

METAL PACKAGING 2026 OUTLOOK

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METPACK 2026 METAL PACKAGING OUTLOOK – EXECUTIVE SUMMARY

Market Size and Growth

The global metal packaging market (metal cans, including aerosols, closures, tubes, trays and industrial) represents approximately 13% of the total packaging industry, estimated at \$ 155 billion in 2025 and forecast to reach \$ 185 billion by 2031. This reflects an expected five-year growth rate (CAGR 2026–2031) of approximately 3.0%. In comparison, the wider packaging industry is expected to grow slightly faster at around 3.5% CAGR, led by plastics and board reaching an estimated \$ 1.44 trillion by 2031. While metal packaging grows marginally below the overall market, it remains a stable and resilient segment with consistent long-term demand, with the main sector cans.



Materials and Market Structure

The metal packaging sector is based on two materials: steel and aluminium. Steel accounts for the majority share, while aluminium represents approximately 40% of total market value, increasing to an expected 42% by 2031. Aluminium is primarily used in beverage cans, but also in aerosols and about a fifth of food cans, while steel is widely applied across food, food and specialty cans, industrial packaging, aerosols, and closures. Both materials are classified as permanent materials, meaning they can be recycled repeatedly without loss of quality, which underpins the sector's sustainability advantage, a tangible benefit compared to other materials in the packaging tax being adopted by over 60 countries.

Dominance of the Can Segment

Cans are the leading sector in metal packaging, accounting for approximately 58% of metal packaging in 2025. The can segment includes beverage, food, aerosol, and food and specialty cans, with beverage cans acting as the primary growth driver. Beverage cans are almost entirely made from aluminium (around 95%) and benefit from high-speed production, lightweighting, and strong recycling economics. Food cans, valued at over \$26 billion in 2025, are more mature and grow at a slower pace, while aerosol and food and specialty cans provide steady but smaller contributions to overall market growth.



Regional Dynamics

The global metal packaging market is geographically concentrated, with the United States holding approximately 24% of total market value, followed by China at around 17%. Together with countries such as Brazil and Germany, the top five markets account for over 60% of global demand. While North America and Europe are relatively mature markets, China and other emerging regions continue to show stronger growth potential, particularly in food and aerosol applications.





Challenges and Market Pressures

Despite strong fundamentals, the industry faces increasing cost pressures. Rising prices for aluminium and steel, combined with geopolitical tensions and energy cost volatility, are expected to impact margins. The current Iran war for metal packaging, from previous crises is most likely a cost impact rather than demand loss, meaning that planned capacity may move back, but they will come on stream. The sector has historically demonstrated resilience during periods of economic uncertainty.

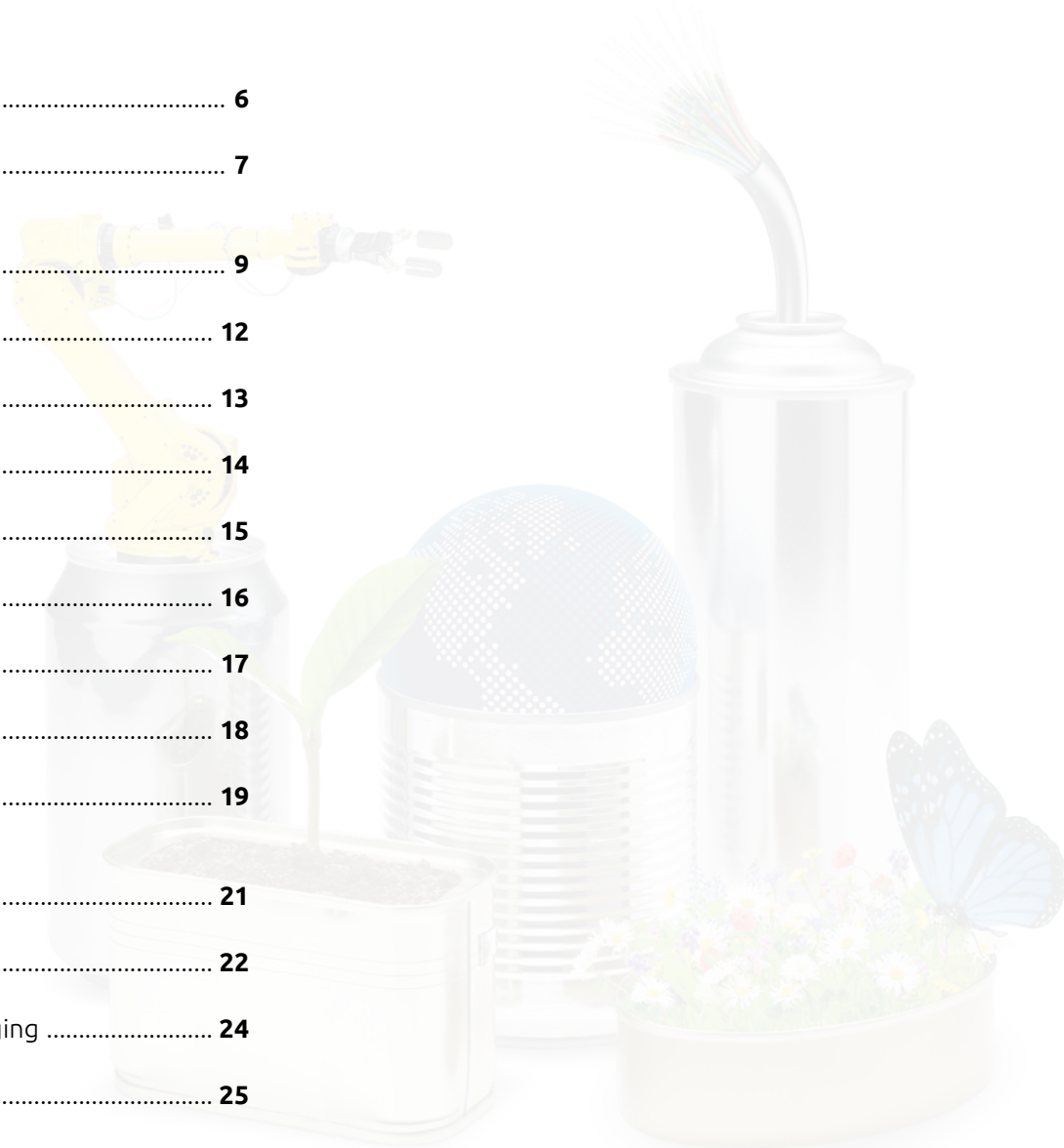
Industry Drivers and Outlook

Several long-term drivers continue to support the metal packaging industry. Sustainability is a key factor, with recycling rates exceeding 75% for aluminium and over 80% for steel in major markets. Metal is positioned favourably to plastics, which face economic and regulatory challenges in recycling. The economic value of recycling aluminium is way out in front with over \$1.25/kg as compared to plastic with zero to -\$0.9/kg in Europe, steel with \$0.20-\$0.50/kg has a positive value, both materials already have full recycling in several countries. There is also a gradual shift from plastic and glass to metal packaging in selected applications, driven by circular economy objectives and material performance. The total cost of ownership is a holistic measure of cost through the supply chain to end of life, where an example of beverages in Spain on a TCO basis is given showing beverage can has the best position.



CONTENT

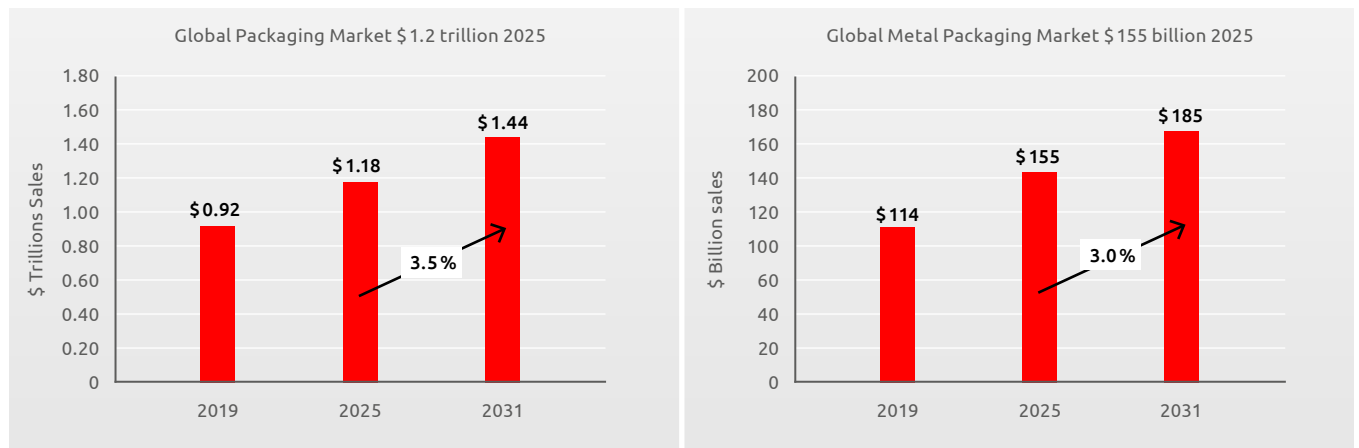
Global Metal Packaging Market Outlook 2026–2031	6
The Packaging share by type and growth by type	7
Top 5 countries by Sector /Segment 2025 estimate and expected growth to 2031	9
A Positive Start to the Year	12
Top Three Beverage Canmakers Capex/Sales 2018–2025	13
Geopolitical Tensions Create New Market Pressures	14
Beverage can growth motor in Metal Packaging	15
Aluminium Supply and Pricing Pressures	16
Packaging Steel supply and pricing pressure	17
Industry Fundamentals Remain Strong	18
Raw materials cost development index basis 2019–2026	19
Economics of Recycling Matrix-Quadrant Graph Recycling Target 2030 Less Actual-Vs-Economic Value \$/t	21
Fillers and Suppliers	22
Total cost of ownership TCO and single serve beverage packaging	24
Imprint / Report Sources	25



GLOBAL METAL PACKAGING MARKET OUTLOOK 2026–2031

At the start of 2026, the global metal packaging market was valued at approximately \$155 billion for 2025, representing around 12–13% share of the \$1.2 trillion global packaging industry, according to Smithers’ report The Future of Global Packaging to 2030. The Global report forecasts a CAGR 2025–30 growth of 3.5% which we estimate at and \$1.44 trillion value in 2031 at constant prices and currencies, the permanent materials have a lower growth rate of 3.0% for metal and 2.0% for container glass whereas plastic and flexibles have growth rates above 3.5%. A dedicated study, The Future of Metal Packaging and Coatings to 2031, will be published by Smithers later this year. The growth for metal packaging is based on our current view using constant 2024 currencies and pricing, company reports and world trade imports and exports data for 2025.

Global Packaging \$trillions vs Metal packaging sales \$billions



Source: MS Can Solutions from Smithers Global Report 2025

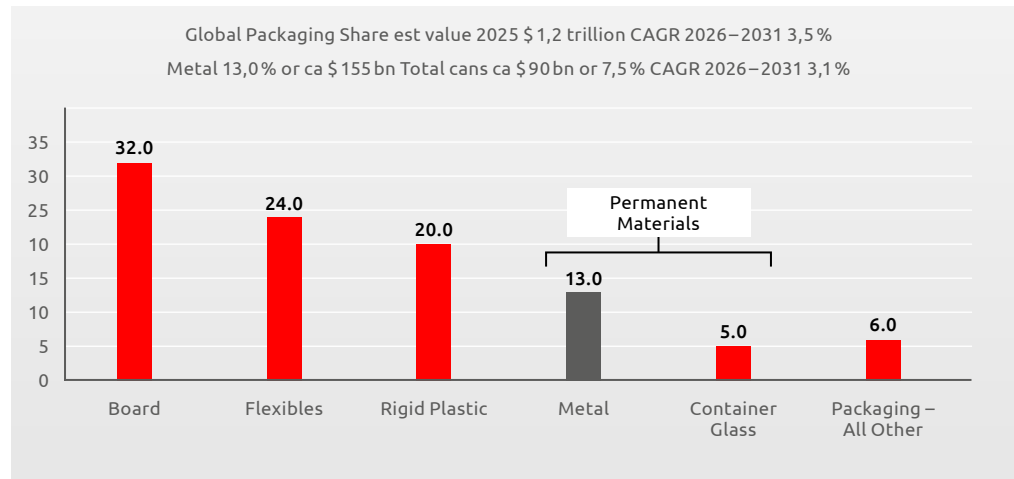
THE PACKAGING SHARE BY TYPE AND GROWTH BY TYPE

This outlook is based on a review of current market developments and forecasts for the period 2026–2031, using constant 2024 prices and exchange rates. The two metals used in metal packaging are packaging steel and aluminium; in 2019 aluminium was 40% in value across all metal packaging, its use is primarily for beverage, but also food,

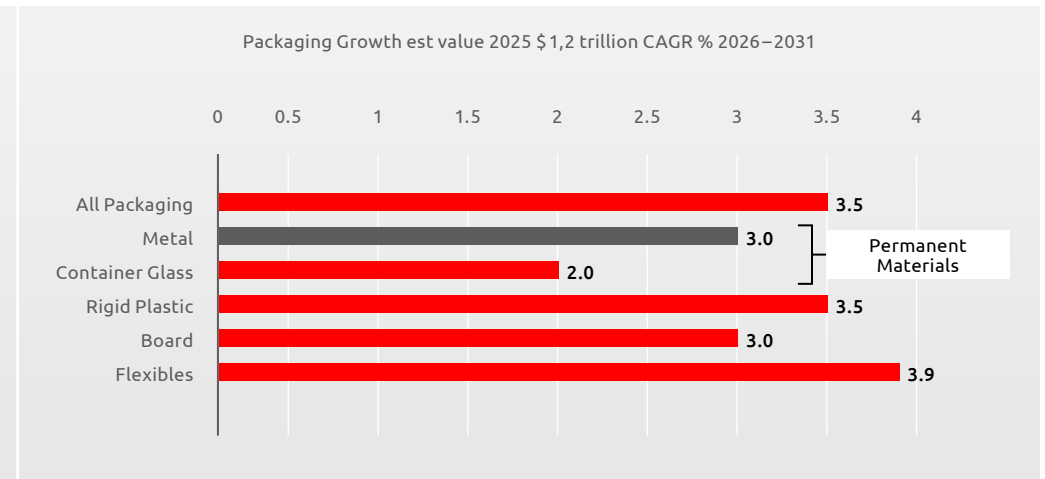
aerosol, metal closures and aluminium collapsible tubes and trays. In 2025 the aluminium share was 40% and forecast to increase its share to 42% by 2031. The main sector is cans using steel and aluminium which in 2025 was 58% by value of all metal packaging with the following segments: beverage, food, aerosols, ‘food, and speciality cans’ (also known

as General Line). The remaining sectors are metal caps and closures, bulk metal containers and gas containers, drums and barrels, and other aluminium not elsewhere specified n.e.s. (including foil trays and collapsible tubes).

Packaging Share by type % value 2025 est \$ 1,2 trillion actual prices to 2024, constant 2024 prices and currencies



Packaging Growth CAGR % 2026 – 2031 actual prices to 2024 constant 2024 prices and currencies

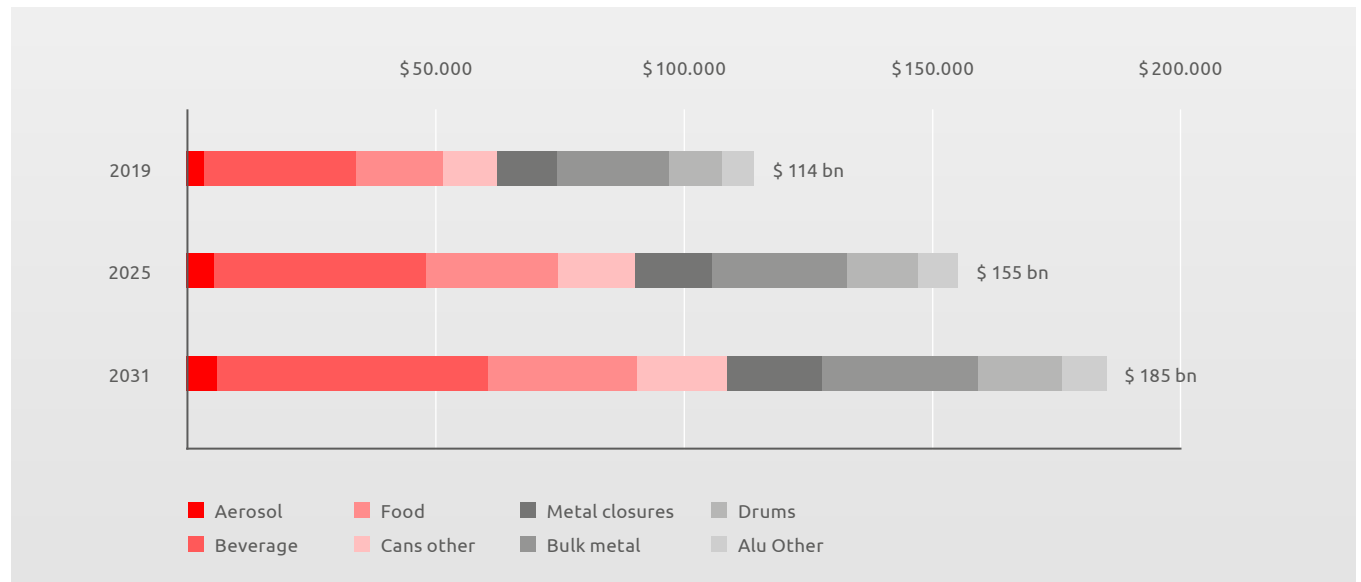


Source: Smithers Global Packaging Report 2025 and Metal Packaging Report 2024

Metal packaging grew from 2019 \$ 114 billion to \$ 153 billion in 2024 with current prices and currencies to 2024, and then with 2024 constant prices and currencies is estimated at \$ 155 billion in 2025 and forecast to \$ 185 billion in 2031 a CAGR 2026–2031 of 3.0%. The bar graph shows that beverage can is the growth motor for metal packaging, food cans, aerosol cans, and cans other are the segments in the cans sector. The other sectors Metal closures, Bulk metal, Drums, and Aluminium other n.e.s. have growth at a lower level and have stable overall share position.

The top five countries for metal packaging and the five sectors are broken out in the next two slides, where since the can sector is 58% and growing the can sector has four segments. The can sector segments which are beverage, food can, aerosol can, food and speciality can (no processed food cans). Cans is only the can sector where both value and volume can be estimated and cross referenced to packaging steel and aluminium usage, company reports, and import and export statistics. For the other sectors the market size is estimated only by value, value is in US dollars as it is the main currency for traded commodities and is the default for all World Trade imports and export statistics.

Development of metal packaging sectors from 2019, 2025 and 2031 forecast



Source: MS Can Solutions from Smithers Metal Packaging Report 2024

TOP 5 COUNTRIES BY SECTOR/SEGMENT 2025 ESTIMATE AND EXPECTED GROWTH TO 2031

The value development and top five countries are shown in the next two slides for Metal packaging Total cans, Beverage, processed food, aerosols, and Food and Speciality cans. The Metal Packaging Value was \$ 114 bn in 2019 and is estimated at \$ 155 bn for 2025 with historic 2019–2024 CAGR of 6.1 % with current prices, is forecast to grow 2026–2031 at 3.1 % to \$ 185 bn by 2031 with constant 2024 prices and currencies. The two metals used are steel and aluminium in 2025 the share of value sold is estimated at 60 % steel and 40 % aluminium in 2025, with the share forecast to grow to 42 % aluminium by 2031. The top five countries for metal packaging by value are the US 24 %, followed by China 17 %, Brazil 4 %, Germany 4 %, Mexico 3 %.

With cans making 58 % by value of Metal packaging in 2025, there is a similar repartition by country for Total cans. Beverage cans are 95 % aluminium, there are still some beverage steel cans in China and Asia used primarily for retorted drinks like nut milk, and coffee and for photographic print quality, with brands like the Chinese Red Bull. Beverage can markets may be considered as beer, carbonated drinks, energy drinks, and other drinks, it is the most concentrated can segment where the top four canmakers have over two thirds of the market by value. Beverage cans are primarily aluminium (about 95 %) and use either carbonation or liquid nitrogen to pressurise the container, which enables a low sidewall

gauge to be used (sidewall reduction of up to 70 % of the starting gauge), resulting in optimal metal usage and high throughput (over 2000 cpm per line) with the draw wall iron dwi process. The beverage stay on tab SoT end uses 5000 series alloy and is set to move to one 3000 series alloy for the body and end Unialloy to drive full recycling.

Food cans are heat sterilised cans for food, seafood and pet-food, they are required to stand heat sterilisation and hold a vacuum requiring different technical specifications to food and speciality cans. The top three food can producers have over 30 % of the market in 2025, the market is less concentrated than beverage can, over 20 % of food cans are aluminium, with petfood, seafood, and meat and pate the main markets. The food can markets supplied are seasonal 'fresh pack' fruit and vegetables and less seasonal, ready meals, soup, seafood, meat and pate, and wet petfood. Processed food cans use heat sterilisation or retorting to ensure long shelf-life often over five years, the process has been described as 'nature's safe', the scientific basis defined by Bigelow and Ball enables the thermal process to be established and from this the physical container requirements (panel, buckle, and volume change) may be defined. Food cans use either a welded side seam or draw redraw, or a dwi process where usually the sidewall reduction is less than beverage at about 50 % reduction.

Food and speciality cans do not require heat sterilisation, they include dry food and powders, infant formula cans, they are usually dimensionally larger than food cans and are often printed, calling for can lines designed to run printed plate. This segment includes cans and pails for paints, chemicals, mastics, as well as vegetable oils, and a wide range of other speciality cans, tins, and caddies. The cans produced may use lap seam, welded seam, or drawn cans, the sizes range from 50 ml up to 25 litres and may be round, conical or rectangular.

Aerosols are produced from steel or aluminium with aluminium over 50 % of demand. The end markets are personal care (strongly aluminium), household mainly steel, and technical products which may be steel or aluminium. Since Aerosols are pressurised containers at the point of use there are prescribed standards relevant to can technology and the container pressure which may be 10–20 bar, calling for pressure resistant domes and cones. The aluminium cans are usually produced by impact extrusion from slugs or pucks off a mini casting line which is pure aluminium, but aluminium alloyed slugs have been developed by Ball, and others. The Dwi process for aluminium aerosols long established in Japan has been developed by Moravia in Czechia the conversion driver being material optimisation, as seen with beverage and food cans.

Top 5 countries by sector/segment 2025 (A)

First Sector Cans – 4 segments actual prices and currencies to 2024, constant 2024 prices and currencies to 2031

Business Sector /segment	2019	2025 est	2019–2024 Growth	2025 Latest estimate						2031 f/c	2026–2031 Growth
Metal Packaging Value 2025 \$ bn Packaging steel and aluminium sheet are the main materials By country the US #1, China #2, Brazil #3, Germany #4 Expect growth on 2024 constant prices and currencies to be 3.0% The market value forecast is \$185 bn in 2031 on constant 2024 basis	\$114,0	\$155,0	6.1%	24%	17%	4%	4%	3%	48%	\$185,0	3.1%
				US	China	Brazil	Germany	Mexico	Others		
Total Cans Value 2025 \$ bn Total cans share moves from 55% in 2019 to 58% in 2025 Expect growth at 3.3% to 2031 and 59% share of metal packaging The leading countries are US #1, China #2, Brazil #3, Japan #4, Mexico #5 The Metal packaging growth motor is dwi Al beverage cans	\$62,4	\$89,7	7.4%	24%	17%	4%	4%	3%	48%	\$109,0	3.3%
				US	China	Brazil	Japan	Mexico	Others		
Beverage Cans – dwi Al Beverage cans are for beer, carbonates, energy drinks and other drinks Beverage is 95% aluminium, there are steel 3pc cans in SE Asia The US continues to grow and remains the number one producer	\$29,0	\$41,0	7.0%	29%	12%	9%	5%	4%	42%	\$50,0	3.2%
				US	China	Brazil	Japan	Mexico	Others		
Food Cans Processed food can are for canned food and wet petfood Food cans include aluminium cans, usually small about 100g US is the largest producer, China is second over 80% filled exports Italy and Spain are large producers and export filled cans	\$17,4	\$26,4	8.2%	19%	9%	5%	5%	5%	60%	\$30,0	0.9%
				US	China	Italy	Spain	Mexico	Others		
Aerosol cans Cast slugs are used for aluminium Aerosol cans are for Personal care, Household, and Technical products Aerosol cans are worldwide about 50:50 steel and aluminium China #1, has overtaken the US #2 and with Brazil #3 are growth centres	\$3,4	\$3,5	9.0%	16%	12%	9%	8%	5%	51%	\$6,2	2.2%
				China	US	Brazil	UK	Germany	Others		
Food & Speciality Cans (General line) Includes Paints, Chemicals, Coatings, Mastics plus dried foods and powders, party beer kegs, vegetable oils, feta cheese, infant formula China #1 has a very large paint market, India #2, large vegetable oil market	\$10,9	\$15,4	6.5%	35%	13%	12%	6%	4%	31%	\$17,4	1.9%
				China	India	Japan	Turkey	US	Others		

Source: MS Can Solutions note about 5% of beverage cans are steel only in Asia

Top 5 countries by sector / segment 2025 (B)

Four Sectors excluding cans (total five) no segments

Business Sector / segment	2019	2025 est	2019–2024 Growth	2025 Latest estimate						2031 f/c	2026–2031 Growth
Metal Packaging Value 2025 \$ bn Packaging steel and aluminium sheet are the main materials By country the US #1, China #2, Brazil #3, Germany #4 Expect growth on 2024 constant prices and currencies to be 3.1 % The market value forecast is \$185 bn in 2031 on constant 2024 basis	\$ 114,0	\$ 155,0	6.1 %	24 %	17 %	4 %	4 %	3 %	48 %	\$ 185,0	3.1 %
	Top 5 Countries %			US	China	Brazil	Germany	Mexico	Others		
Metal Caps, closures 2025 \$ bn Volume is not available The main market is closures for glass, sometimes plastic Metal closures may be twist off, pilfer proof, from steel or aluminium Includes aluminium wine wrap for corks	\$ 11,9	\$ 15,6	4.8 %	17 %	14 %	6 %	6 %	5 %	53 %	\$ 19,2	3.5 %
	Top 5 Countries %			China	US	France	Brazil	Germany	Others		
Fabricated steel boxes, barrels & drums Volume is not available Only steel is used Industrial market for chemicals, oil, food ingredients	\$ 10,7	\$ 14,4	5.5 %	32 %	15 %	6 %	2 %	2 %	43 %	\$ 16,3	2.0 %
	Top 5 Countries %			US	China	Germany	France	Mexico	Others		
Bulk metal containers / gas containers Volume is not available Only steel is used US #1, China #2, Germany #3, Italy #4, Mexico #5	\$ 22,5	\$ 27,0	3.2 %	31 %	15 %	8 %	6 %	3 %	36 %	\$ 31,7	2.5 %
	Top 5 Countries %			US	China	Germany	Italy	Mexico	Others		
Other aluminium containers Volume is not available Only aluminium foil is used Includes aluminium tubes for pharma, food, & paints, foil food trays and lids, coffee capsules	\$ 6,4	\$ 8,0	4.0 %	39 %	18 %	6 %	4 %	3 %	29 %	\$ 8,9	1.9 %
	Top 5 Countries %			China	US	Turkey	India	Italy	Others		

Actual prices and currencies to 2024, constant 2024 prices and currencies to 2031

Source: MS Can Solutions

The value development of the remaining four sectors ranks the top five countries and are shown above for Metal packaging; Metal caps and closures; Fabricated steel boxes, barrels, and drums; bulk metal containers and gas cylinders; and

Other aluminium n.e.s. These markets are more fragmented than the can markets, aluminium is present only for other aluminium, and metal caps and closures. The market value in 2025 for these sectors is estimated at \$65 bn forecast

to grow to \$76.1 bn by 2031 with constant 2024 prices and currencies, except for the closures sector with expected growth rate of 3.5%, the growth rate is under 3.0% for the other sectors.

A POSITIVE START TO THE YEAR

The metal packaging sector entered 2026 with cautious optimism. Share prices of the leading publicly quoted companies had risen over the year, as compared to the previous two years seen in increased market capitalisation. Analysts described this as a market “tailwind,” reflecting the positive momentum seen across global equity markets, easily viewed in the leading market indexes.

Following the low returns from Covid up to 2024, the inflection point and return to growth was in 2025, many investors were satisfied with the returns generated by the sector and the improved outlook for demand in key end-use markets such as beverages, food, and household products. This optimism is justified, with equipment suppliers reporting their order books starting to fill once more, with new lines and plants announced in the professional press at least on a quarterly basis, across all can segments. The drivers of demand are trends and then population, where the world's population grew 54% between 1990 and 2025 to over 8.0bn people, that is the equivalent of a Western Europe every five years, then within this the urban population grew over 100% or an additional 2.4 billion consumers, although the growth rate has fallen to about 1.0% today the UN forecasts growth through to 2080 before any decline. The UN-FAO are quite firm about population driving increased food demand, where they promote yield improvement, supply resilience, affordability, and distribution, consumption is set to increase, as is packaging waste.

Metal beverage cans over the period 1990–2025 grew 130% to about 420bn cans. Food cans, aerosols, and food and speciality cans also increased but less dramatically evidenced by the line additions and equipment development.

The second level is any change in consumption patterns which will drive further the packaging offer, so when Gen Z move to no alcohol we see a reduction in beer consumption and a growth in no alcohol beer and other drinks, the slim can fits better than standard can, smaller food cans, shaped aerosols, easier to open and close paint cans, and now the dawn of re-closeable drink cans. The leading breweries AB Inbev, Heineken, Carlsberg, and Asahi are all aligning their strategies with the consumers thinking of ‘drink less but better’, for cans there is a move to smaller sizes or even simply shape, sleek cans in 57mm diameter are associated more with wellness than standard 33-cl or 12 oz can, the new consumers dissonance with the traditional can has driven the change in the can technology development.

Further trends in food are also driving change, the natural ‘slow down eating’ hormone GLP-1 peptide is now synthesised as a weight loss drug with leading brands like Ozempic and Mounjaro universally known, the estimated total accessible market has been estimated at 180 million people by 2030. Over twenty million people have adopted this weight loss programme in the US, and at least five million in Europe to the extent that it is reducing food consumption. Nestlé has launched a new brand Vital Pursuit targeting these new

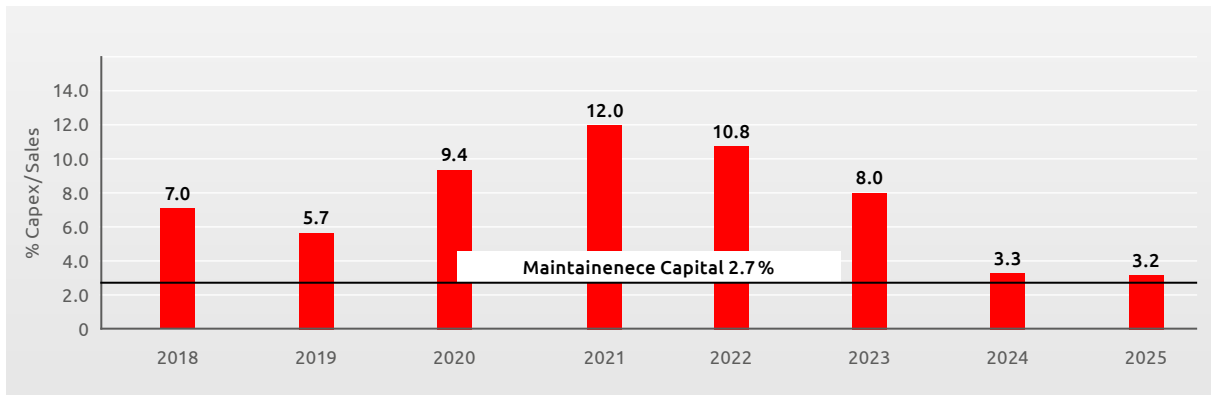
consumers. GLP-1 adoption is creating a new consumer profile – one that eats less, eats differently, and prioritises nutritional efficiency over volume. Once again, this unexpected change is causing fillers to look at the can offering matching the consumer's expectation.

The third big trend is the impact of e-commerce where the secondary packaging use is already above \$80 billion, within this metal packaging is the ideal container as it is recycled at scale. For the metal packaging sector, these trends signal a long-term shift toward smaller formats, premiumisation, and functional packaging solutions.

These developments are to be noted as they both fit the “health and wellness” trend and influence the size and type of metal packaging used, this is driving increased manufacturing flexibility, increased uptime, reduced spoilage, and high output.

A key metric for metal packaging equipment suppliers is end user capital expenditure (capex), with capex as a percentage of sales providing a useful proxy for market activity. Focusing on the three leading beverage can producers – Ball, Crown, and AMBP – which together account for approximately 60% of global beverage can output, maintenance capex is estimated at around 2.7% of sales. Over the period 2019–2025, total capex increased from around 5% of sales to a peak of over 12% in 2022, before declining to approximately 3.5% in 2025; it is now entering a growth phase cycle.

TOP THREE BEVERAGE CANMAKERS CAPEX/SALES 2018–2025



Note: - Average Capex/sales 2008–2018 Beverage Can 5.0%

Source: MS Can Solutions - Ball, Crown, AMBP Capex/Sales, and maintenance capital (ca 60% of beverage can market)

Equipment suppliers report improving order intake across beverage, food and speciality can segments, reflecting a combination of maintenance requirements and renewed growth investment. While order books remained subdued following the 2021 peak and a subdued market early 2026 marks the beginning of a recovery. Since mid 2025, announcements of new can plants have increased, and full year company results point to rising demand and higher planned capital expenditure. As an example, Crown Holdings has indicated capital spending of approximately \$ 500 million for 2026, Ball from its results also points to increased capital in 2026, albeit before the Iran war impact.

Nevertheless for the outlook we expect a return to about 5 % capex to sales for beverage cans and maintenance, with the other segments close to this level, for beverage cans this represents \$ 2.0 bn and for the total metal packaging market using the same proxy \$ 7.75 bn in 2025, up from what was most likely ca \$ 5.0 bn. Capital expenditure is made up of new equipment, buildings and civil engineering, infrastructure, IT, and automation. The Capex life cycle is cyclical it moves between maintenance and expansion cycles having just seen low activity to 2024 our indicators point to a return to the normal phase of capex which is about 5 % of sales.

GEOPOLITICAL TENSIONS CREATE NEW MARKET PRESSURES

However, the global outlook changed significantly in February 2026 as geopolitical tensions escalated with the Iran–US/Israel war. The conflict has introduced a new layer of uncertainty across global markets, particularly affecting energy prices, commodity markets, and industrial supply chains.

Energy costs remain a critical driver of raw material prices for packaging producers, not just metal. Oil prices have risen above \$100 per barrel, and markets expect further volatility before prices stabilise. Rising energy costs feed directly into higher production, transport, and raw material costs across the packaging industry, and everything else.

The war in Iran is unlikely to fundamentally alter long-term demand for packaging. Its primary impact on metal packaging will be on costs rather than demand. Rising energy and raw-material prices particularly for aluminium and steel are likely to squeeze margins, driving ‘pass through’ and may temporarily slow packaging volumes.

A similar dynamic was visible during the Covid-19 crisis, and before that the 2008/9 financial crisis when volatility affected the value of packaging sales across all materials. However metal packaging, which represents about 13.0% of the global packaging market, proved more resilient than any other materials in terms of value growth, outperforming even plastics. From the previous crisis our view is that the Iran war impact will be modest if there is no global recession, it is a cost shock and not a demand impact for metal packaging.

Plastic packaging is particularly sensitive to oil and gas prices, as resins are produced from petrochemicals. A sustained spike in energy prices will increase the cost of plastic packaging more rapidly than alternatives, potentially accelerating the ongoing shift toward paper and metal formats.

We should learn from the Covid-19 crisis, where there was a bull-whip impact demonstrating that flexibility and supply chain inventory must accommodate the recovery. This effect is when small changes in demand along a supply chain (mining, metal sheet, can maker, filler, distributor, retail, consumer) become amplified upstream, disrupting inventory along the entire supply chain. In times of crisis, it is worthwhile checking the supply chain resilience sharing information and the KPI triggers used.

BEVERAGE CAN GROWTH MOTOR IN METAL PACKAGING

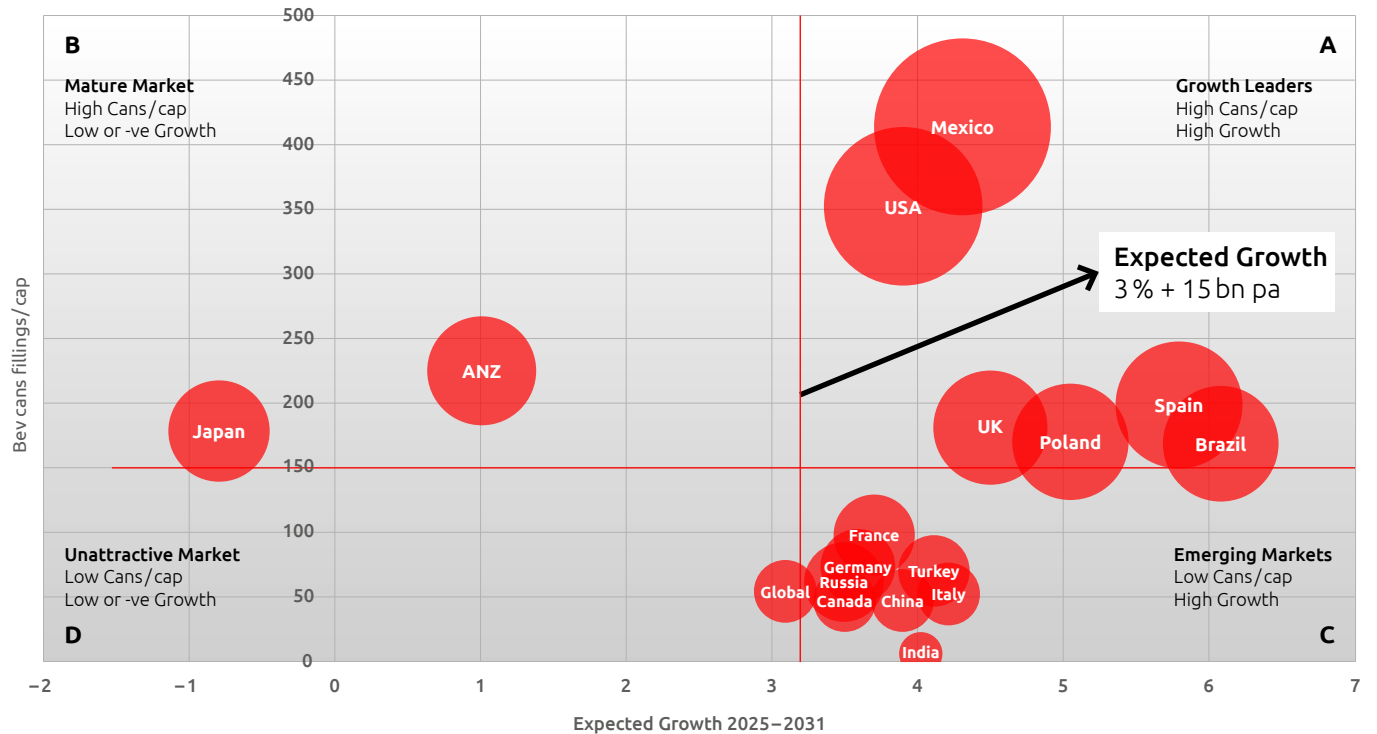
Beverage can is the growth motor in metal packaging, the other segments also have growth, but they are not on the same scale. It is useful to look at filling intensity as beverage cans filled per capita as compared to expected growth and use the quadrant graph to identify the emerging, developing, and mature markets. Fillings are packaging demand whereas consumption is after imports and exports most notably of filled goods, where Europe has over twenty billion beverage cans filled and exported. In food cans China is a large filler but over 80% of fillings are exported, Thailand exports over 90% of food cans filled, and Morocco a large filler of sardines exports over 90% of filled cans to Europe. There are many countries and regions where there is a major distinction between fillings and consumption, we focus on fillings.

We show a quadrant graph of beverage can fillings and expected growth from 2025–2031. The graph shows the division of Growth Leaders 'A' with high cans/cap and high growth – US, Mexico, Brazil, Spain, UK, and Poland where Brazil has overall grown strongly and the US saw growth return after 2018. The Mature Market with high cans/cap and low or negative growth are Australasia and Japan. The Unattractive market with low cans/cap and low or negative growth are China and India through their massive population, and then Germany, France, and Turkey. There are no countries in the Unattractive market with low cans/cap and low or negative growth. The expected growth to 2031 is 3% pa which is an annual increase in demand of fifteen bn pa, which compares to 12–14 bn pa back in 2016.

The other can segments are not as dynamic in growth and are stable and shown earlier, food and speciality can lines have been added in Asia, Africa, and South and Central

America and there have been investments around innovation and adapting the range offered.

Quadrant graph- Beverage Can Fillings / cap vs Expected Growth % 2025 – 2031



Source: MS Can Solutions

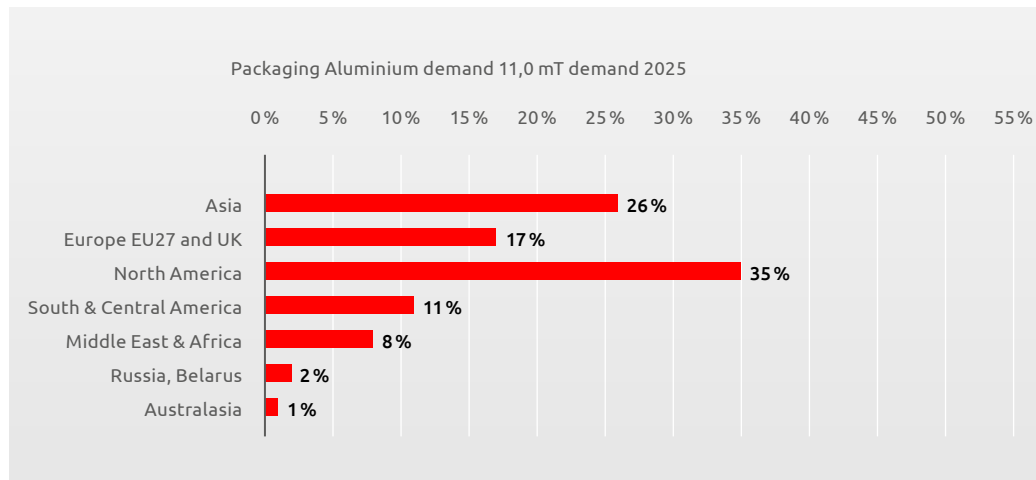
ALUMINIUM SUPPLY AND PRICING PRESSURES

The Middle East is a major contributor to global aluminium production, accounting for around 10% of the world’s primary aluminium output, equivalent to more than five million tonnes annually. Any disruption or risk to supply from this region means manufacturers may need to diversify sourcing strategies and manage inventories carefully to maintain supply security. The annual global demand for aluminium sheet is estimated at 11.0 million tonnes, where North America leads with 35% share followed by Asia and then Europe.

Supply chain pressures are reflected in aluminium prices. In 2026, the London Metal Exchange (LME) aluminium price is trading above \$3,220 per tonne representing about half of the cost, it is significantly higher than the 2025 three-month buyer range of \$2,600–\$2,650 per tonne. In addition, the tariffs result in a wide range in the regional premium and cost to the manufacturer.

Aluminium is highly recycled and is classed as a permanent material along with steel and glass they are defined as ‘a material which can be recycled over and over again without loss of its properties.’ The move to the new single Unialloy 3000 series for beverage can from 3104 (body stock) and 5052 series (end stock) will drive full recycling in Europe and North America, currently at over 75% recycling. This change moving to a single 3000 series with lower tensile for the ends will require about a 20% up gauging on the current lightweight beverage end meet the buckle standards, however equipment supplier Stolle and tooling company Container Development Ltd CDL have a new end and tab design which reduces this impact to 2%.

Packaging Aluminium Demand



Source: MS Can Solutions

- Can bodies 3104** low manganese Mn, moderate Magnesium Mg, and trace copper Cu
- Can ends 5052** low manganese Mn, High magnesium Mg over 2.2% and Chromium Cr stabilisation
- Unialloy 3000** can bodies, ends, tabs low manganese Mn, moderate Mg,
- One Alloy ‘Unialloy’** will enable full recycling and reduced carbon footprint

The main beverage end equipment suppliers have also introduced six lane conversion presses which deliver a 50% productivity improvement at over 4500 ends per minute per conversion press, which can only help the growth of beverage can.

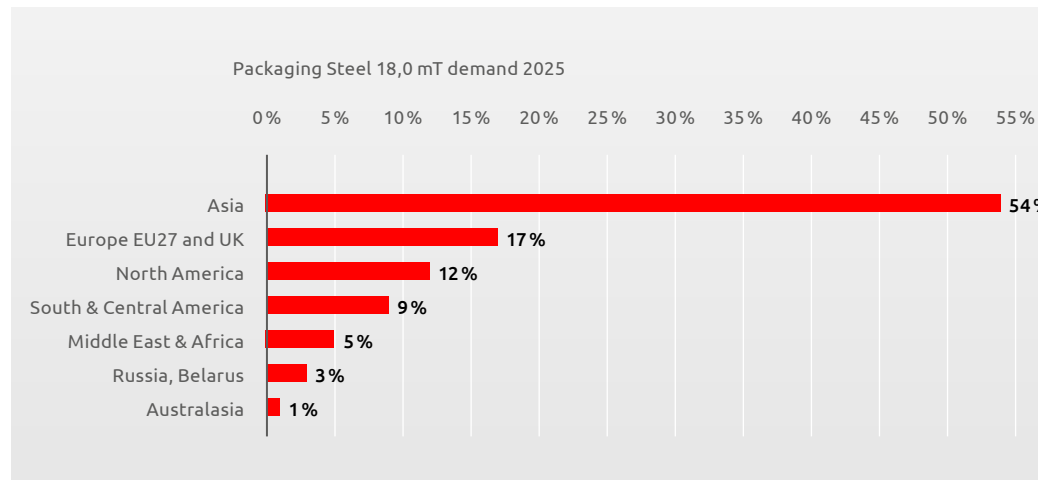
PACKAGING STEEL SUPPLY AND PRICING PRESSURE

Packaging steel is about 1% of the steel market and is estimated at about 18.0 m tonnes the market in tonnage terms is considered flat with Asia representing over half, followed by Europe and North America.

The US increased its section 232 tariffs from 25 to 50% in 2025, for packaging steel but over 70% of its demand is imported, much of the imports are from Canada and Europe. Europe has its own tariffs set resulting in a ranking of cost as US #1, then Europe #2, then Asia and others. Packaging steel is the most recycled packaging material at over 80% in Europe. Like aluminium there are fundamental changes ahead like the new CFPA Chromium Free Passivation Alternative which is being introduced in Europe to comply with the REACH regulations and is described in the updated standard EN10202:2022.

The metal packaging market is therefore entering a more volatile phase, where companies must balance cost management with the need to secure raw material supply.

Packaging Steel demand 18.0 mT



Source: MS Can Solutions

INDUSTRY FUNDAMENTALS REMAIN STRONG

Despite these headwinds, and changes, the underlying fundamentals of the metal packaging industry remain solid. Leading publicly listed companies – including Ball, Crown, Ardagh Metal Packaging, Silgan, Sonoco, ORG and Orora – continue to trade higher year-on-year, signalling ongoing investor confidence in the sector.

After two relatively subdued years leading up to 2025, the industry is now positioned to navigate a more complex global environment while continuing to benefit from long-term drivers such as sustainability, recyclability, and growing demand for circular packaging solutions. The share by Sector-Segment and expected growth rate to 2031 are in the table.

Market data – 2019 vs 2025 and forecast to 2031

Actual prices and currencies to 2024, constant 2024 prices and currencies to 2031

Sector-Segment	2019	2025	2031	CAGR 2026–2031
Metal Packaging (value \$ bn)	\$ 114 bn	\$ 155 bn	\$ 185 bn	3.0%
Beverage	27.0%	28.0%	30.0%	4.2%
Food	15.0%	17.0%	16.0%	1.8%
Aerosol	3.0%	4.0%	3.0%	2.0%
Food & Speciality cans	10.0%	10.0%	10.0%	2.8%
Metal Closures	10.0%	10.0%	10.0%	3.5%
Bulk Metal	20.0%	17.0%	17.0%	2.5%
Drums	9.0%	9.0%	9.0%	2.9%
Aluminium other	6.0%	5.0%	5.0%	1.9%

Source: MS Can Solutions note – Definition and rounding are used

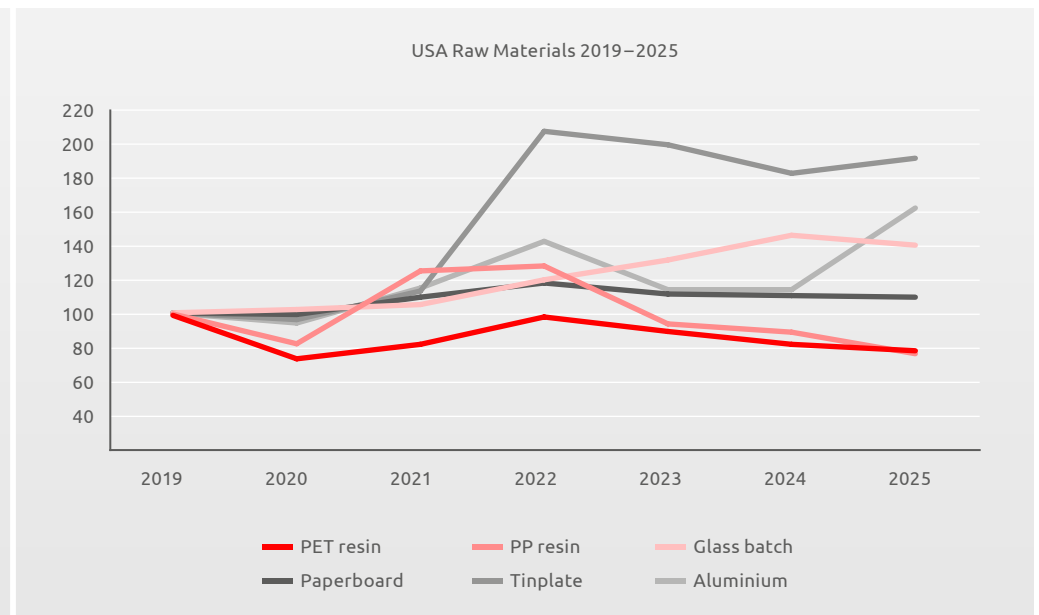
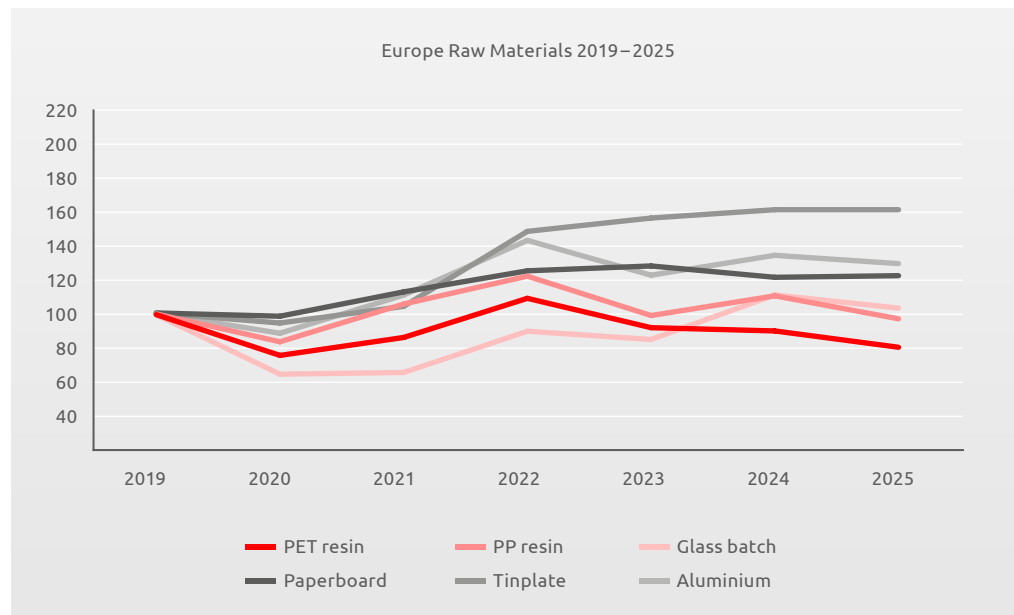
RAW MATERIALS COST DEVELOPMENT INDEX BASIS 2019–2026

Elevated prices for filled consumer goods and trends have suppressed volumes across FMCG categories, yet canmakers report a modest but noticeable shift toward cans. This reflects both affordability pressures and the strength of metal packaging’s recycling credentials. Cans continue to gain share in selected markets due to convenience, durability, and high recycling rates. The relative packaging raw mate-

rials cost development are similar across all regions, which is shown in the graph on an index basis set to 100 in 2019, using cost in \$/tonne in both cases plastic resins PET and PP have moved down since 2019, whereas tinplate, and aluminium have moved up in cost.

Sustainability remains a key structural tailwind, but there are headwinds looming. Aluminium and steel are the most recycled packaging materials in every region they both have growth and in beverage cans throughout 2025 in most quarterly calls there were references to a shift from plastic and in some cases glass to metal, the level of recycling in metal has increased.

Raw materials Europe and US on an Index basis



Recycling of metal packaging, steel and aluminium are the highest in Europe the most recent data is shown by country.

In contrast, plastic although growing due to its low cost has seen recycling in Europe decline sharply, with over one million tonnes of capacity lost in the past two years to 2025, reported by Biffa polymers, and the business press. Ongoing exports of plastic waste and recycling closures raise serious doubts over plastics' ability to meet recycling targets set by regulators in the EU, US, and China. Metal packaging benefits from established infrastructure and genuine national or regional circularity with economic value, aluminium has a scrap value of over \$ 1,250/t to \$ 2,100 for class 1 UBC, packaging steel has a value of \$ 200–\$ 500/t to the converter. Plastics in stark contrast continue to tackle a negative recycling economic value as high as \$ 920 per tonne for rPET food grade but, with a highly fragmented recycling system it is not surprising to read the reports in EUWID and PET Planet where recycling is simply not advancing as intended.

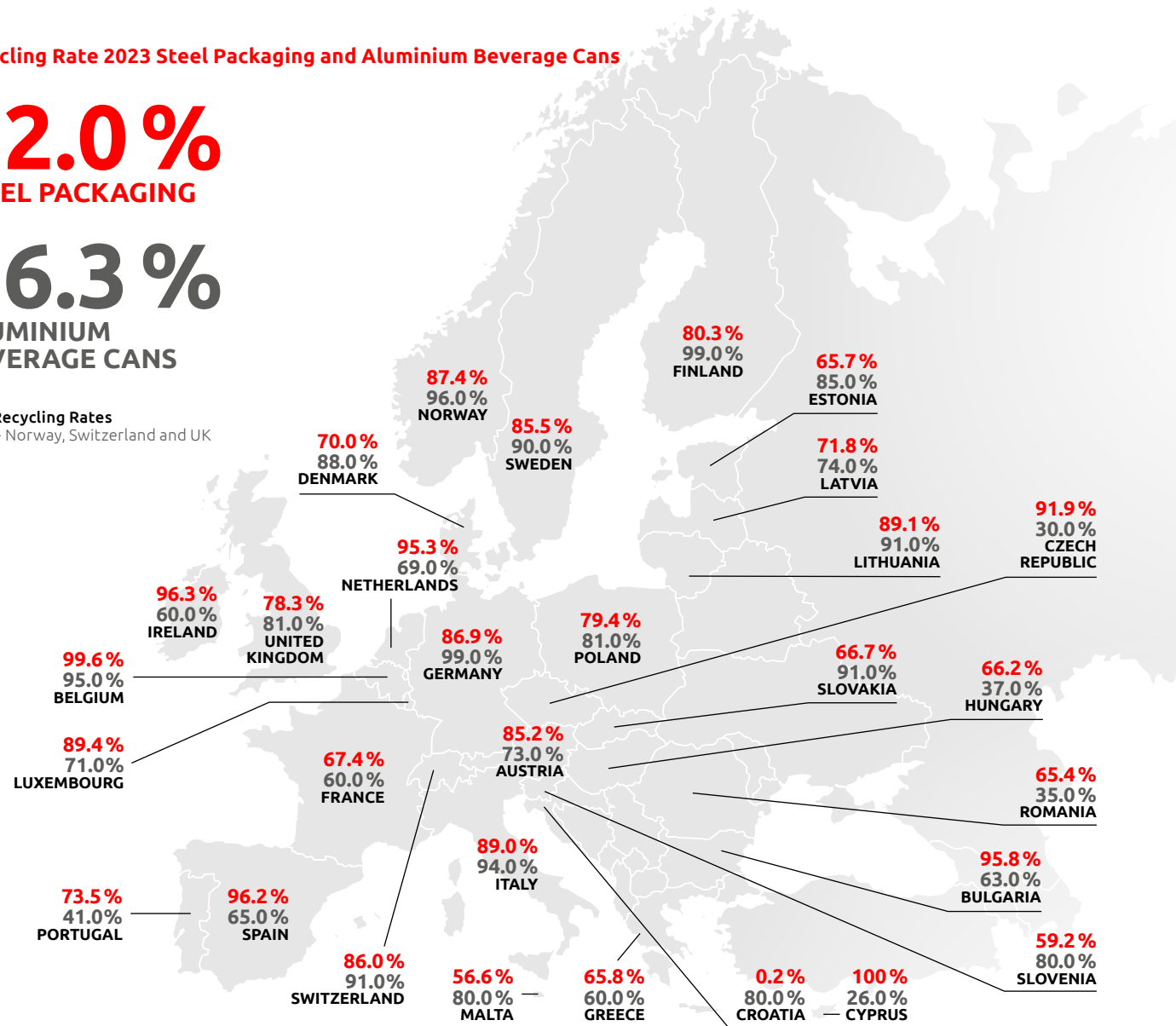
While metal packaging is forecast to grow approximately 3%, plastics are growing at a higher rate because of low cost and a small carbon footprint. However, plastic has an exceptionally large plastic footprint from the current poor recycling economics. This has generated uncertainty on the sustainability of plastic because of recycling capacity closures, and major brands moving back their commitments on sustainability previously made.

Recycling Rate 2023 Steel Packaging and Aluminium Beverage Cans

82.0 %
STEEL PACKAGING

76.3 %
ALUMINIUM BEVERAGE CANS

2023 Recycling Rates
EU27 + Norway, Switzerland and UK



Source: Steel for Packaging Europe, European Aluminium and Metal Packaging Europe
<https://www.metalpackagingeurope.org/benefits/recyclability-recycling/>

ECONOMICS OF RECYCLING MATRIX-QUADRANT GRAPH RECYCLING TARGET 2030 LESS ACTUAL-VS-ECONOMIC VALUE \$/T

Using the most recent published recycling packaging waste figures and subtracting from the 2030 EU recycling target, we have a useful comparable which shows only the “permanent materials” (aluminium, steel, and container glass) are ahead of the 2030 target. This is the upper half of the quadrant graph A and B with both the comparable and the value to the converter are positive.

Aluminium has an economic recycling value way out in front at \$ 1,250/t spot up to \$ 2,100/t for UBC scrap where volumes are high, it is in ‘A’ Positive Recycling, Best Value.

Equally Packaging Steel has a favorable economic recycling value of \$ 200–\$ 500/t, it is in ‘B’ Positive Recycling, Good Value.

Paper and board also have a positive value but is off the 2030 target by 2.5% however most likely it will achieve the EU target. It is most likely that it moves from ‘D’ to ‘B’.

Plastic packaging ‘D’ however, has for food grades a negative value of \$ 920/t to almost zero in the best case, it is 12.5% off the EU 2030 target, this is cause for concern amongst fillers and their sustainability targets and the packaging mix.

EU Recycling Waste Target 2030 less Actual Recycling % -v- Value \$/t value to converter 2026

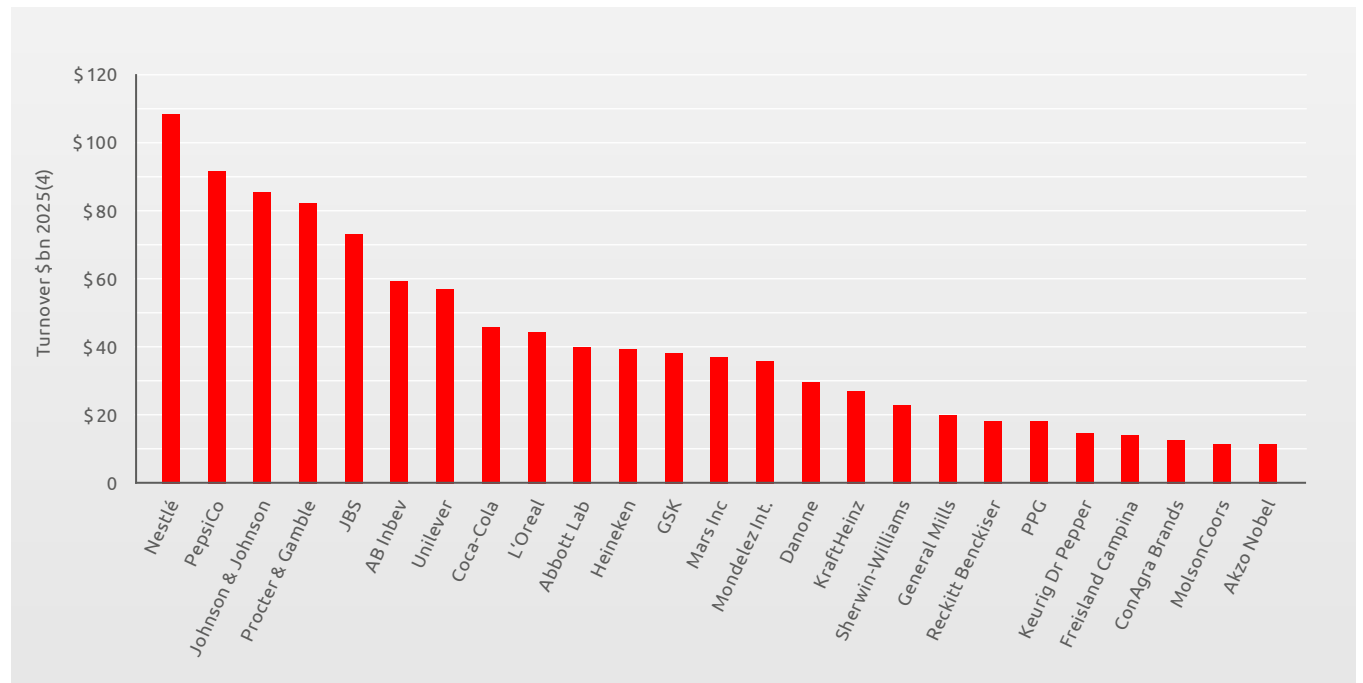


Source: MS Can Solutions

FILLERS AND SUPPLIERS

The main users of cans are given by sales turnover, covering all metal packaging sectors, companies tend to be aligned to a particular end market, although the leaders Nestlé, PepsiCo, JBS, are in segments like beverage, food and personal care, progressing down the list companies like Coca-Cola, Heineken, Red Bull, Cambell Soup are more likely to be in just one segment using just one of the can segments above.

Metal Packaging Customers Top 25 by Turnover \$ bn



Source: MS Can Solutions

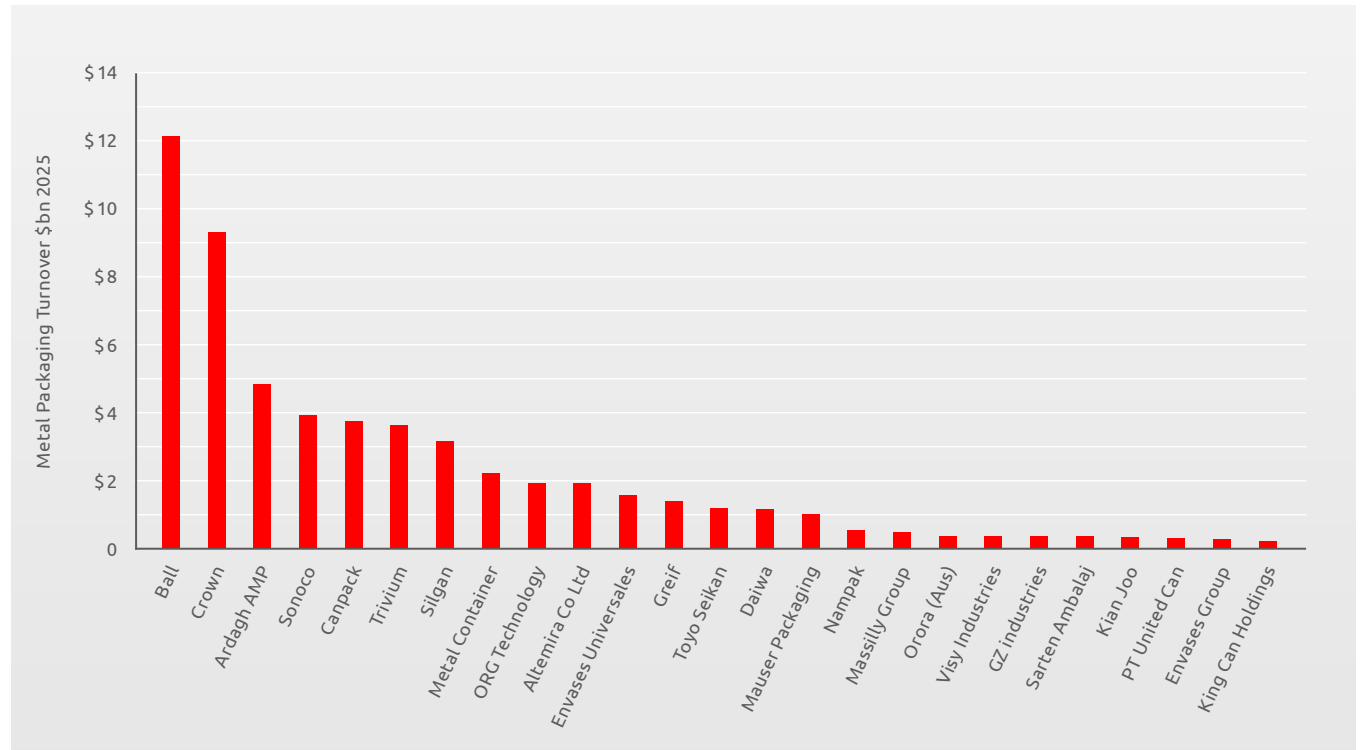
The main metal packaging companies have ranked by metal packaging turnover supplying all sectors, and the estimated metal sales as shown.

Similar to the main customers the metal packagers tend to be aligned to sectors Ardagh AMBP sales are 100% beverage and only in metal. Ball is about 95 % beverage and 100% metal it also has aerosols, slugs and cups; Crown is about 70 % beverage can and 77 % metal it has food and food and speciality cans and converts other raw materials. Trivium Packaging in Food and Speciality is 100% metal. However, Sonoco and Silgan are both just over 50% metal in food and speciality cans and both convert other raw materials. The graph shows the estimated metal packaging turnover by main supplier.

Geopolitical uncertainty adds further headwinds and has shifted direction from globalisation and scale to supply security and preferred local or regional supply. Rising tariffs, trade tensions and elevated steel and aluminium input costs are forcing supply-chain re-evaluation. Tariff changes can trigger sourcing shifts, increasing the importance of supply security in procurement decisions. As the metal tariffs do not apply to scrap or filled goods, fillers may respond by importing more finished commodity products, and manufacturers scrap exports may distort trade with availability driving inflation.

In Europe, the most immediate inflationary pressure comes from Extended Producer Responsibility (EPR) schemes introduced under the EU Packaging and Packaging Waste Regulation (PPWR). Designed to reduce packaging waste and promote circularity, EPR functions in practice as a packaging tax. Now adopted by more than sixty countries, EPR fees are prescribed by material for each SKU the fee is mandatory and paid by brand owners who will push back for the most efficient option in the standard commercial process. From

Metal packaging sales revenue by company 2025



Source: MS Can Solutions

2026, the Carbon Border Adjustment Mechanism (CBAM) from the European green deal will apply a carbon price to certain imported goods (packaging steel and aluminium are included) to reflect EU carbon costs. Its impact is noted but not assessed in this review due to complexity. One way to follow through cost and value is the total cost of ownership TCO, which we completed here with SavvyPack Corporation using Spain since the Royal Decree was introduced in January 2025, Ecoembes had over twenty thousand companies

signed up for EPR its information is clear and there are widespread reports. Taking products used in Spain for beverage we ran a total cost of ownership which applies our assumed primary packaging cost, the package weight, closure used, decoration, and then the cost of all freight, filling, secondary packaging, the multipack units, then the EPR. The total cost includes the EPR using the published tariff.

TOTAL COST OF OWNERSHIP TCO AND SINGLE SERVE BEVERAGE PACKAGING

The aluminium beverage can and end (12.4–13.0g) starts with the second highest cost after container glass (bottle only 145g) but becomes the best package in TCO terms after passing through the supply chain seen in € per thousand litres, the driver is throughput or line speed and EPR. TCO is a particularly useful tool to develop a holistic view on cost through the total chain.

Despite metals' strong recycling performance, EPR costs vary widely across Europe, creating structural distortions, we show here two common packages I weighed from the market, with the 2026 € per kilo rate from Citeo-FR, Ecoembes-ES, Fost-plus-BE, and Dual systems-DE.

Estimated 2026 EPR costs per thousand units show wide disparities:

- **Aluminium 33 cl beverage can & end (13 g):**

France € 4.55 | Spain € 0.78 | Belgium € 1.69 | Germany € 2.60

- **Steel 400g food can & end (45 g):**

France € 5.40 | Spain € 3.60 | Belgium € 4.50 | Germany € 6.30

SPAIN – TCO RESULTS					
(€/’000 units)	Beverage Can	Liquid Carton	PET bottle	rPET bottle	Glass
Product Volume ml	330	330	330	330	200
Main Pack finished weight (g)	12.4	14.4	18.3	18.3	145
Dimensions (D1/D2 × H)	52/65 × 115	53 × 53 × 150	63.5 × 165	63.5 × 165	52 × 185
Recycled Content %	75	0	0	100	73
Primary Packaging	€ 80.00	€ 70.00	€ 59.00	€ 69.00	€ 111.00
Filling Cost	€ 17.18	€ 45.82	€ 25.82	€ 25.82	€ 27.74
Packaging	€ 13.36	€ 12.52	€ 22.57	€ 22.57	€ 15.07
Freight	€ 9.26	€ 7.31	€ 10.18	€ 10.18	€ 10.29
EPR Tax	€ 0.50	€ 7.68	€ 5.22	€ 5.24	€ 10.08
TCO	€ 120.30	€ 143.33	€ 122.78	€ 132.80	€ 174.17
TCO (€/1000 liters)	€ 0.36	€ 0.43	€ 0.37	€ 0.40	€ 0.87

Source: SavvyPack® – Tariff Ecoembes 2026 “Precios 2026 Envasés domesticos”

Aluminium beverage can and end at 12.4g has a sixfold cost difference between France and Spain, and a 400g steel food can has an almost twofold difference between Spain and Germany, there are yet more dramatic differences with plastic PET, container glass, fibre based liquid cartons.

Overall, metal packaging enters 2026 supported by solid fundamentals, sustainability advantages, and renewed investment. However, demand sensitivity, geopolitical risk and unharmonised EPR frameworks will test margins as the EPR rates become a source of inflation which will influence demand. A harmonised European EPR system will be critical if the regulation is to support, rather than distort, the market.

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