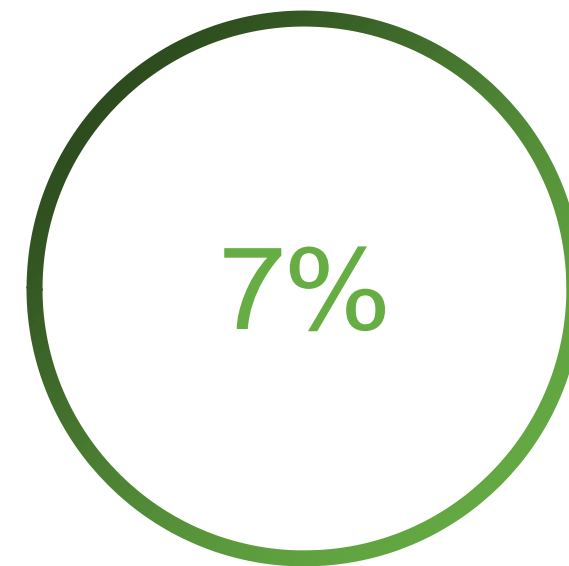
Polycarbonate cladding

2

KSA cladding market is sizeable with forecasted continued growth



Estimated 2024 KSA market size

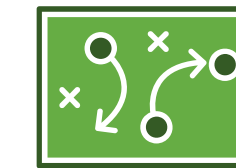


Forecasted 5-year CAGR

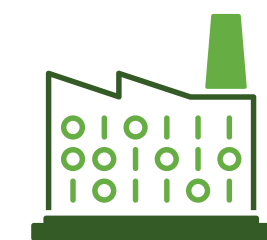
3

Attractive investment opportunities in the Composite Cladding value chain

KSA value chain opportunities



Intermediate processes



Manufacturing

KSA enablers

- Financial incentives
- Land and infrastructure
- Investment support

Driving Prosperity

Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Grand view research; Mordor intelligence; Team analysis

Potential Composite cladding localization categories



Applications

- Residential buildings
- Interior decoration
- Retro-fitting for insulation

- High-rise buildings
- Hospitals
- Corporate offices

- Greenhouses
- Malls and showrooms
- Arenas and stadiums

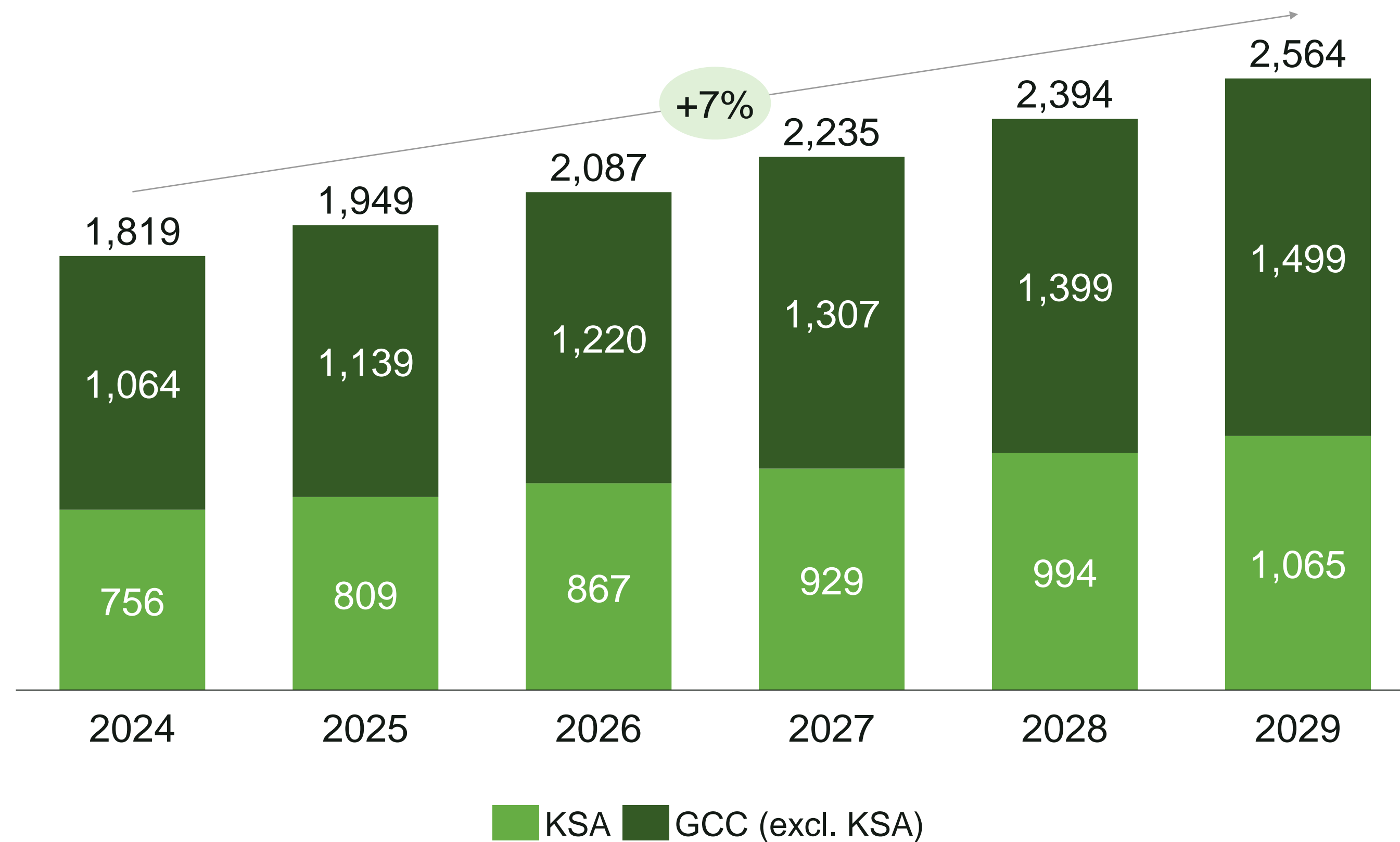
Driving Prosperity

Note: Non-exhaustive
International standards: SASO-2752; BS 8414-1:2015+A1:2017; SASO-ISO-20819-1
Source: Team analysis

Composite Cladding demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC Composite Cladding market 2024-2029 (\$MM)



Typical customers in KSA

Residential developers

Urban development authorities

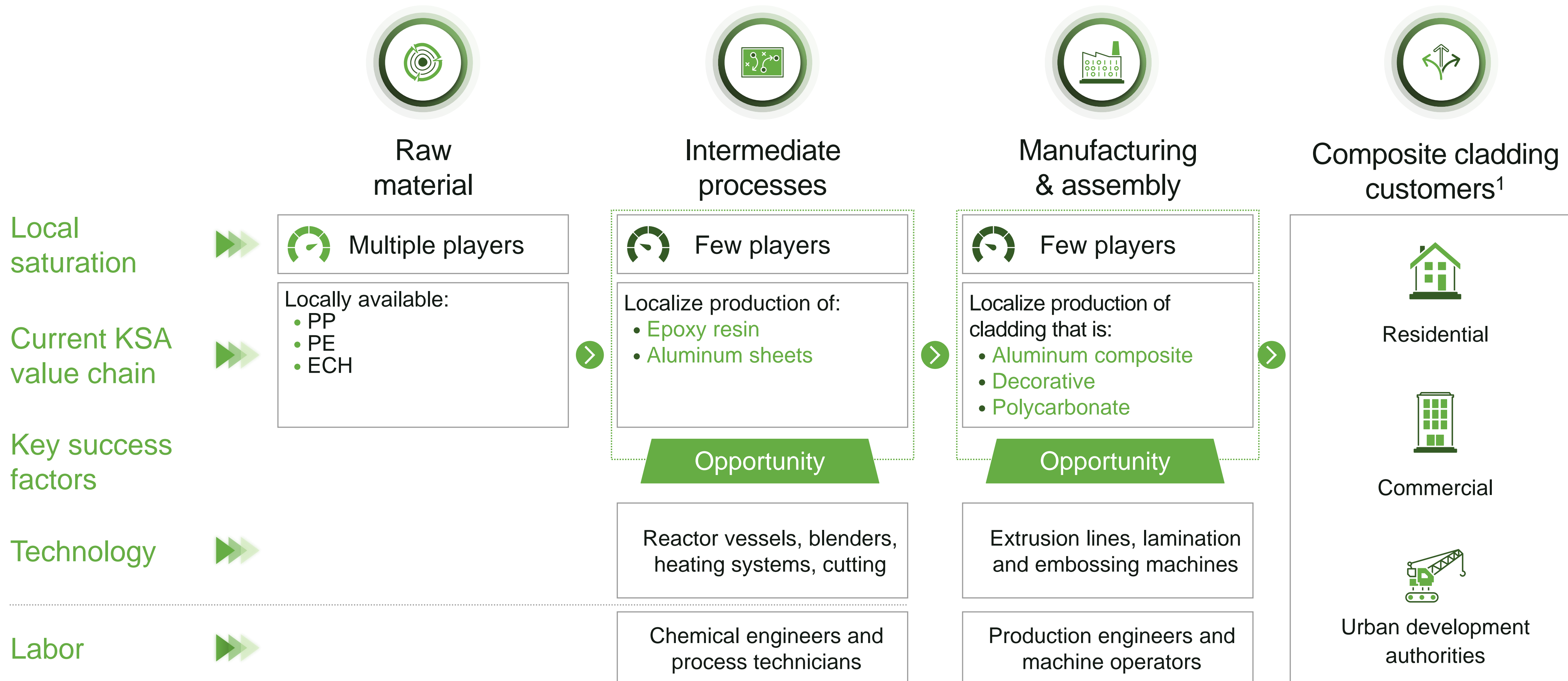
Industrial construction firms

Key KSA demand drivers

- **Construction expansion:** Mega projects such as NEOM and Amaala project driving demand for cladding
- **Environmental conditions:** Composite cladding offers high resistance to corrosion, fading, and negative environmental impact in rising temperatures and UV exposure

Driving Prosperity

Value chain and key localization opportunities



Driving Prosperity

1. Non-exhaustive
Source: Team analysis

Investment opportunity and enablers

Key enablers in KSA to drive success



Financial Support: SIDF offers working capital loans in the initial phase and benefits for SMEs under Afaq program for plant setup



Infrastructure enablers: Subsidized land and infrastructure in special economic zones such as Ras Al Khair reduces setup costs



Investment support: Accelerated extension of investor license through MISA and investor support center on a regional level



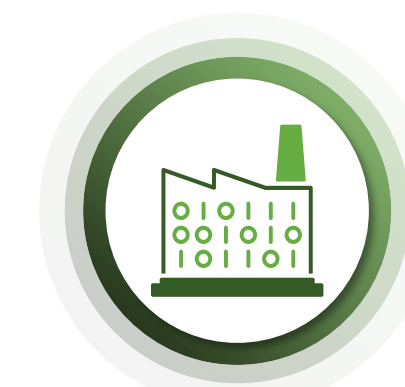
Workforce Enablers: Specialized training programs by TVTC in chemical engineering and plant operations/production

Where is the opportunity



Intermediate processes

Localize production of epoxy resins and aluminum sheets



Manufacturing

Opportunity to establish facility for production aluminum composite, fire-resistant and polycarbonate cladding

Driving Prosperity

Note: SIDF = Saudi Industrial Development Fund; MISA = Ministry of Investment Saudi Arabia; TVTC = Technical Vocational Training Corp.
 Source: Government websites; Team Analysis

Doors & Windows

Opportunity profile – Doors & Windows

1

KSA needing Doors & Windows to meet current infrastructure expansion

2

Doors & Windows market is sizeable with forecasted continued growth

3

Attractive investment opportunities in the Doors & Windows value chain



Plastics



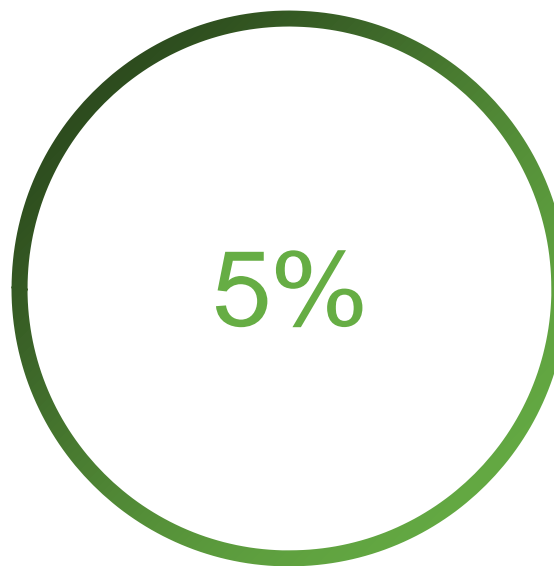
Wood-plastic composites



Other composites

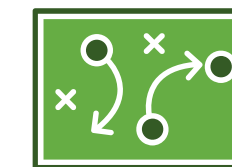


Estimated 2024 KSA market size

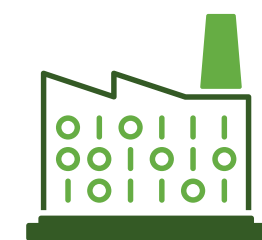


KSA forecasted 5-year CAGR

KSA value chain opportunities



Intermediate processes



Manufacturing

KSA enablers

- Financing available
- Subsidized land and setup costs
- Productions operations training available

Driving Prosperity

Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Mordor Intelligence; Global Data; Allied Analytics; CBNME; Team analysis

Potential Doors & Windows localization categories



Applications

Typically made with uPVC, PU, and polyethylene used for:

- Residential development
- Commercial development
- Industrial facilities

Wood fibers combined with plastic materials used for:

- Residential development
- Commercial development

Made from materials such as fiberglass, and aluminum-plastic composites

- Residential development
- Commercial development

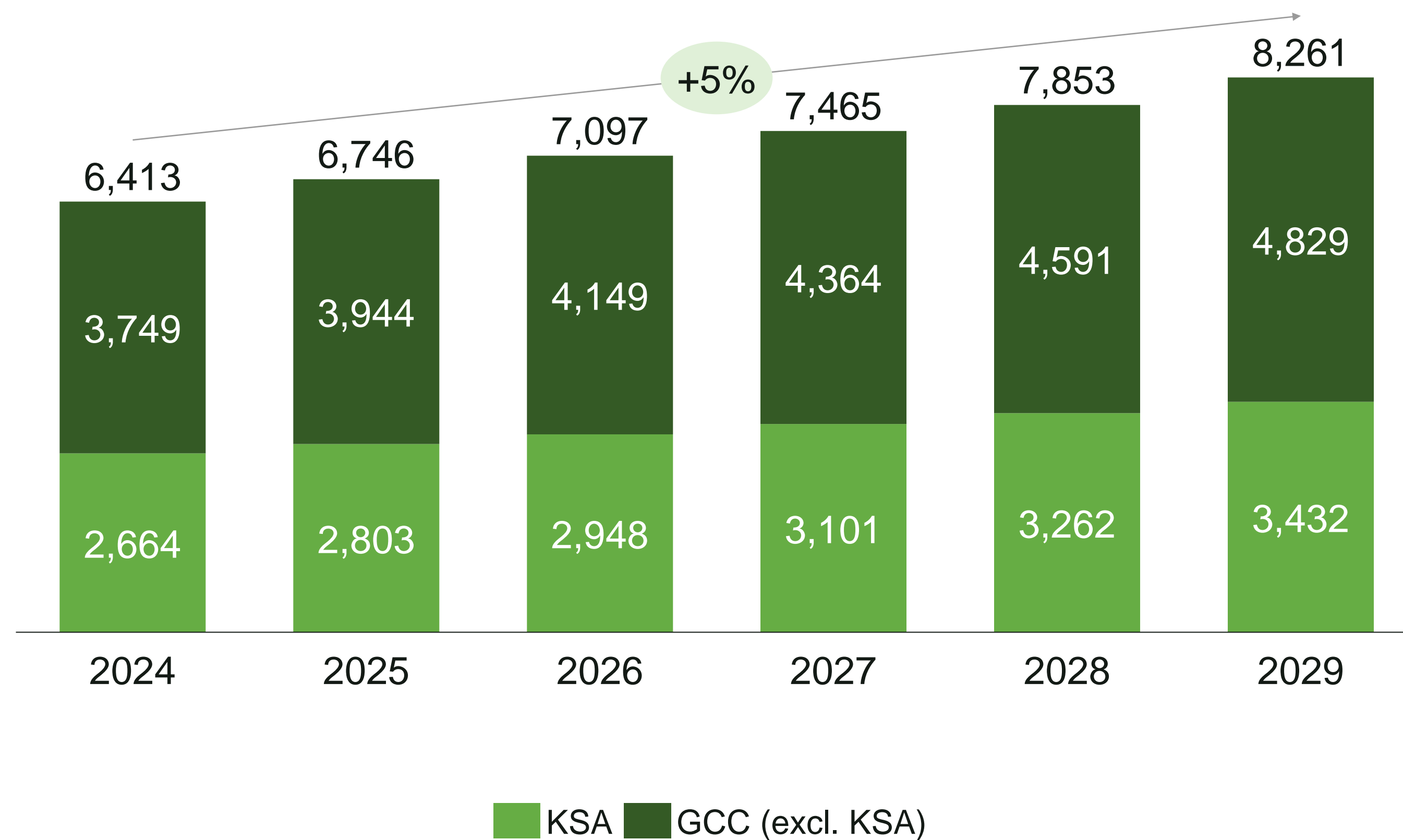
Driving Prosperity

International standards: SASO-2052; ASTM D4726-24; BS 7412; ASTM D7745-19
Source: Team analysis




Doors & Windows demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC Doors & Windows market 2024-2029 (\$MM)



Typical customers in KSA

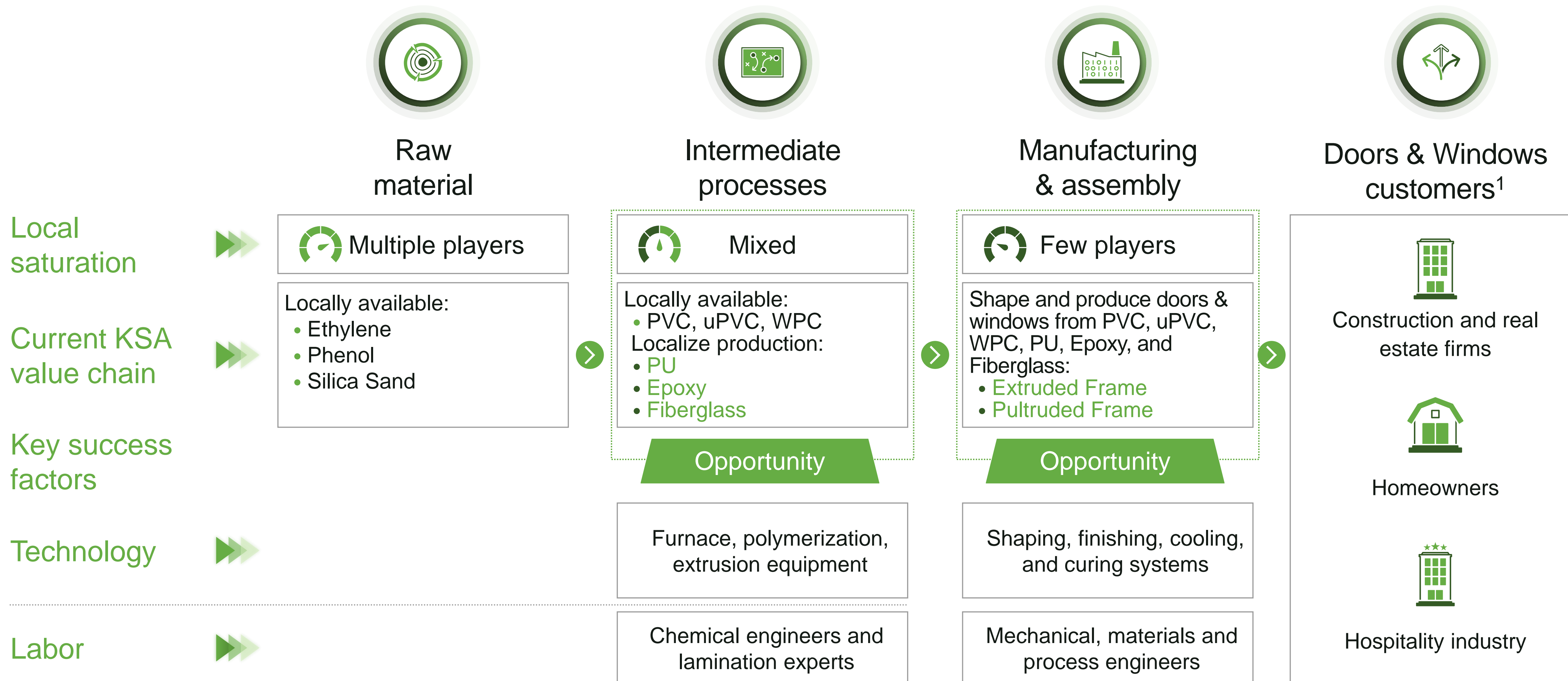
-  Construction and real estate firms
-  Homeowners
-  Hospitality industry

Key KSA demand drivers

- **Industry trends:** Additional doors & windows required due to infrastructure development across megaprojects and overarching Vision 2030 initiatives
- **Sector expansion:** Doors & windows needed to match rapidly growing construction sector – expected to reach \$91B by 2029

Driving Prosperity

Value chain and key localization opportunities



Driving Prosperity

1. Non-exhaustive;
Note: PVC = Polyvinyl Chloride ; uPVC = Unplasticized Polyvinyl Chloride; WPC = Wood Plastic Composites; PU = Polyurethane
Source: Team analysis

Investment opportunity and enablers

Example KSA enablers to drive success



Financial Incentives: SIDF offers working capital loans in the initial phase and benefits for SMEs under Afaq program for plant setup



Land and infrastructure: Subsidized land and infrastructure in special economic zones such as Ras Al Khair reduces setup costs



Workforce Development: Fully covered or subsidized training programs by HRDF and SEDA for productions operations

Where is the opportunity



Intermediate processes

Localize production of PU, epoxy, and fiberglass



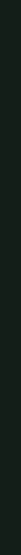
Manufacturing

Localize manufacturing of doors & windows

Driving Prosperity

Notes: SIDF = Saudi Industrial Development Fund; HRDF = Human Resource Development Fund; SEDA = Saudi Export Development Authority
 Source: Government websites; Team analysis

Flooring



Opportunity profile – Flooring

1

KSA needing Flooring to meet current construction boom



Vinyl



Epoxy seamless



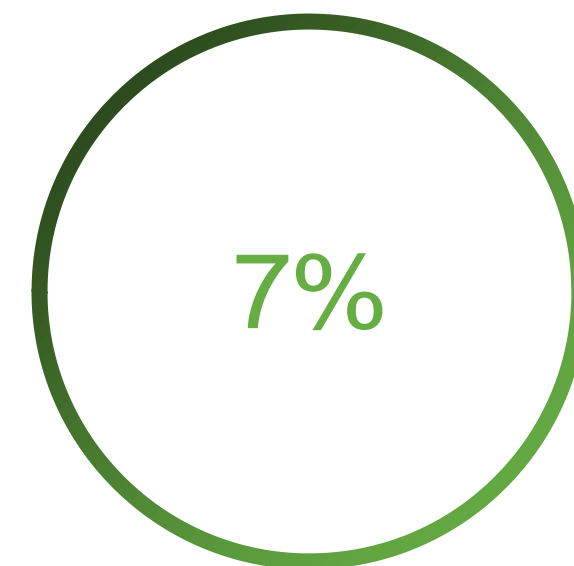
PU seamless

2

Flooring market is sizeable with strong forecasted growth



Estimated 2024 KSA market size

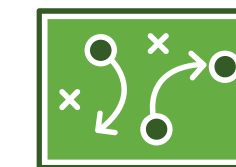


Forecasted 5-year CAGR

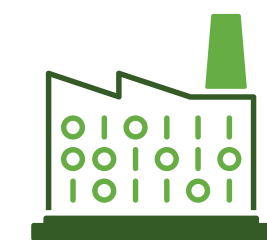
3

Attractive investment opportunities in the Flooring value chain

KSA value chain opportunities



Intermediate



Manufacturing

KSA enablers

- Financial incentives
- Land subsidies
- Investment support

Driving Prosperity

Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Freedonia; Mordor intelligence; Global data; Team analysis

Potential Flooring localization categories

Non-exhaustive

Definition

Offers seamless, durable, and low-maintenance surfaces with excellent resistance to moisture, chemicals, and wear



Applications

- Residential homes
- Offices
- Schools

- Industrial facilities
- Warehouses
- Processing plants

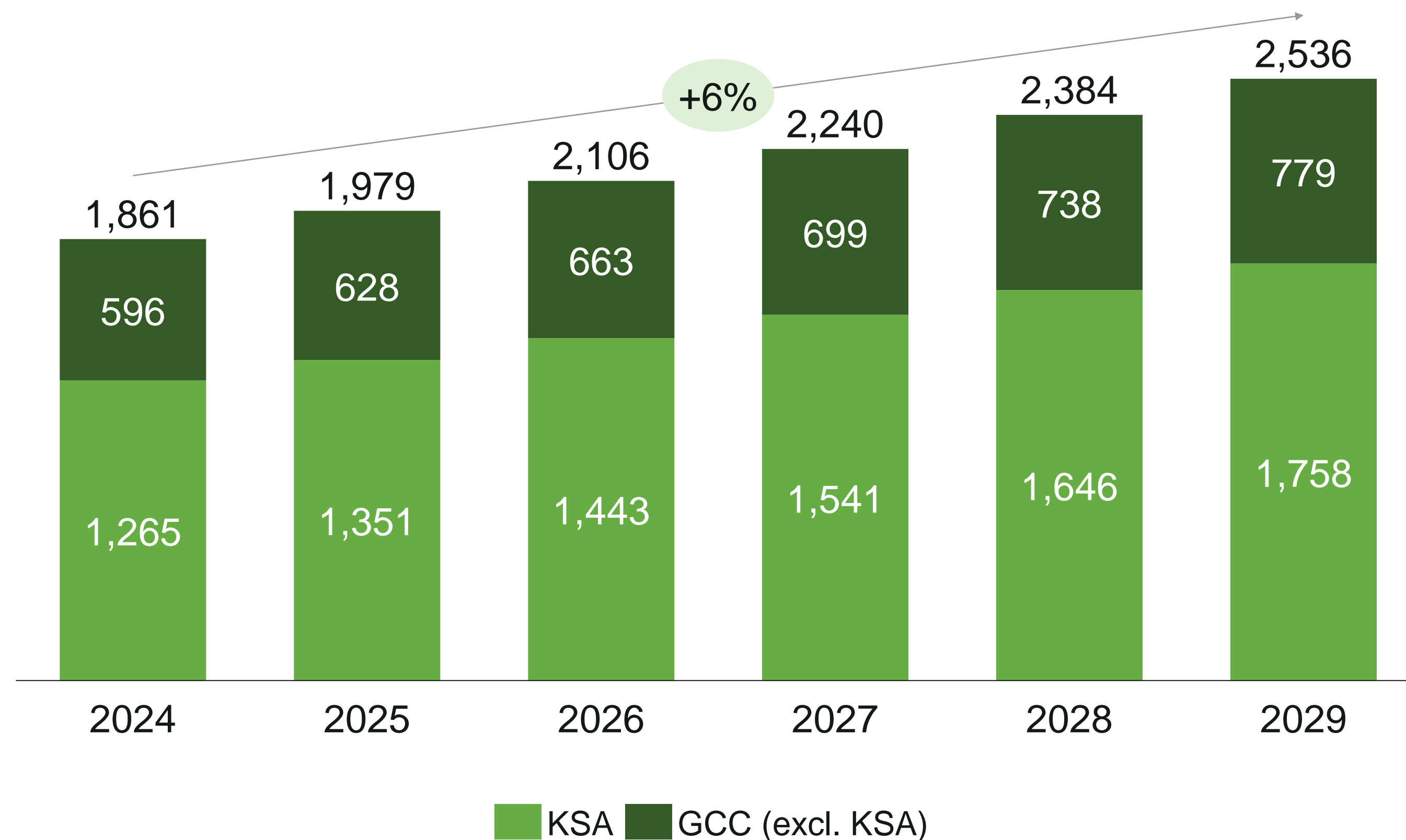
- Retail spaces
- Sports facilities
- Hospitals

Driving Prosperity

Flooring demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC Flooring market 2024-2029 (\$MM)



Typical Flooring customers in KSA



Residential developers



Government infrastructure projects



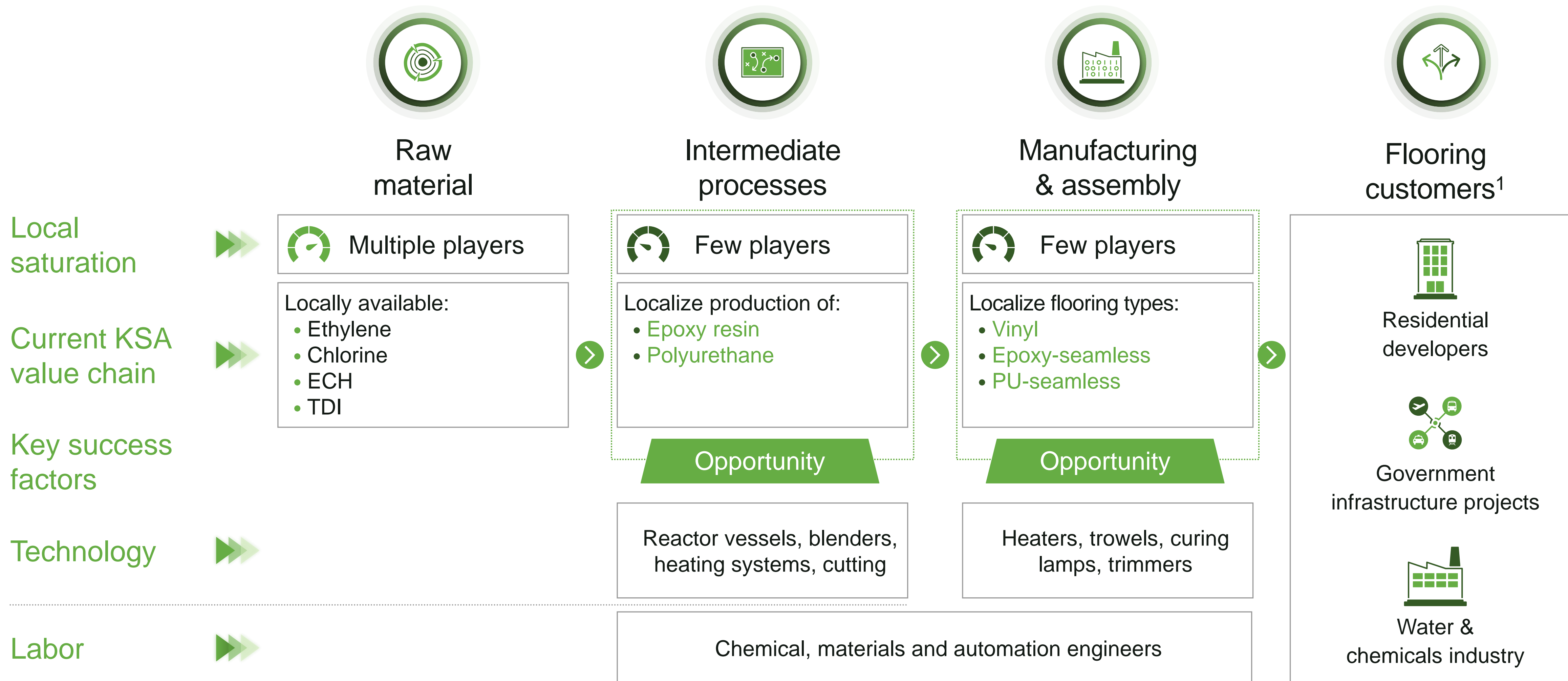
Industrial facilities

Key KSA demand drivers

- **Urbanization:** Vision 2030 & population growth drive flooring demand
- **Government projects:** Ongoing megaprojects bolster flooring demand
- **Manufacturing localization:** Rising number of industrial plants need durable non-metallic flooring

Driving Prosperity

Value chain and key localization opportunities



Driving Prosperity

1. Non-exhaustive
Source: Team analysis

Investment opportunity and enablers

Key enablers in KSA to drive success



Financial incentives: SIDF offers working capital loans in the initial phase and benefits for SMEs under Afaq program for plant setup



Infrastructure enablers: Subsidized land lease options for chemical manufacturing in designated zones like Jubail Industrial City II



Investment support: Accelerated extension of investor license through MISA and investor support center on a regional level



Workforce development: Fully covered or subsidized training programs by HRDF for productions operations

Where is the opportunity



Intermediate processes

Localize manufacturing of epoxy resin and polyurethane



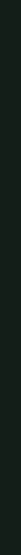
Manufacturing

Opportunity to establish facility for production of vinyl, epoxy, and polyurethane flooring

Driving Prosperity

Note: SIDF = Saudi Industrial Development Fund; MISA = Ministry of Investment Saudi Arabia; HRDF = Human Resource Development Fund
 Source: Expert interviews; Government websites; Team analysis

Roofing



Opportunity profile—Roofing

1

KSA needing Roofing to meet current construction expansion

2

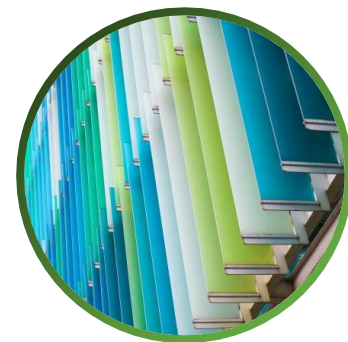
Roofing market is sizeable with forecasted continued growth

3

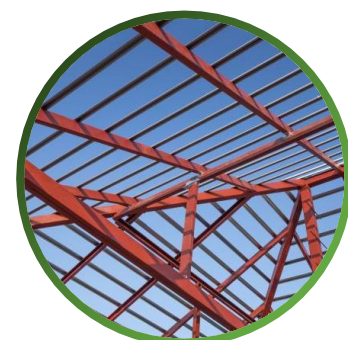
Attractive investment opportunities in the Roofing value chain



Asphalt Shingles



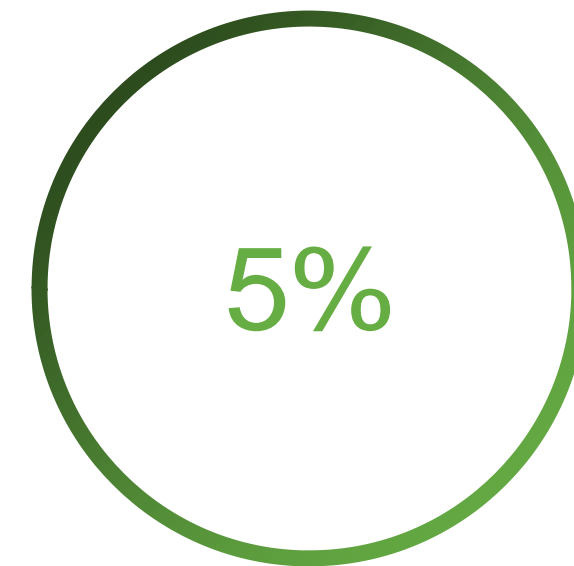
Plastics



Others

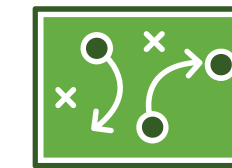


Estimated 2024 KSA market size

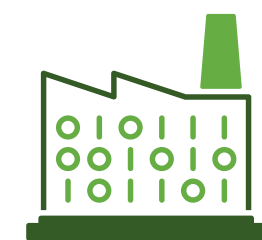


Forecasted 5-year CAGR

KSA value chain opportunities



Intermediate processes



Manufacturing

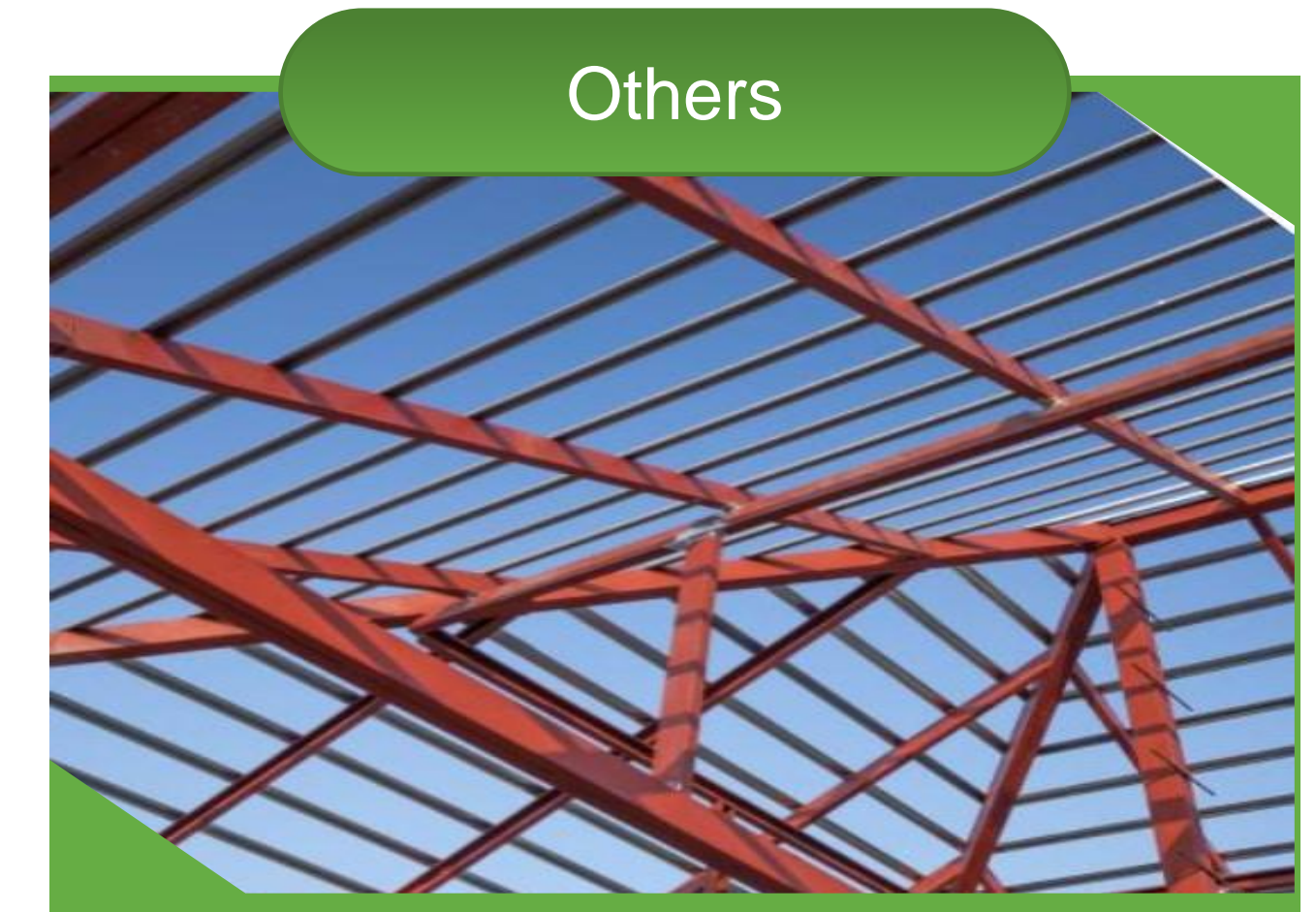
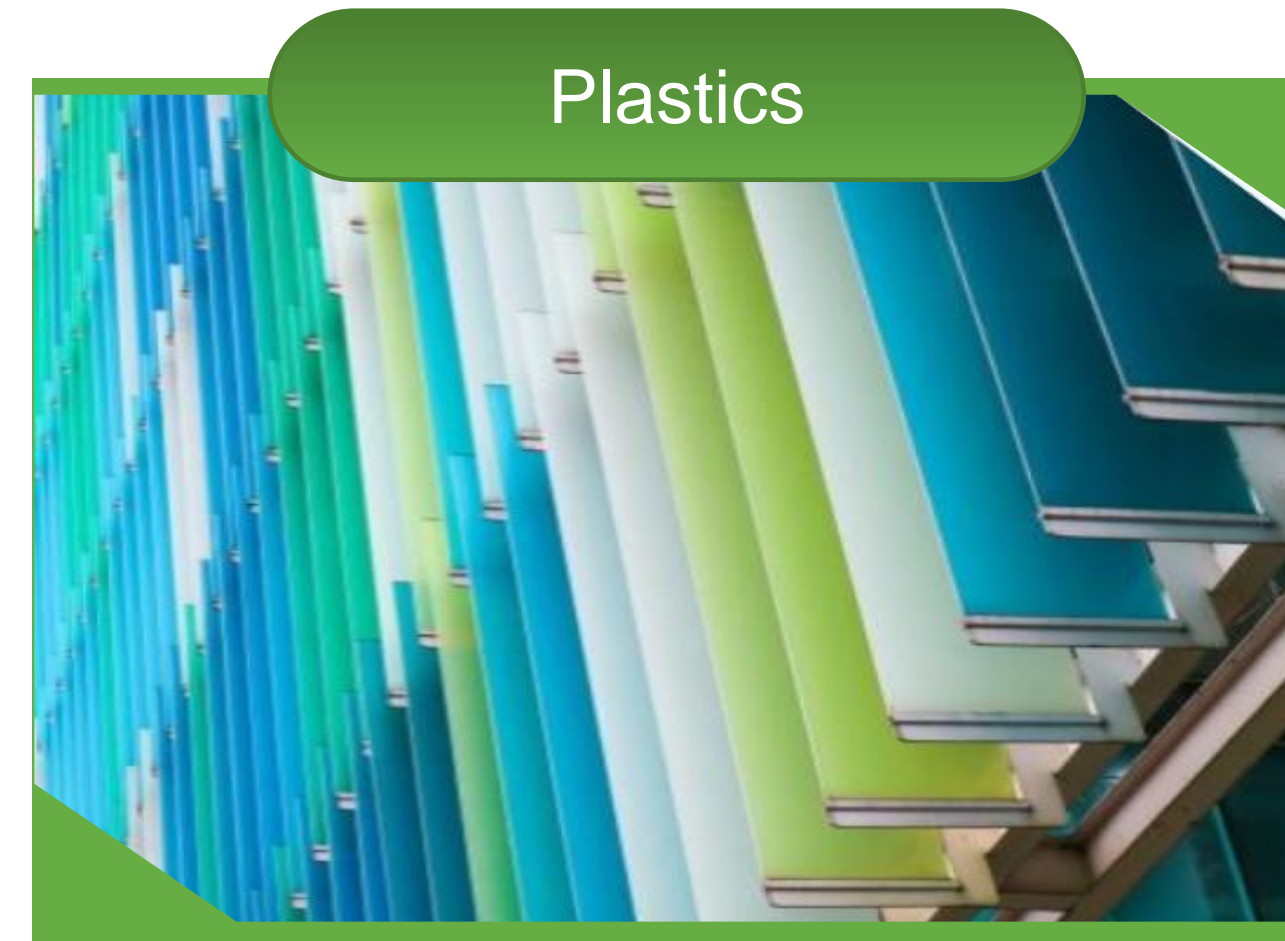
KSA enablers

- Competitively priced raw materials
- Subsidized land and setup costs
- Production operations training available

Driving Prosperity

Note: Others includes different types of roofing such as seamless, single ply, and sandwich roofing; 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Grandview; Mordor Intelligence; Databridge; Team analysis

Potential Roofing localization categories



Advantages

- Low upfront cost
- Ease of installation

Applications

- Organic or fiberglass base with asphalt coating
- Residential and light commercial usage

- High durability
- Low maintenance

- Synthetic polymer material – PVC, polycarbonate, or recycled plastics
- Residential and commercial usage

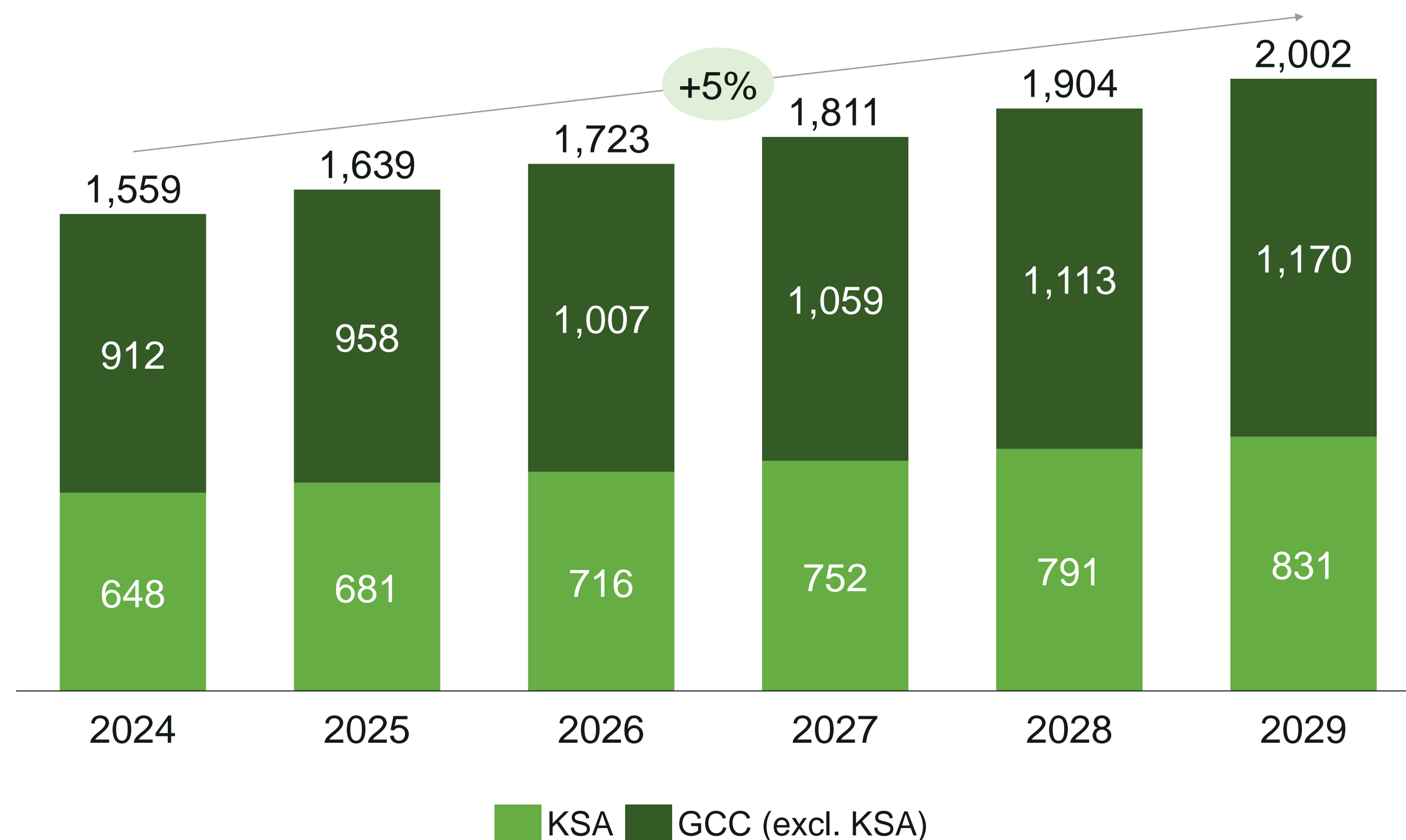
- Including products such as seamless roofing, single ply roofing and sandwich roofing
- Residential and commercial usage

Driving Prosperity

Roofing demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC Roofing market 2024-2029 (\$MM)



Typical Roofing customers in KSA

Residential developers

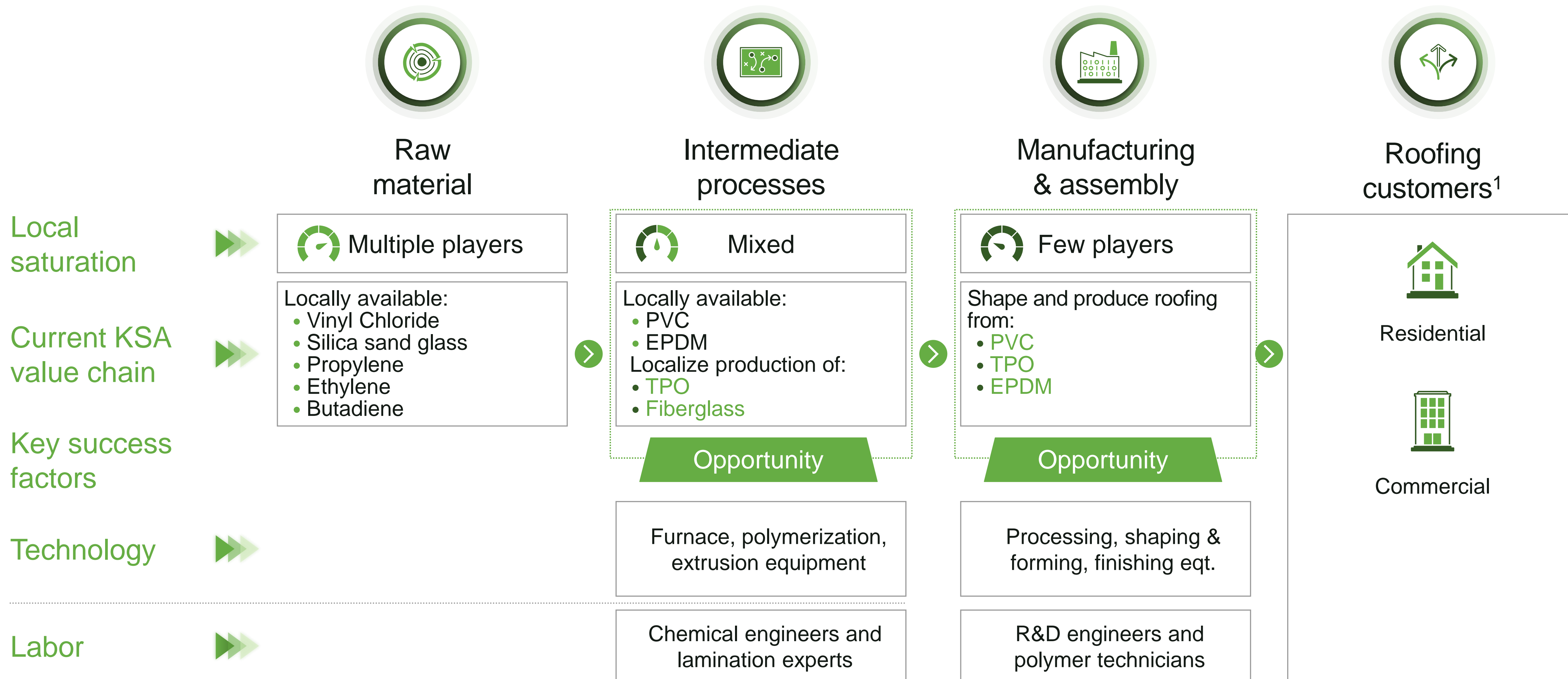
Commercial construction

Key KSA demand drivers

- **Industry trends:** Additional roofing required due to infrastructure development across megaprojects and overarching Vision 2030 initiatives
- **Sector expansion:** Roofing needed to match rapidly growing construction sector – expected to reach \$91B by 2029

Driving Prosperity

Value chain and key localization opportunities



Driving Prosperity

1. Non-exhaustive
Note: PVC = Polyvinyl Chloride; TPO = Thermoplastic Polyolefin; EPDM = Ethylene Propylene Diene Monomer
Source: Team analysis

Investment opportunity and enablers

Key enablers in KSA to drive success



Competitively priced raw materials:
 Competitively priced raw materials enable manufacturing competitive advantage



Financial Incentives: SIDF offers working capital loans in the initial phase and benefits for SMEs under Afaq program for plant setup



Land and infrastructure: Subsidized land and infrastructure in special economic zones such as Ras Al Khair reduces setup costs



Workforce Development: Fully covered or subsidized training programs by HRDF and SEDA for productions operations

Where is the opportunity



Intermediate processes

Localize production of TPO and fiberglass



Manufacturing

Localize manufacturing of roofing from PVC, EPDM and TPO

Driving Prosperity

Notes: SIDF = Saudi Industrial Development Fund; HRDF= Human Resource Development Fund; SEDA = Saudi Export Development Authority; TPO = Thermoplastic Polyolefin
 Source: Team analysis

Self Insulated HVAC Ducting

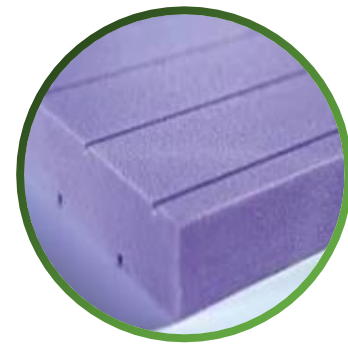
Opportunity profile – Self Insulated HVAC Ducting

1

KSA needs Self Insulated HVAC Ducting for construction expansion



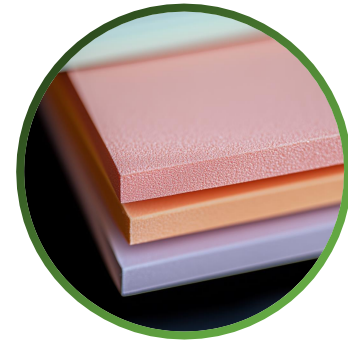
Polyurethane foam



Extruded polystyrene



Expanded polystyrene



Phenolic foam

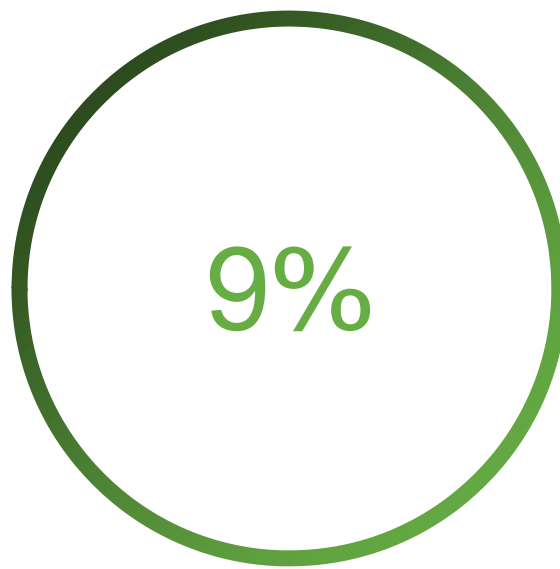
Driving Prosperity

2

Self Insulated HVAC Ducting market is sizeable with forecasted growth



Estimated 2024 KSA market size

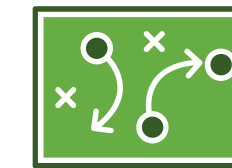


Forecasted 5-year CAGR

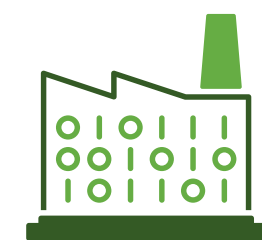
3

Attractive investment opportunities in the HVAC Ducting value chain

KSA value chain opportunities



Intermediate processes



Manufacturing

KSA enablers

- CAPEX financing programs
- Subsidized lease options
- Quality certification funding

Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Expert Market Research; Markets and Markets; P&S Market Research; MarkNtel Advisors; Team analysis

Potential Self Insulated HVAC Ducting localization categories

Non-exhaustive



Advantages

Exceptional thermal insulation, highly fire-resistant, lightweight, and moisture-resistant

Moisture resistance, thermal insulation and compressive strength

Lightweight, cost-effective, moderate thermal resistance

Thermal insulation, lightweight, durable, and moisture-resistant

Applications

- Fire-regulated building
- Premium HVAC systems

- Humid environments
- Underground systems
- Cold storage

- Budget-conscious HVAC
- Temporary ducts
- Non-humid areas

- Commercial HVAC
- Industrial systems
- Cold storage

Driving Prosperity

End product visualization

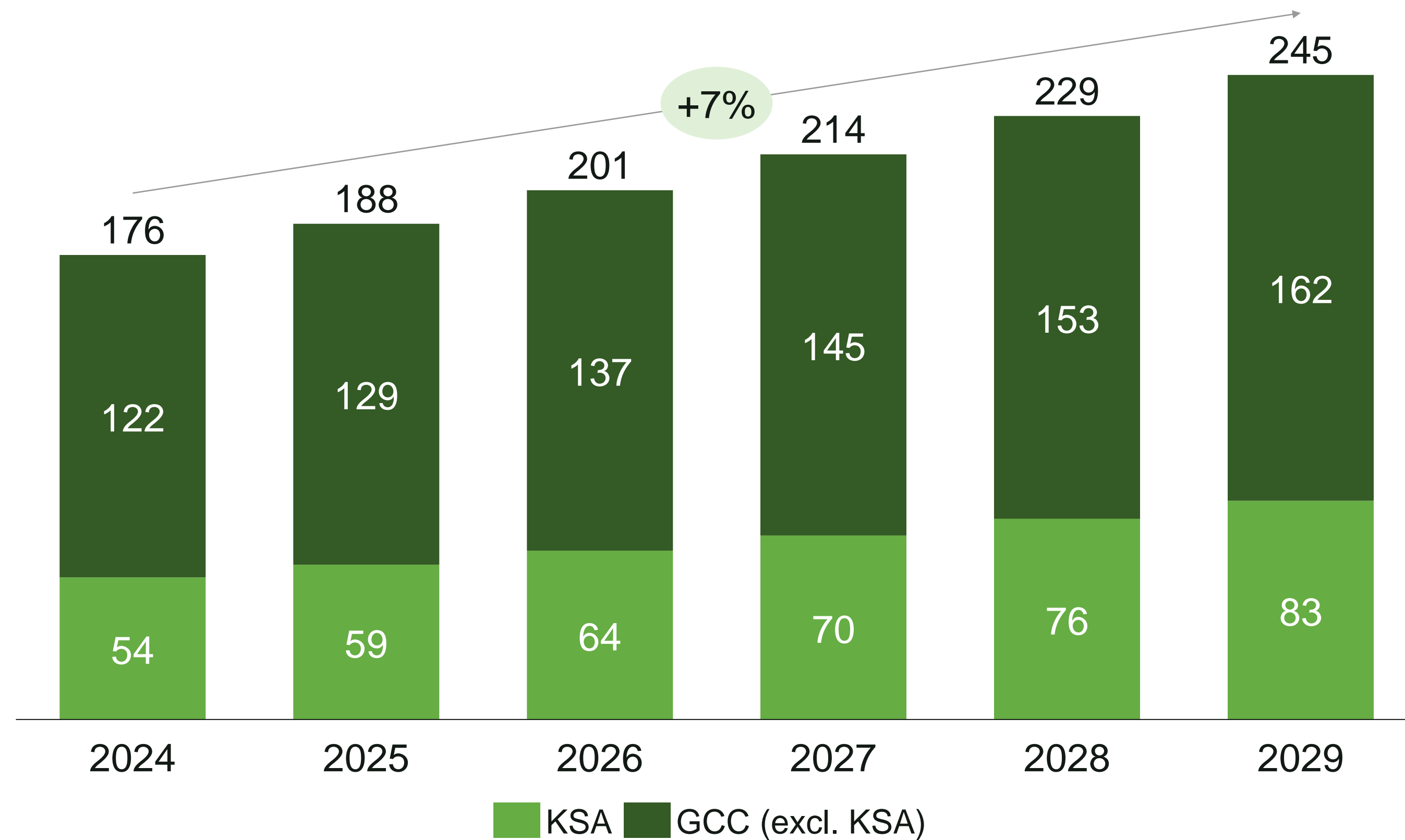
Self Insulated HVAC Ducting






Self Insulated HVAC Ducting demand, customers, and drivers

Non-exhaustive

Forecasted KSA and rest of GCC Self Insulated HVAC Ducting market 2024-2029 (\$MM)



Typical customers in KSA

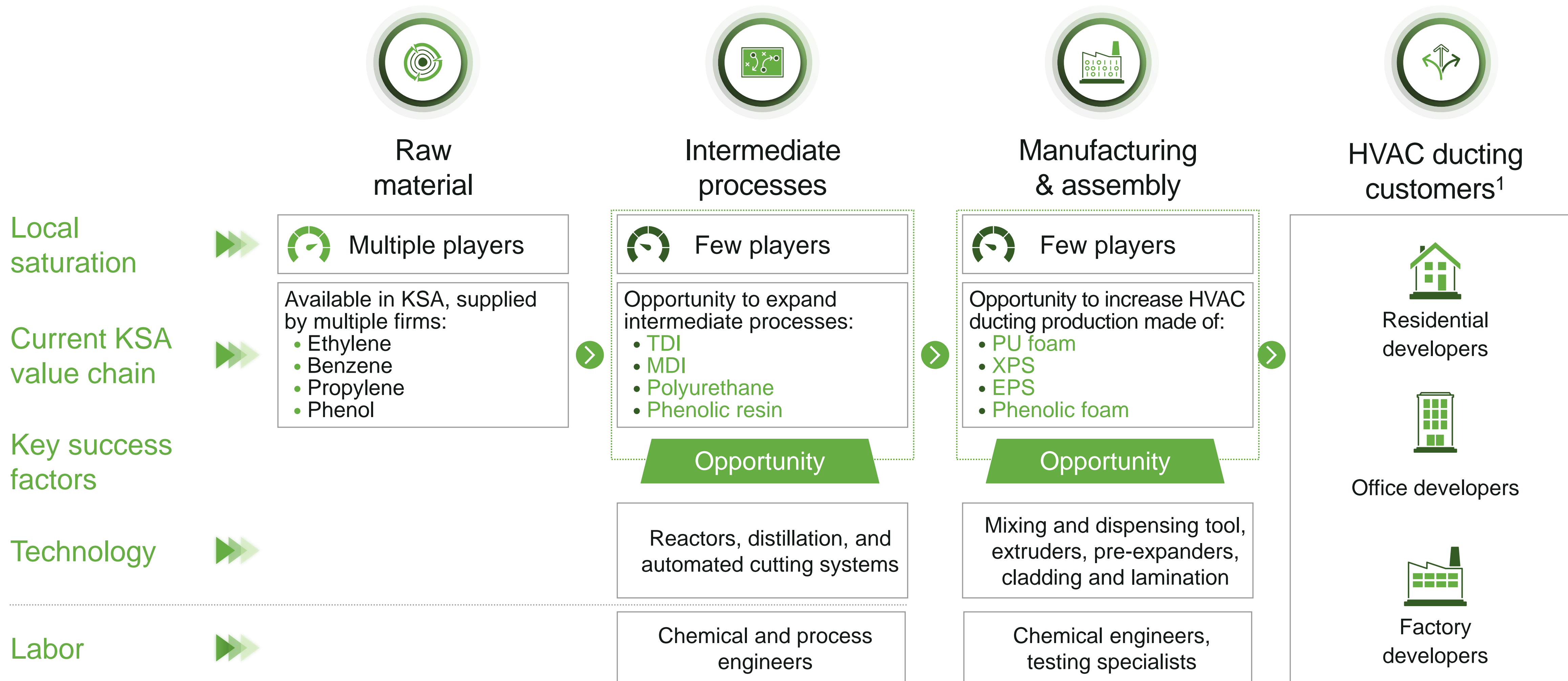
-  Residential developers
-  Office building developers and maintenance firms
-  Factory building developers and maintenance firms

Key KSA demand drivers

- **Industry trends:** Construction projects like Qiddiya and AlUla drive demand for efficient HVAC ducting systems
- **Regulatory measures:** KSA enforces energy efficiency standards and promotes sustainable building practices, driving adoption of self-insulated HVAC ducting

Driving Prosperity

Value chain and key localization opportunities



Driving Prosperity

1. Non-exhaustive

Note: TDI = Toluene Diisocyanate; MDI = Methylene Diphenyl Diisocyanate; PU = Polyurethane; XPS = Extruded Polystyrene; EPS = Expanded Polystyrene

Source: Team analysis

Investment opportunity and enablers

Key enablers in KSA to drive success



Financial program: SIDF CAPEX and working capital loans for financing of production facility.



Industrial lands: Subsidized lease options in specialized industrial zones with advanced logistics and infrastructure



Quality certification funding: Funding by SIDF to obtain necessary certifications to meet industry standards



Workforce development: Fully covered or subsidized training programs by HRDF for productions operations

Where is the opportunity



Intermediate

Expand intermediate processes for TDI, MDI, polyurethane, and phenolic resin



Manufacturing

Increase local production for self insulated HVAC ducting made from polymer resins

Driving Prosperity

Note: SIDF = Saudi Industrial Development Fund; HRDF = Human Resource Development Fund
 Source: Team analysis

**Wood Plastic Composite
Furniture (WPC)**

Opportunity profile – WPC furniture

1

KSA needing WPC furniture to meet current consumer goods expansion



Indoor furniture



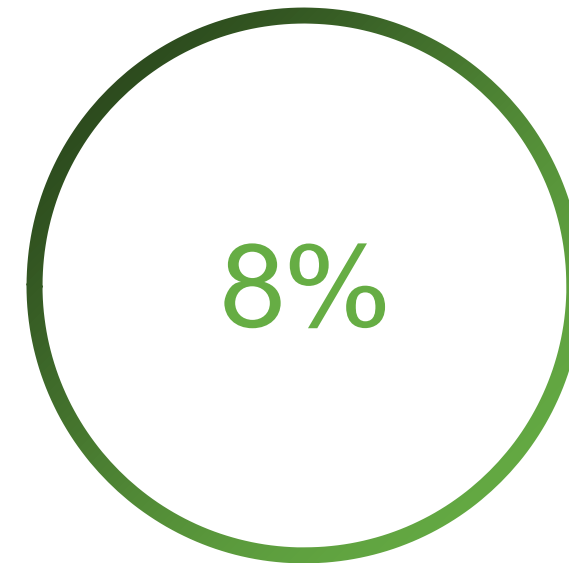
Outdoor furniture

2

WPC furniture market is sizeable with forecasted continued growth



Estimated 2024 KSA market size

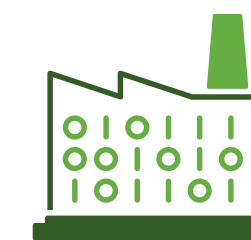


Forecasted 5-year CAGR

3

Attractive investment opportunities in the WPC furniture value chain

KSA value chain opportunities



Manufacturing

KSA enablers

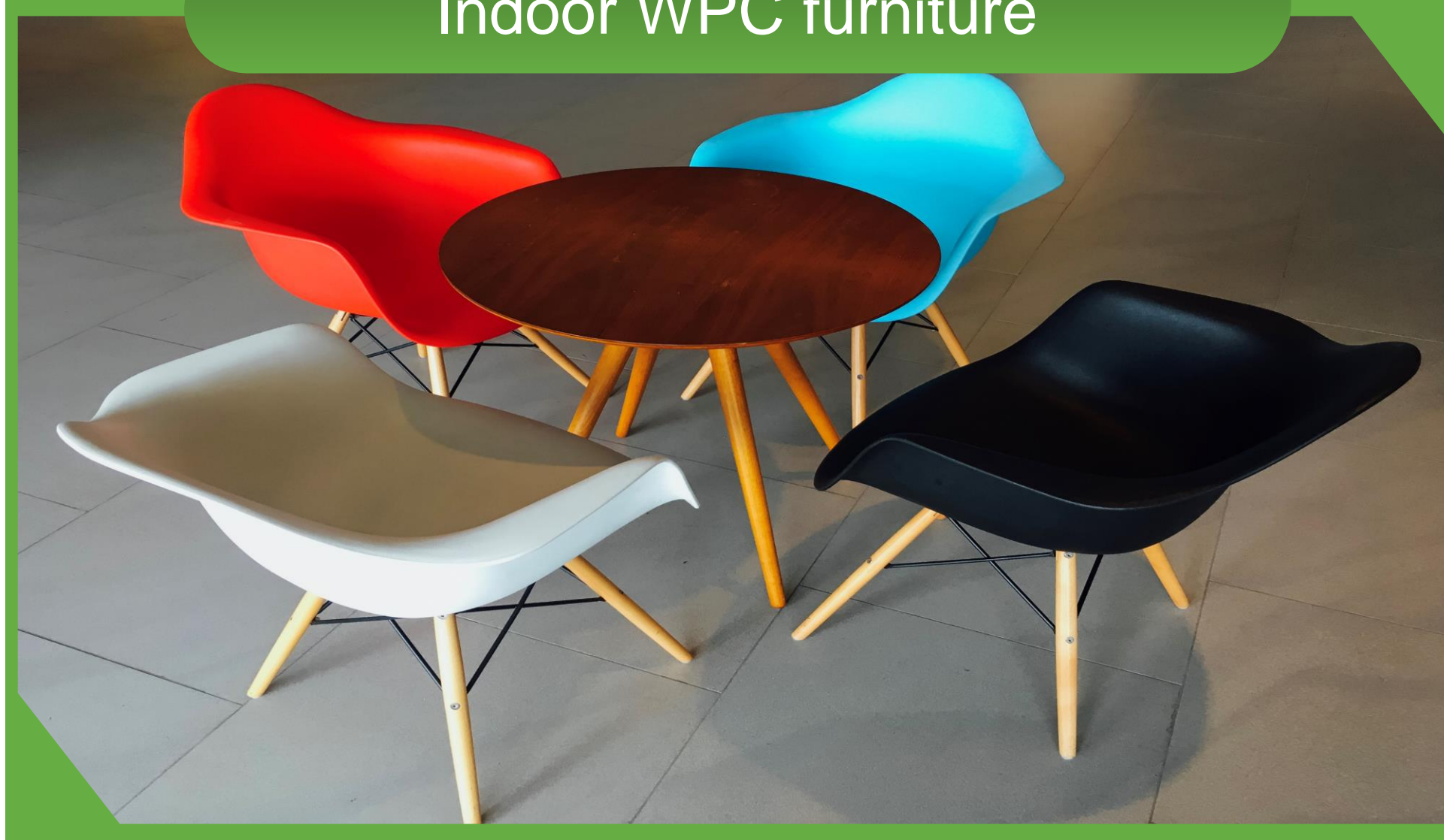
- Working capital financing
- Customs duty export exemptions
- Subsidized training programs

Driving Prosperity

Note: 5-year CAGR refers to KSA market from 2024 to 2029
 Source: Grand View Research; Team analysis

Potential WPC furniture localization categories

Indoor WPC furniture

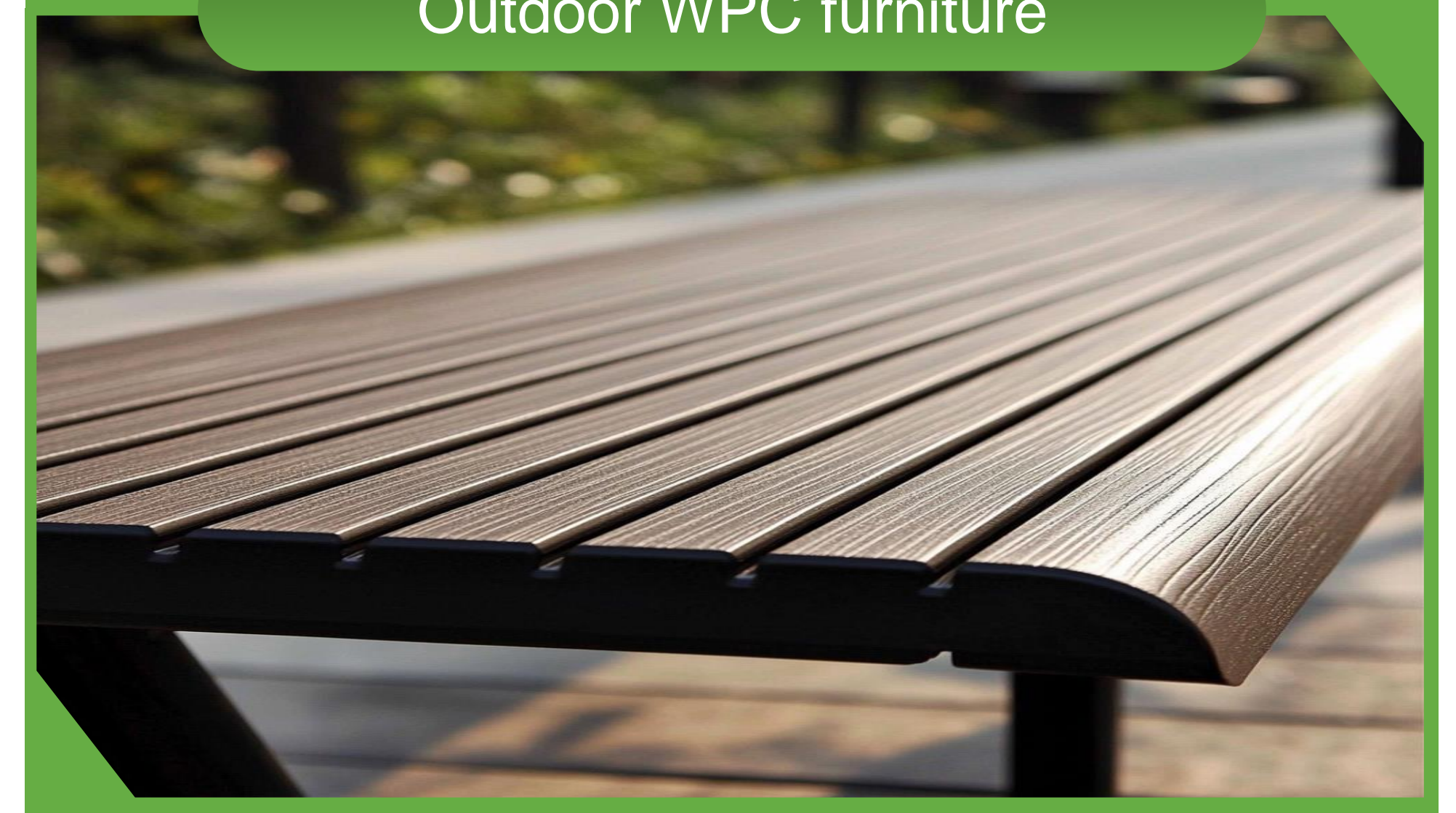


Applications

Prioritizes aesthetics and focuses on lightweight design, used for:

- Tables and chairs
- Cabinets and shelving
- Partitions and paneling

Outdoor WPC furniture



Durability, UV resistance, and weatherproof features, used for:

- Patio furniture
- Garden benches
- Decking and pergolas

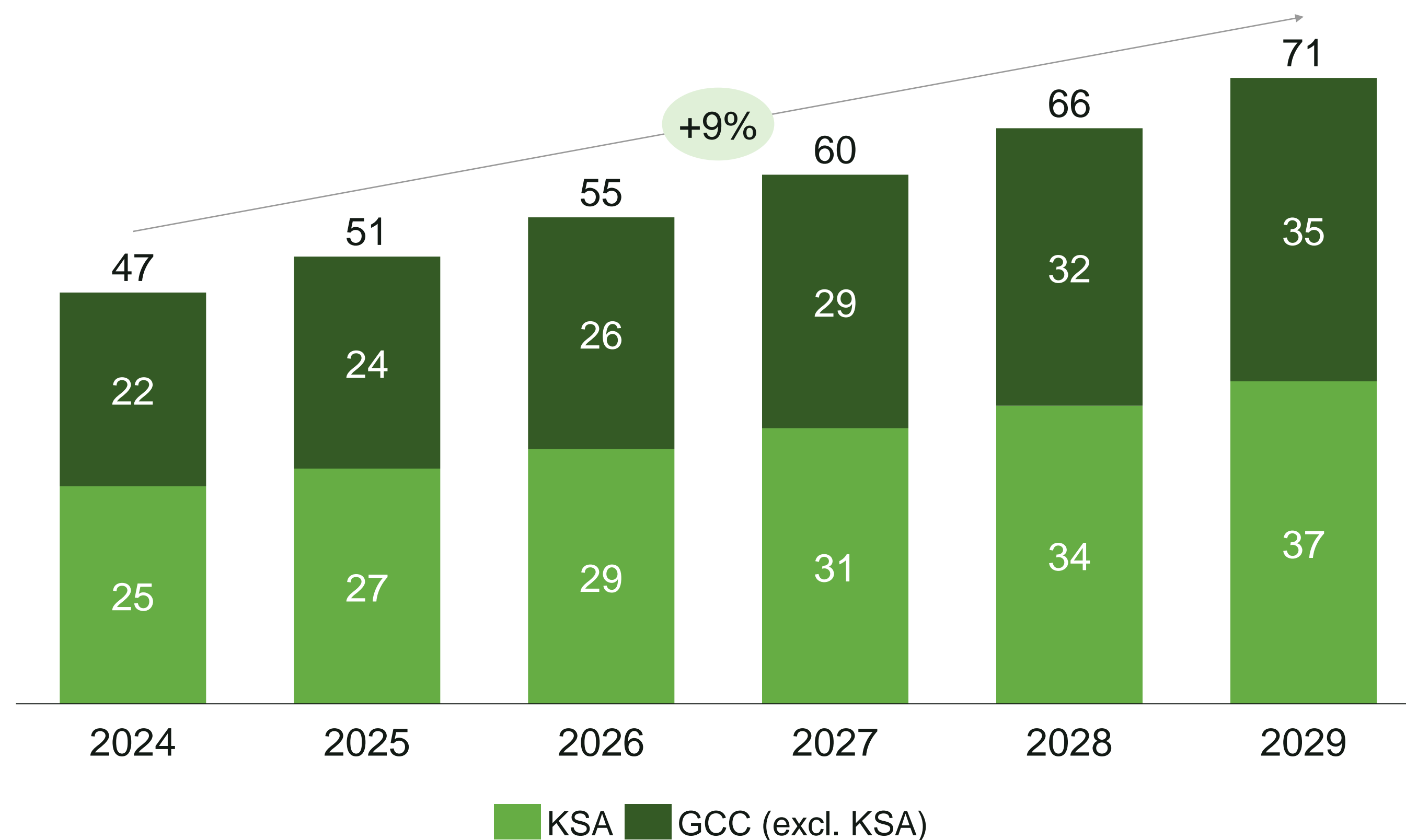
Driving Prosperity

International standards: SASO-ASTM-D7031; SASO-ASTM-D7032; SASO-ASTM-D8484
 Source: Team analysis


WPC furniture demand, customers, and drivers


Non-exhaustive


Forecasted KSA and rest of GCC WPC furniture market 2024-2029 (\$MM)



Typical WPC furniture customers in KSA

-  Private households

-  Offices

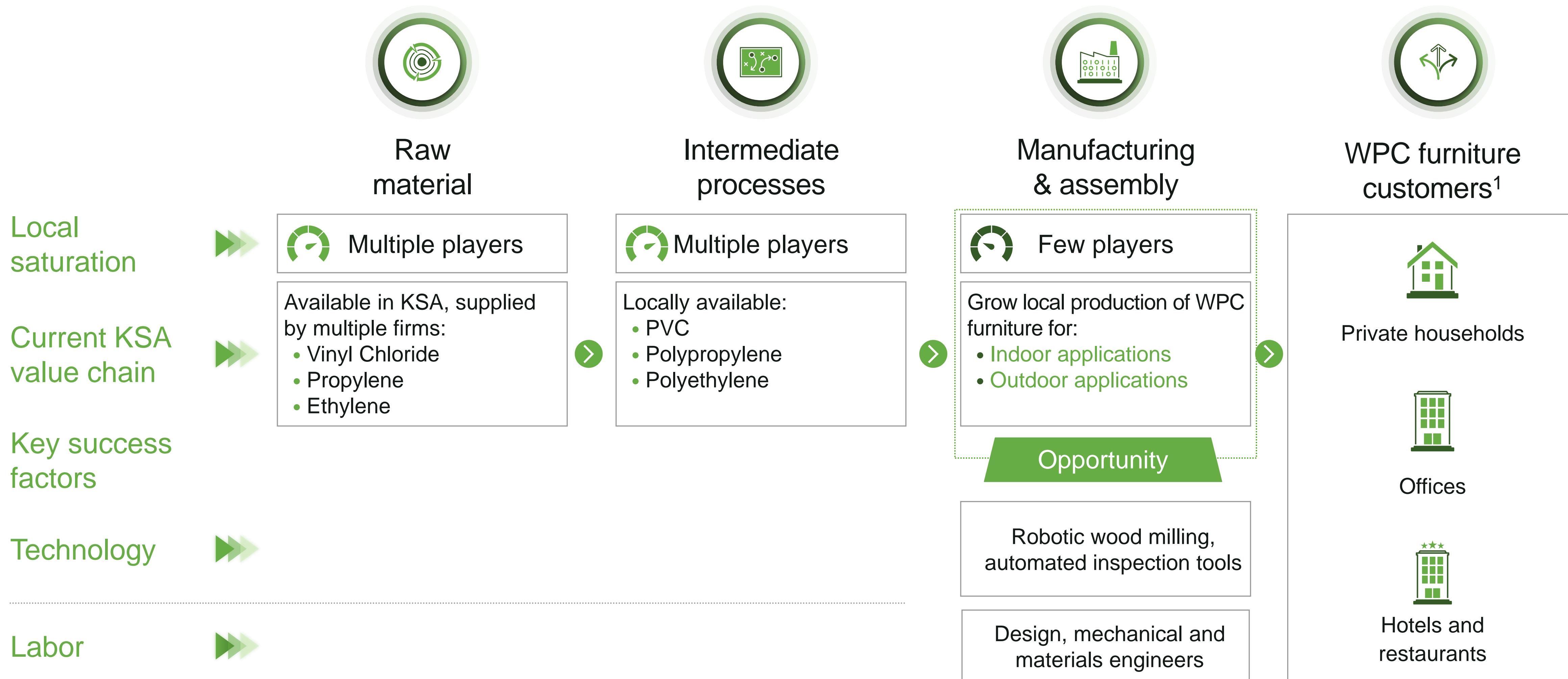
-  Hotels and restaurants

Key KSA demand drivers

- **Office and retail growth:** The thriving commercial sector is paving the path for WPC, with increasing demand for office and retail furniture
- **Industry trends:** Low cost, high durability, and environment-friendly characteristics of WPC are expected to boost market penetration of WPC furniture

Driving Prosperity

Value chain and key localization opportunities



Driving Prosperity

1. Non-exhaustive
Note: PVC = Polyvinyl Chloride
Source: Team analysis

Investment opportunity and enablers

Key enablers in KSA to drive success



Financial Incentives: SIDF offers working capital loans in the initial phase and benefits for SMEs under Afaq program for plant setup



Fiscal incentives: Customs duty exemptions provided by SEDA and ZATCA on exports of WPC furniture to wider GCC markets



Land and infrastructure: Subsidized land and infrastructure in special economic zones such as Ras Al Khair reduces setup costs



Workforce Development: Fully covered or subsidized training programs by HRDF for productions operations

Where is the opportunity



Manufacturing

Grow local production of WPC furniture for indoor and outdoor applications

Driving Prosperity

Note: SIDF = Saudi Industrial Development Fund; SEDA = Saudi Export Development Authority; ZATCA = Zakat, Tax, and Customs Authority; HRDF = Human Resource Development Fund
 Source: Team analysis

**Thank
You**