



GCC AL Market Research

GCC AL Scrap Research



OBJECTIVES

- The objective of the project is to assist clients in understanding the supply structure and pricing mechanisms of GCC aluminum market, and to provide professional third-party advice for clients' local layout of recycled alloy projects, combining forecasted data.

PROCESS

- Methodology
 - ▶ Mapping out local primary aluminum production
 - ▶ In-depth analysis of exporting business by casthouse type
 - ▶ Establishment of scrap generation model and conduct primary research
 - ▶ Determination of the trading flow of AL scrap within and outside of the GCC region
- Sample Size
 - ▶ Traders & Dismantler (20), Fabricators (2), Institution (1)
- Project Time
 - ▶ 6 weeks

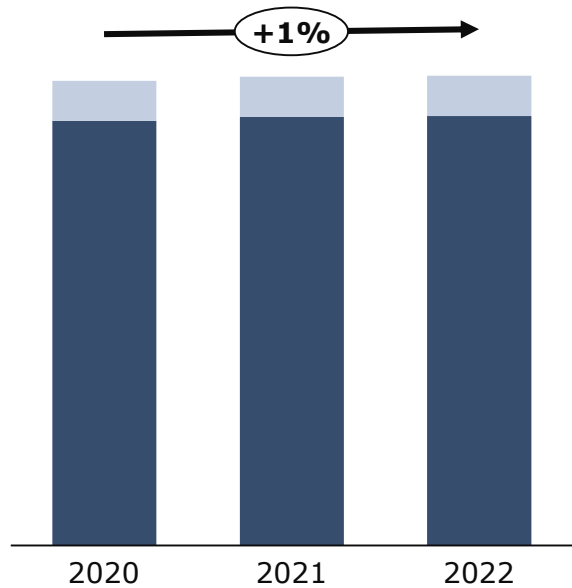
DELIVERABLES

- Aluminum market transparency
 - ▶ Primary market
 - ▶ Secondary market
- Scrap generation modeling
 - ▶ By industry: construction, transportation, packaging, consumer durable, electrical and others
 - ▶ By scrap type: old & new
- Aluminum element balance forecast up to 2050E
- Long-list of dismantlers with basic information regarding city, contact information, capacity, production, key customer type and type of aluminum scrap

GCC Aluminum Production Map

GCC Aluminum Production 2020-2022

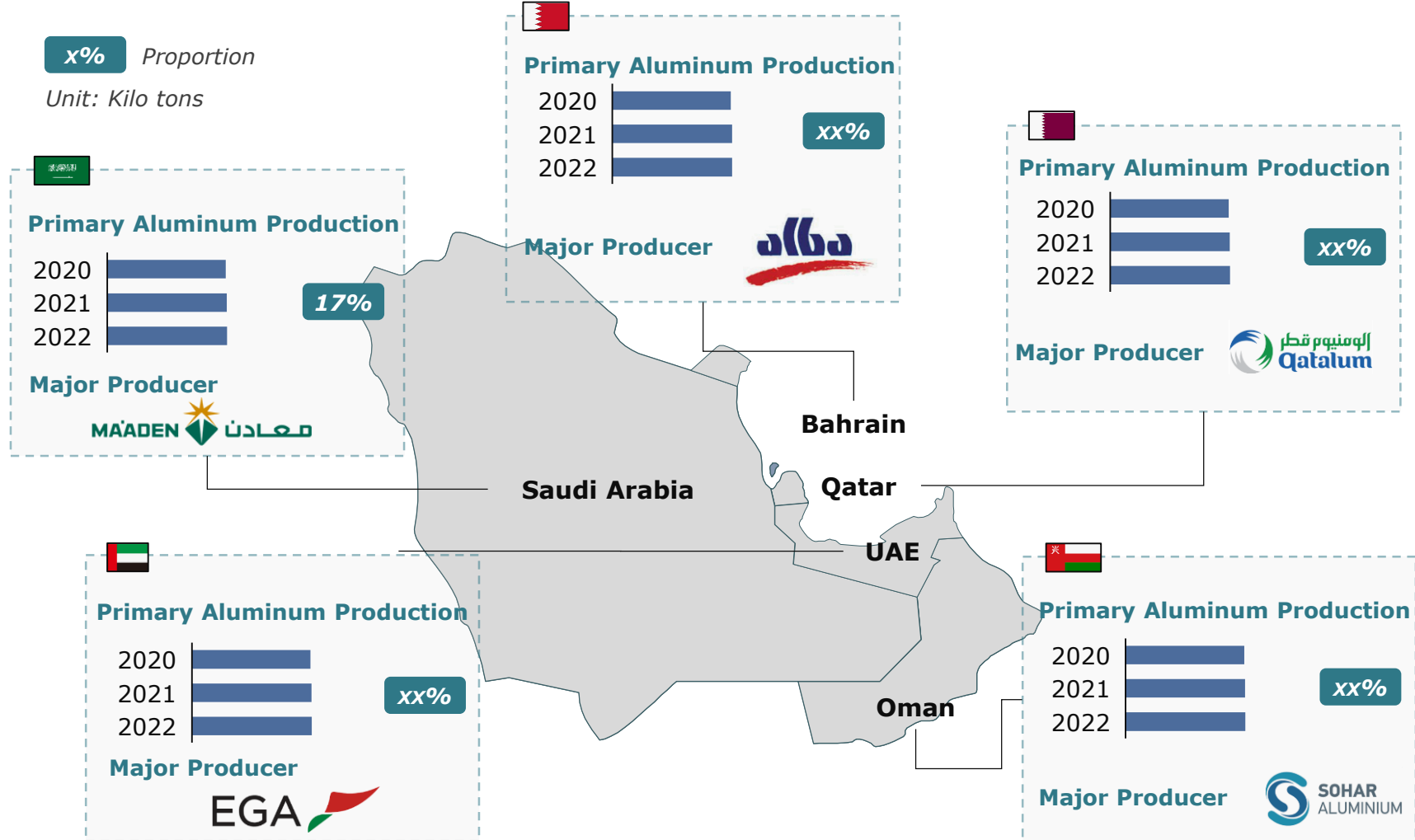
■ Primary Aluminium Production
■ Secondary Aluminium Production



Source: Gulf Aluminum Council, SMM

x% Proportion

Unit: Kilo tons

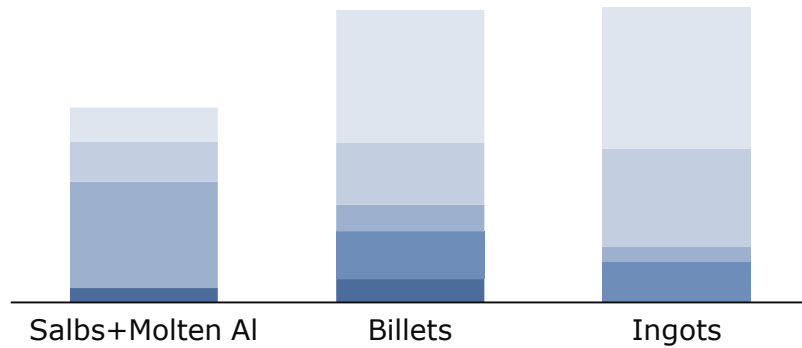


Source: SMM

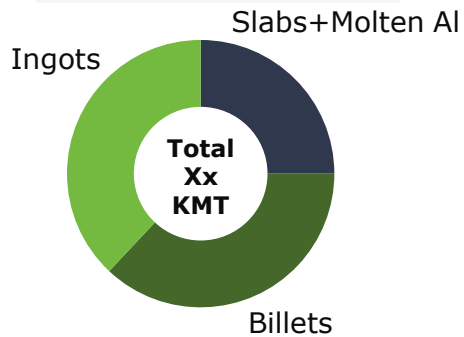
Primary Aluminum Sales in GCC

Primary Aluminum Sales in GCC 2022 by Type

By Country



Total GCC Market

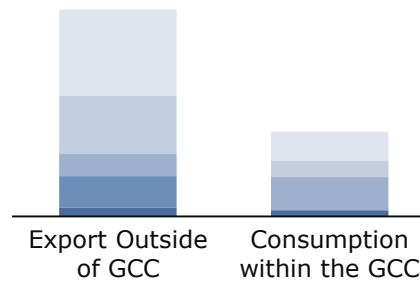


Analysis

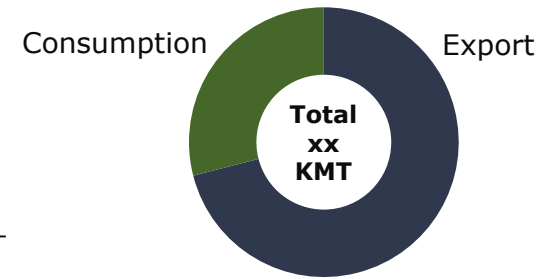
In 2020, Ingots accounted for the highest proportion of GCC's Primary aluminum sales and the lowest was Slabs + Molten Al

Primary Aluminum Sales in GCC 2022 by Export

Primary Sales in GCC by Country



Total GCC Market

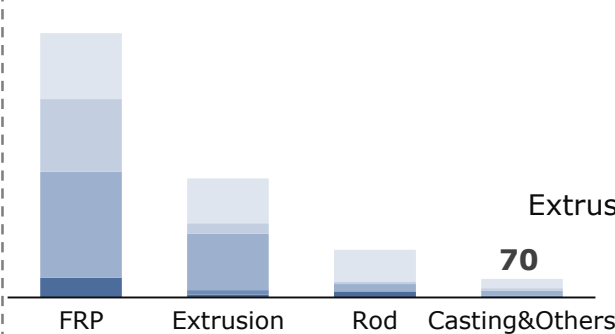


Analysis

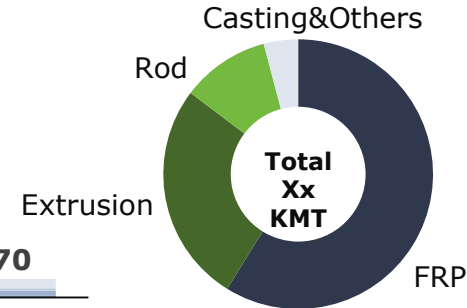
Around 7xx% of the total primary aluminum produced in the GCC region is exported, and the rest gets used by the domestic downstream sector.

Intermediate Sales in GCC 2022

By Country



Total GCC Market



Analysis

The growth in processed food packaging, aluminum cans, and other packaging products has helped the GCC region to set up FRP lines.

Source: Gulf Aluminum Council, SMM

UAE Bahrain Saudi Arabia Qatar Oman

Source: SMM

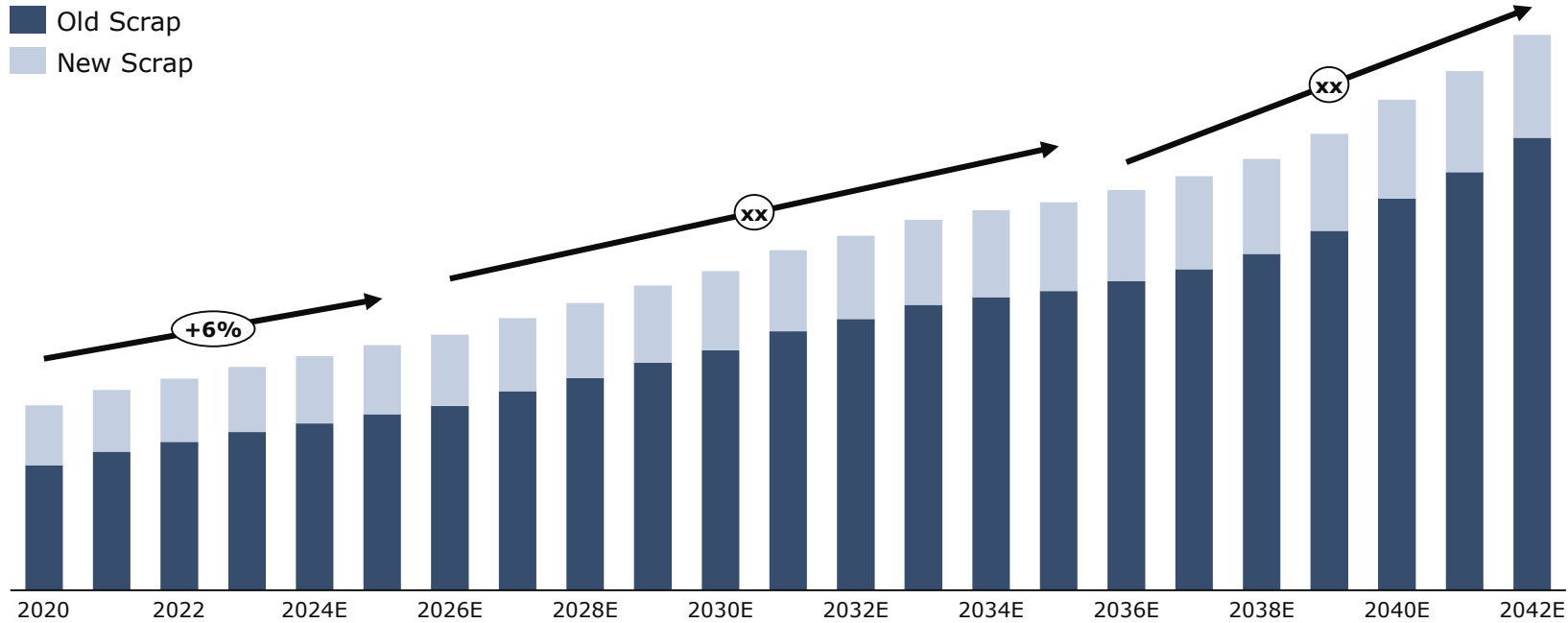
GCC Aluminum Scrap Forecast

Aluminum Scrap Forecast

Unit: kilo tons

Aluminum scrap production in GCC, 2020-2042E

Old Scrap
New Scrap



CAGR

Old Scrap

New Scrap

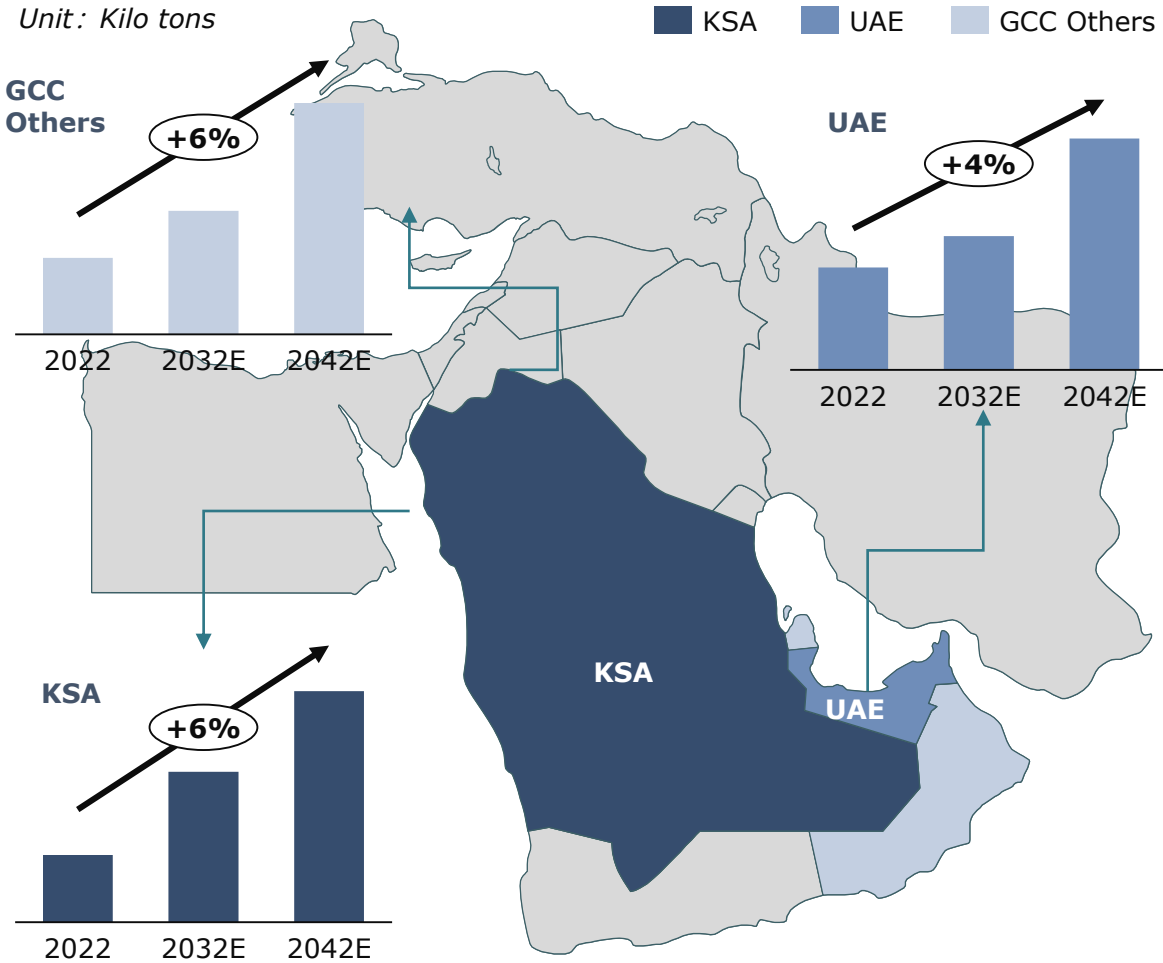
Period	Old Scrap CAGR	New Scrap CAGR
2020-2025E	7.1%	2.9%
2025E-2035E	xx%	xx%
2035E-2042E	xx%	xx%

Forecast Analysis

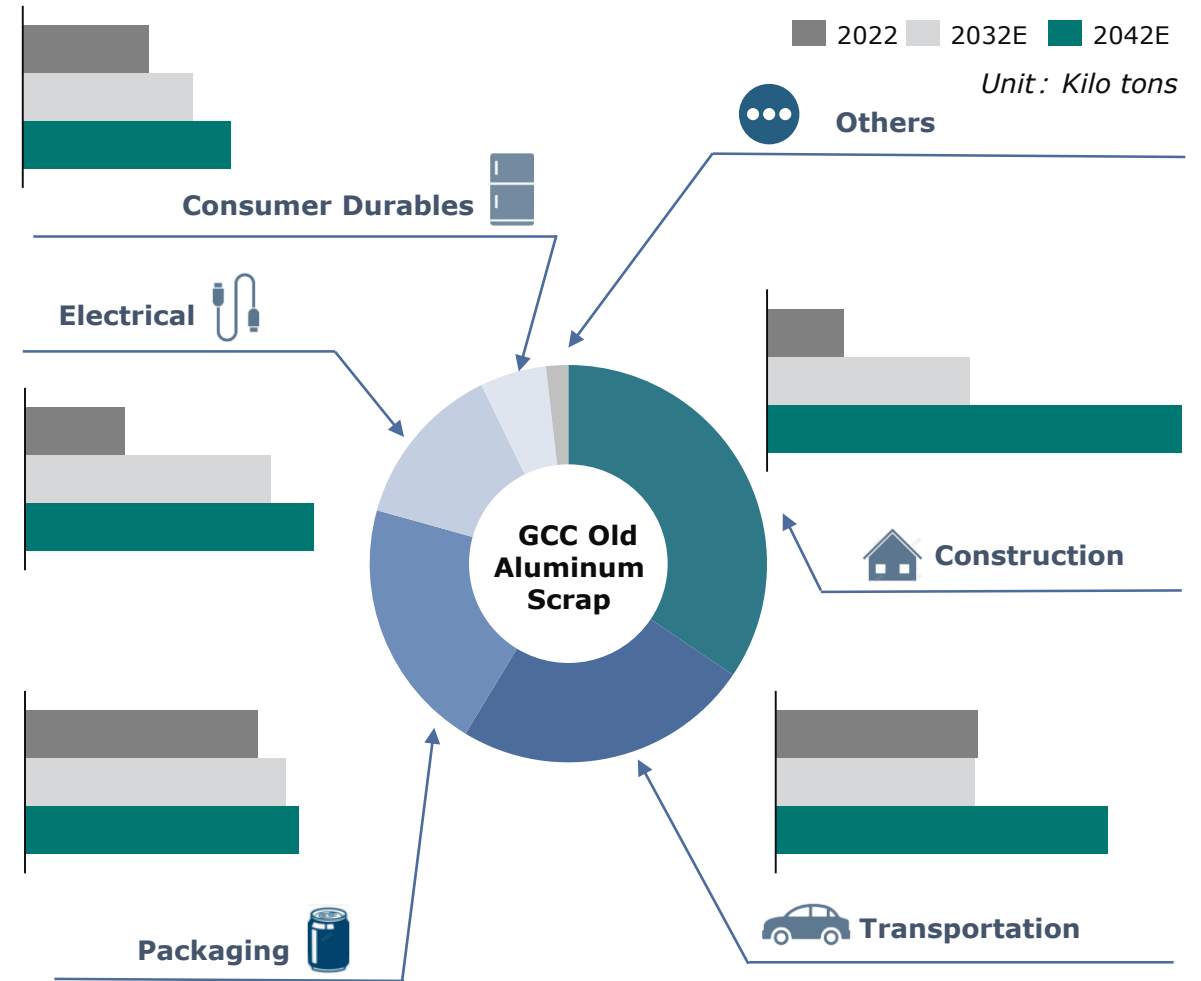
- 2020-2042, the production of scrap aluminum in GCC generally shows a **steady upward trend**, and after 2035, as more and more aluminum products reach the end-of-life cycle, the growth rate of scrap aluminum production will further increase, reaching 6%.
- The growth rate of old aluminum scrap production is significantly higher than the growth rate of new scrap. Due to the **continuous improvement of the recycling system** in the GCC region, the amount of old aluminum scrap will grow rapidly.

GCC Aluminum Old Scrap Production

Aluminum Old Scrap Production by Country in GCC



Aluminum Old Scrap Production by Industry in GCC

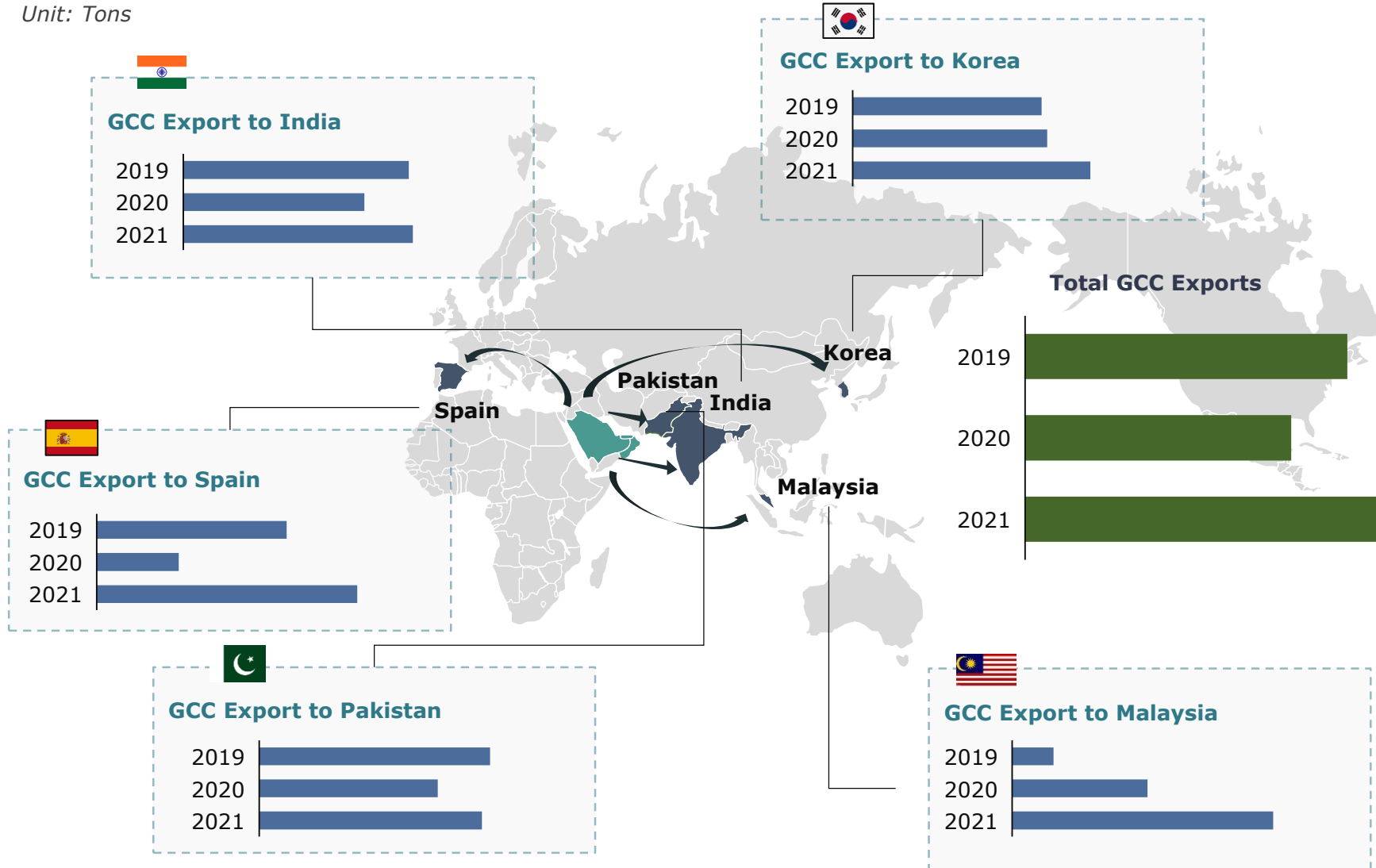


Note: GCC others include Oman, Bahrain, Qatar, Kuwait

Source: SMM

GCC Aluminum Scrap Export Map (Top 5 countries)

Unit: Tons



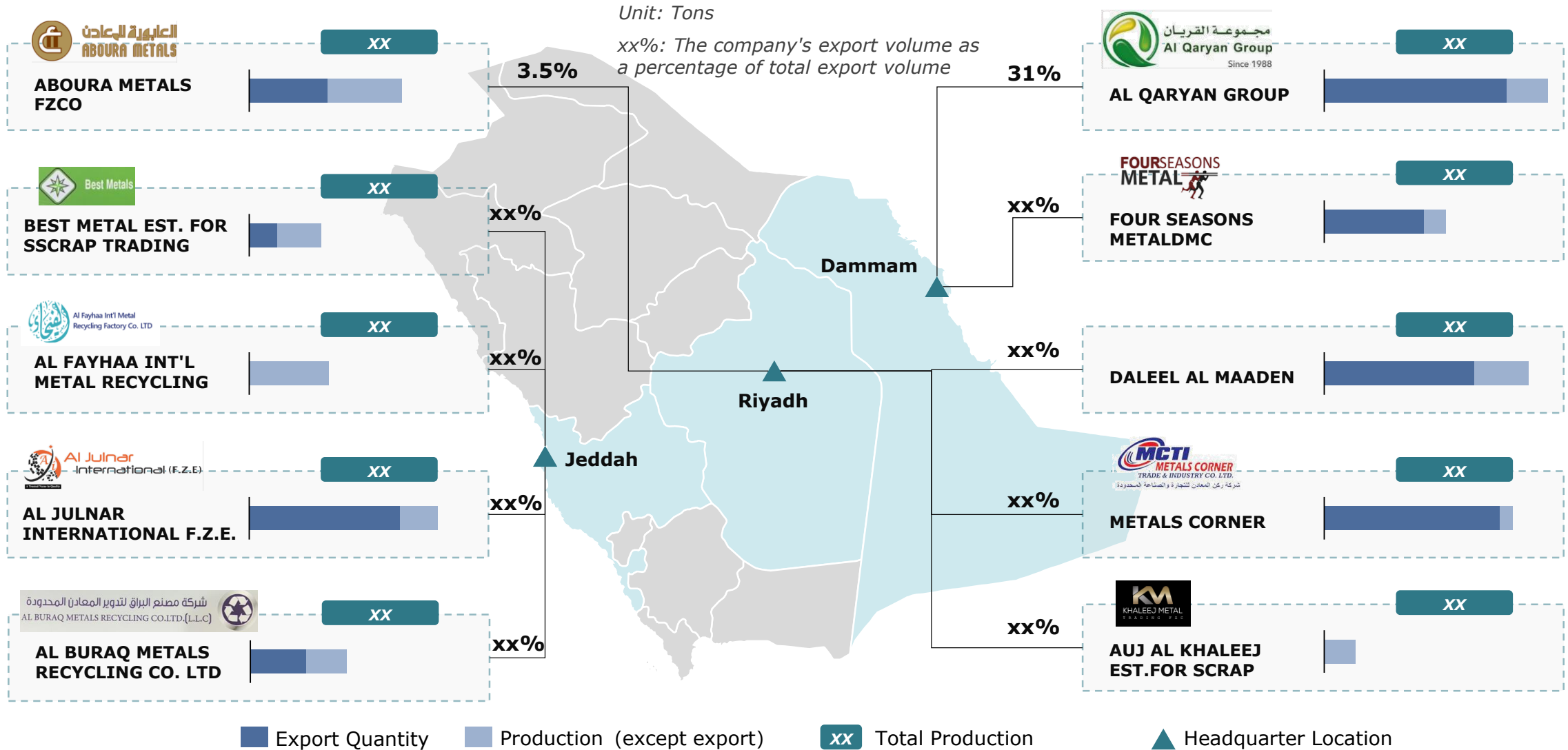
Source: SMM

Key Findings

- In 2020, due to the **impact of the COVID**, the scrap demand of some destination countries drop, and the export volume of scrap aluminum from GCC also decreased.
- The distance between India and the GCC region is relatively close, **the cost of sea transportation is low**, therefore its import volume of scrap aluminum is large. South Korea, as a large industrial country, mainly relies on external raw materials, also imports a large volume of scrap aluminum from GCC.

Source: SMM, ITC, UN Comtrade

KSA Aluminum Scrap Export Map by Companies (2021)



Source: SMM

KSA Aluminum Scrap in Construction Industry

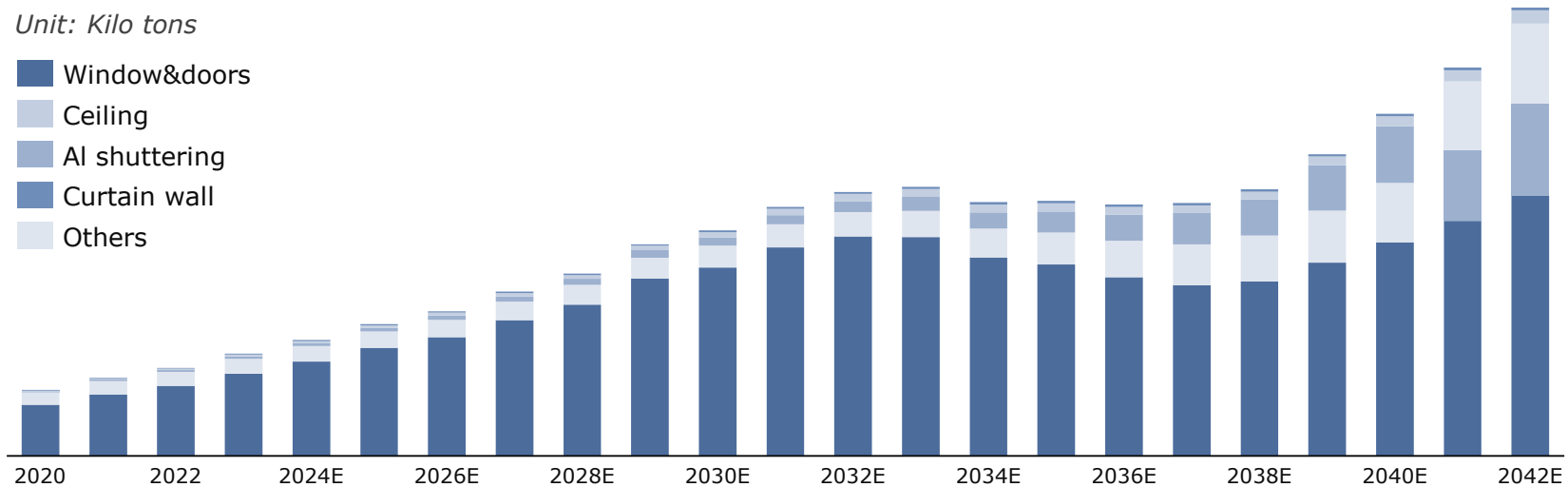


KSA Aluminum Old Scrap Forecast

KSA Aluminum scrap in construction industry 2020-2042E

Unit: Kilo tons

- Window&doors
- Ceiling
- Al shuttering
- Curtain wall
- Others



CAGR

2020-2030E 2031E-2035E 2036E-2042E

Window & doors	13.9%	-xx%	xx%
Ceiling	xx%	xx%	xx%
Al shuttering	xx%	xx%	xx%
Curtain wall	xx%	xx%	xx%

Collection rate

Unit: %

2020 2030E 2042E
74.53% ↗ xx% → xx%

Recovery rate

Unit: %

2020 2030E 2042E
89.72% ↗ xx% → xx%

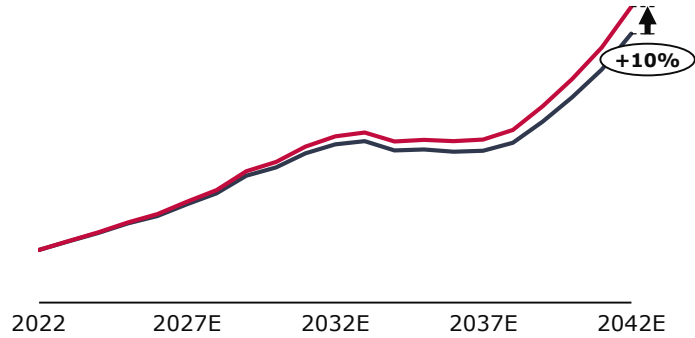
Forecast Analysis

- Since old scrap aluminum in the construction industry are mainly derived from aluminum doors and windows, the overall trend in the construction industry is largely consistent with doors and windows.
- Saudi Arabia's proposed **xx plan** will provide a boost to the construction industry, and scrap aluminum will increase.

Aluminum Old Scrap Production in Different Collection Rate

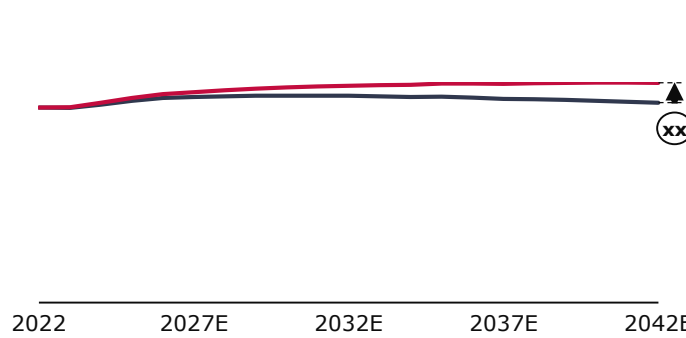
Construction

Unit: kilo tons



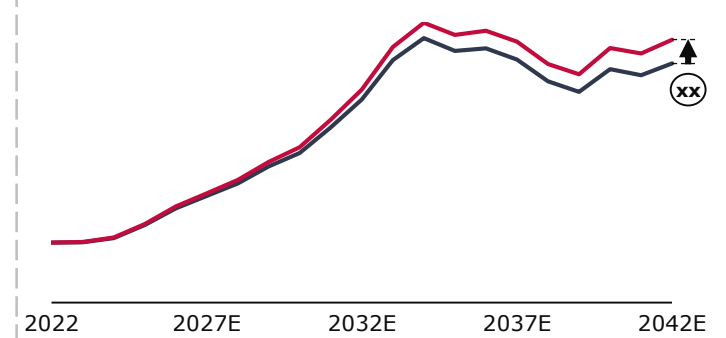
Packaging

Unit: kilo tons



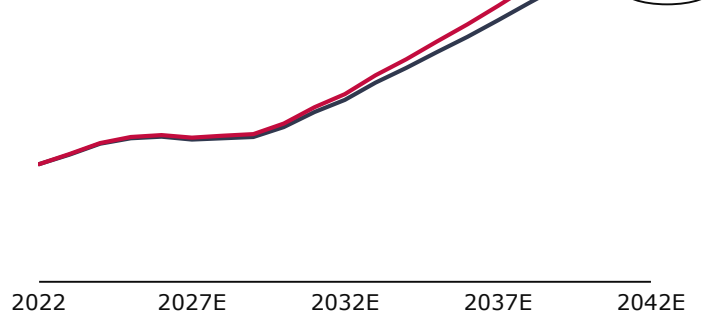
Electrical

Unit: kilo tons



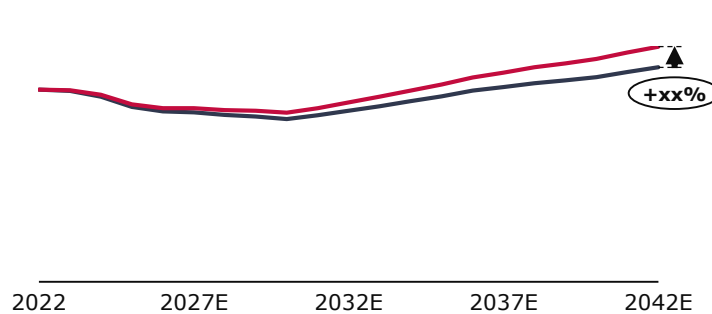
Transportation

Unit: kilo tons



Consumer Durables

Unit: kilo tons



Analysis

- In order to achieve the goals of carbon peaking and **carbon neutrality**, KSA's **recycling system is expected to be greatly improved**. If the recycling rate of various industries can be increased by xx, the amount of scrap aluminum recycling will also increase.
- The increase in recycling rate has the **greatest impact** on the consumer durables industry, and the corresponding scrap aluminum production would **increase by xx**.