Accelerating Action to Limit Global Temperature Rise to 1.5°C

Ball Corporation's Climate Transition Plan

March 2023

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CREATING CLEAR AND CREDIBLE PATHWAYS TO NET ZERO

DANIEL W. FISHER
President & Chief Executive Officer

To our Fellow Stakeholders,

As a global leader and innovator in our industry, we remain committed to be at the forefront of developing low-carbon, circular aluminum packaging solutions as well as satellite instruments for environmental monitoring. We believe that real leadership is action-oriented and requires demonstrated accountability in order for change to be created. As a 143-year old organization, we understand the importance of delivering long-term value by partnering with our stakeholders to address their most important needs. At Ball, sustainability is an integral part of our strategy and it shapes our competitive and economic advantage, while allowing us to partner across our value chain to address important topics like climate change, circularity and inequality. Our growth potential relies in part on our ability to transform ourselves into a fully circular and decarbonized business, and reflects our focus on achieving science-based milestones in the near-and long-term.

Our aim is embracing systemic change for every aluminum can, bottle and cup that we produce – and we are doing that not just for ourselves but for customers such as Coca-Cola, AB InBev, Red Bull, Unilever and P&G, many of whom have strong net zero targets of their own. With packaging representing up to 40% of our customers' carbon footprint, our decarbonization plans could be a sound insurance for them.

Companies rely on each other's pathways and there will be a process of co-creation and co-learning, especially across the value chain and through conversations with governments. This document demonstrates that our commitment to reach net zero is credible and robust, as is our focus on increasing industry collaboration to new levels of detail, focus and transformation.

The physical properties of aluminum provide an opportunity to decarbonize more quickly, and with lower abatement costs than other packaging materials. This marvelous metal may be recycled forever in a can-to-can closed-loop, with minimum losses, which means that as recycling rates increase, the need for primary aluminum is exponentially reduced. A key part of our decarbonization plan is to achieve 90% recycling rates and with that enable 85% recycled content by 2030 – something that is entirely feasible with current technologies and by leveraging policies already implemented in several countries. Systemic circularity is more challenging and expensive for other packaging materials to achieve in the near-, medium- and long-term.

Unlike other metals and materials, primary aluminum can be decarbonized to a great extent via greening electricity. Today, hydro-electric powered plants in regions such as Canada, Norway, Siberia, Brazil and Iceland already produce low-carbon primary aluminum, and the Middle East, with its solar radiation potential, could be next. According to the Mission Possible Partnership's (MPP) rapid grid decarbonization scenario, all regional grids could achieve net zero emissions by 2035.

Accelerating decarbonization relies on matching developments in technology with improvements in policymaking, and there are three key elements to it. The first one is a combination of Extended Producer Responsibility (EPR) regulations, which mandate businesses to collect and recycle, and modern Deposit Return Schemes (DRS), which make collection and recycling of beverage packaging more efficient. This combination is already proven to work. These regulations incentivize the industry to rethink packaging, and, very importantly, do not involve any extra cost for governments.

The second key element is for governments to support the transition to a low-carbon economy. Through relatively minor and focused regulatory measures, decreasing fossil fuel use across the value chain will result in significant emissions reductions from alumina refineries to remelting furnaces and ovens used in can making.

The third element is to scale up existing technologies, such as the use of inert anodes, that can help to produce virtually carbon-free primary aluminum. To help scale new net zero technologies faster than currently anticipated, Ball joined the First Movers Coalition and committed to purchasing 10% of primary aluminum annually as low-carbon aluminum by 2030. While working closely with our supplier partners on such ambitions, we will continue to think out-of-the-box on key topics like circularity, aluminum alloy innovation and purification technologies.

With these measures as an integral absolute part of our plan, we have confidently committed to a 55% reduction in absolute carbon emissions across our entire value chain by 2030, against a 2017 baseline. This commitment is in line with the international aim of limiting global average temperature increase to 1.5°C above pre-industrial levels, and is an upgrade to our approved science-based target set in 2020.

Ball Aerospace plays a critical role in the creation of innovative, break-through technologies used for space exploration, climate risk mitigation and the identification of various geopolitical threats. Our hardware and data intelligence capabilities are in high demand, and address needs that are perpetuated by increasing climate-related financial risks. As scientific communities, corporations, financial institutions, governments and civil society focusing increasingly on climate change, we are in need of environmental intelligence based on high precision, spatial resolution and frequency data that provides us with the ability to make high-value decisions as we all work to foster a climate-resilient, zero emissions world.

Of course, it helps that we have more direct control over our own operations. To ensure we make progress beyond them, I will continue to spend a significant portion of my time facilitating conversations within our value chain, with governments and other stakeholders as to how we can all achieve our mutual goals and transform our industry together.

DANIEL W. FISHER
President & Chief Executive Officer

BALL CORPORATION'S CLIMATE TRANSITION PLAN OVERVIEW

OUR PATHWAY	**55% reduction** of Scope 1, 2 & 3 emissions by 2030 (vs 2017)	**Net Zero** before 2050 across the full value chain (by 2040 with ambitious policies)	**1.5° Celsius** -aligned Science-Based Target	Ball Aerospace to lead on instruments to **detect air emissions** including CO_2 and CH_4	Ball Aerospace is the partner of choice for **weather, air quality & other environmental missions**
OUR OPERATIONS	**100% renewable electricity** by 2030, 75% by 2025	**30% energy efficiency** gains	Accelerate novel technologies to **electrify thermal processes,** especially ovens	New **capital expenditures** in line with climate ambition	Continuous **lightweighting** of our products
RECYCLING RATES & RECYCLED CONTENT	**90% recycling rates** by 2030 across our regions	**85% recycled content** by 2030 across our regions	Well-designed **Deposit Return Systems** (DRS) across Europe and North America	Ambitious **EPR with eco-modulated fees** across all our regions	Support suppliers to decarbonize and enhance **remelting and rolling**
LOW CARBON PRIMARY ALUMINUM	**First Movers Coalition:** 10% primary aluminum under 3 t Co2e / t Al by 2030	Build partnerships between governments and primary producers to **advance new technologies**	Lead **value chain collaboration** to accelerate progress	Can sheet suppliers to **source & trace** low carbon aluminum	**Pilot products** with high recycled content & ultra-low carbon footprint
POLICY ADVOCACY	Be a leader in **progressive climate advocacy coalitions** such as CLG and CERES	Advocacy resources dedicated to lever #1: **circularity**	Ambitious **industry voice on EPR/DRS** uniting the entire value chain	Transparency in line with **climate lobbying** standards	Be **thought leaders** on aluminum decarbonization
GOVERNANCE & TRANSPARENCY	Long-term growth linked to **climate & policy outcomes**	Regular **Board oversight** of integrated climate and policy processes	External assurance of GHG data & **progress reported annually** (performance and advocacy)	Annual CDP response for **investors**	Aligning reporting with **TCFD Guidance**

1

OUR BASELINE:
BALL'S GHG EMISSIONS PROFILE AND TARGETS

1.1 CLIMATE LEADERSHIP

In 2004, Ball published its first 10-year climate goal and began disclosing detailed climate-related information to CDP (formerly Carbon Disclosure Project) in 2007. Since then, our greenhouse gas (GHG) accounting has evolved even further, with limited assurance added for all emission scopes, and goals aligned to the latest climate science. We were the first aluminum can manufacturer to adopt a science-based target. In early 2020, our 2030 climate goals were approved by the Science Based Target Initiative (SBTi), an international governing body that independently assesses and approves corporate GHG goals.

Our original approved science-based target was two-fold:

- a 55% reduction in absolute Scope 1 and Scope 2 emissions between 2017 and 2030 (1.5°C compliant), and
- a 16% reduction in absolute Scope 3 emissions within the same timeframe (below 2°C compliant).

While both reduction goals are challenging to our company and value chain to achieve, we came to understand that our Scope 3 goal had become out of date, both in terms of what the latest climate science suggests (as laid out, for example, in reports by the Intergovernmental Panel on Climate Change), and in what our customers expect from Ball. Between 2020 and 2023, almost all our key beverage and aerosol customers published aggressive net zero plans, primarily with the intention of achieving net zero emissions across all three emissions scopes by 2040 (Figure 1 next page). Because packaging accounts for up to 40% of some of our customers' GHG emissions profiles, they are focused on understanding how aluminum cans, bottles and cups can provide them with a feasible pathway to achieve those objectives.

That is why we decided to update and expand our 2030 climate goals. These actions increase the level of transformation required by Ball and its partners to achieve the following:

- **a 55% reduction in absolute GHG emissions across the entire value chain, covering all three scopes of emissions (1.5°C compliant), and**
- **achieving net zero carbon emissions between 2040 and 2050 depending on the level of ambition in government policies on circularity and support for net zero technologies.**

We plan to resubmit our revised targets, including Ball´s net zero commitment, for validation by the Science Based Targets initiative (SBTi) in 2023. Approval status can be checked at *www.sciencebasedtargets.org*.

BALL FOR 1.5°C

FIGURE 1

CLIMATE GOALS OF SELECTED ALUMINUM BEVERAGE AND AEROSOL CUSTOMERS (AS OF MARCH 2023)

CUSTOMER	PUBLIC GOAL	SBT	NET ZERO
ABInBev	Net zero across value chain by 2040, 35% absolute reduction in scope 1-2 by 2025, 25% reduction in scope 1-3 per beverage by 2025 (vs 2017)	1.5°C	2040
Carlsberg Group	Net zero across value chain by 2040, 30% reduction in scope 1-3 by 2030, zero emissions from breweries by 2030 (vs 2015)	1.5°C	2040
Coca-Cola European Partners	Net zero across value chain by 2040, 30% absolute reduction in scope 1-3 by 2030 (vs 2019)	1.5°C	2040
Heineken	Net zero across value chain by 2040, 30% absolute reduction in scope 1-3 by 2030, net zero in production by 2030, reduction in scope 3 by 21% (vs 2018)	1.5°C	2040
Molson Coors beverage company	50% absolute reduction in scope 1-2 by 2025, 20% absolute reduction in scope 1-3 by 2025 (vs 2016)	1.5°C	TBD
PepsiCo	Net zero across value chain by 2040, 75% absolute reduction in scope 1-2 by 2030, more than 40% absolute reduction in scope 1-3 by 2030, 40% absolute reduction in scope 3 by 2030 (vs 2015)	1.5°C	2040
Beiersdorf	30% absolute reduction in scope 1-3 by 2025 (vs 2018), climate-neutral production sites by 2030	1.5°C	2050
Henkel	65% reduction in scope 1-2 from operations per ton of product by 2025 (vs 2010), 30% reduction in scope 3 from raw materials per ton of product by 2030 (vs 2017)	1.5°C	2040
L'ORÉAL	100% absolute reduction in scope 1-2 by 2025, 25% absolute reduction in scope 1-3 by 2030 (vs 2016)	1.5°C	2050
P&G	Net zero across value chain by 2040, 50% absolute reduction in scope 1-2 by 2030 (vs 2010), 40% reduction in supply chain by 2030 (vs 2020)	1.5°C	2040
Unilever	Net zero across value chain by 2039, 100% absolute reduction in scope 1-2 by 2030 (interim target of 70% reduction by 2025) (vs 2015), 50% reduction in scope 1-3 by 2030 (vs 2010)	1.5°C	2039

Source: *Science Based Targets' Progress dashboard, , CDP Climate Change disclosure, companies' websites*

1.2 WHAT'S IN BALL'S CARBON FOOTPRINT?

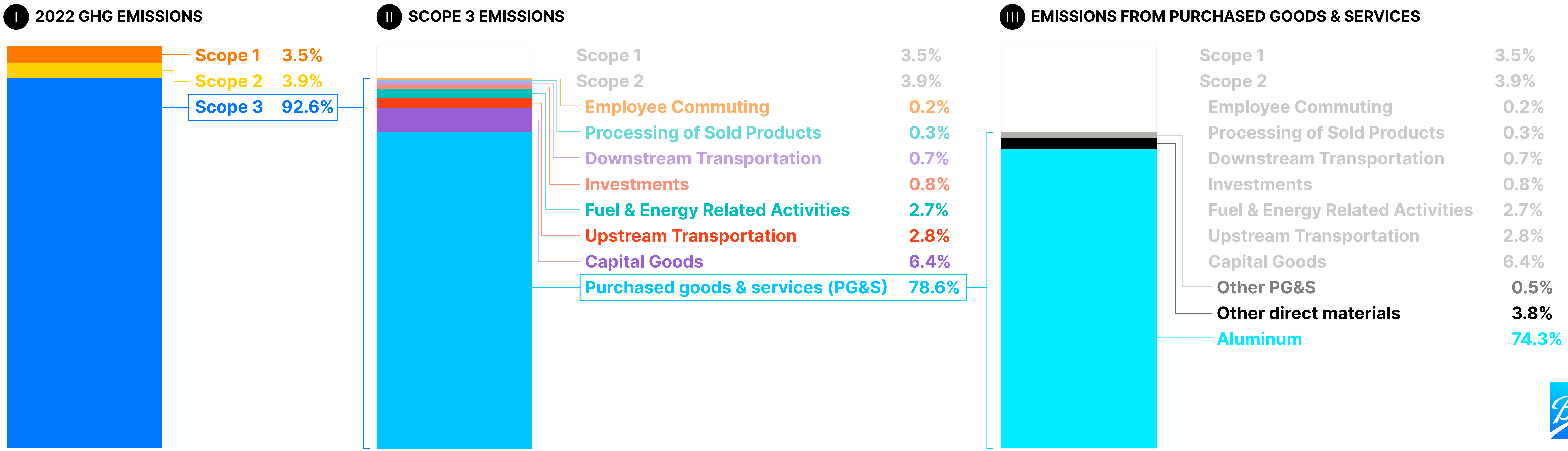
Ball's carbon footprint is composed of the GHG emissions emitted from our direct operations (Scope 1 and 2) and from our value chain (Scope 3). In 2022, Ball's total carbon footprint (Scope 1, 2 & 3) was 13.1 million metric tons of carbon dioxide equivalents (t CO2e).

- Our **Scope 1** emissions are primarily driven by our use of natural gas to cure inks and coatings in our ovens, heat water for our washing processes, burn volatile organic compounds in thermal oxidizers, and – depending on the location and temperatures – comfort heating.
- Our **Scope 2** emissions are tied to the electricity we use in our manufacturing processes, for example for air compressors, vacuum pumps, motors and lighting.
- Our **Scope 3** emissions represent emissions outside of our direct operations and that occur in our value chains. In line with the *Greenhouse Gas Protocol's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard"*, we evaluate GHG emissions from all 15 categories covering upstream emissions – such as those from our aluminum and equipment suppliers – and downstream emissions, such as those from transporting goods to our customers.

FIGURE 2

BALL CORPORATION'S 2022 GREENHOUSE GAS EMISSIONS

TOTAL OF 13.1 MILLION METRIC TONS CO2e



We experienced a 19% increase in our Scope 1 emissions between 2017 and 2022 due to unprecedented growth in the popularity of aluminum packaging. Aluminum is an increasingly desirable alternative to other materials which may lack credible circularity and net zero pathways. Over the same measurement period, the company's production increased 23% or by 21 billion units.

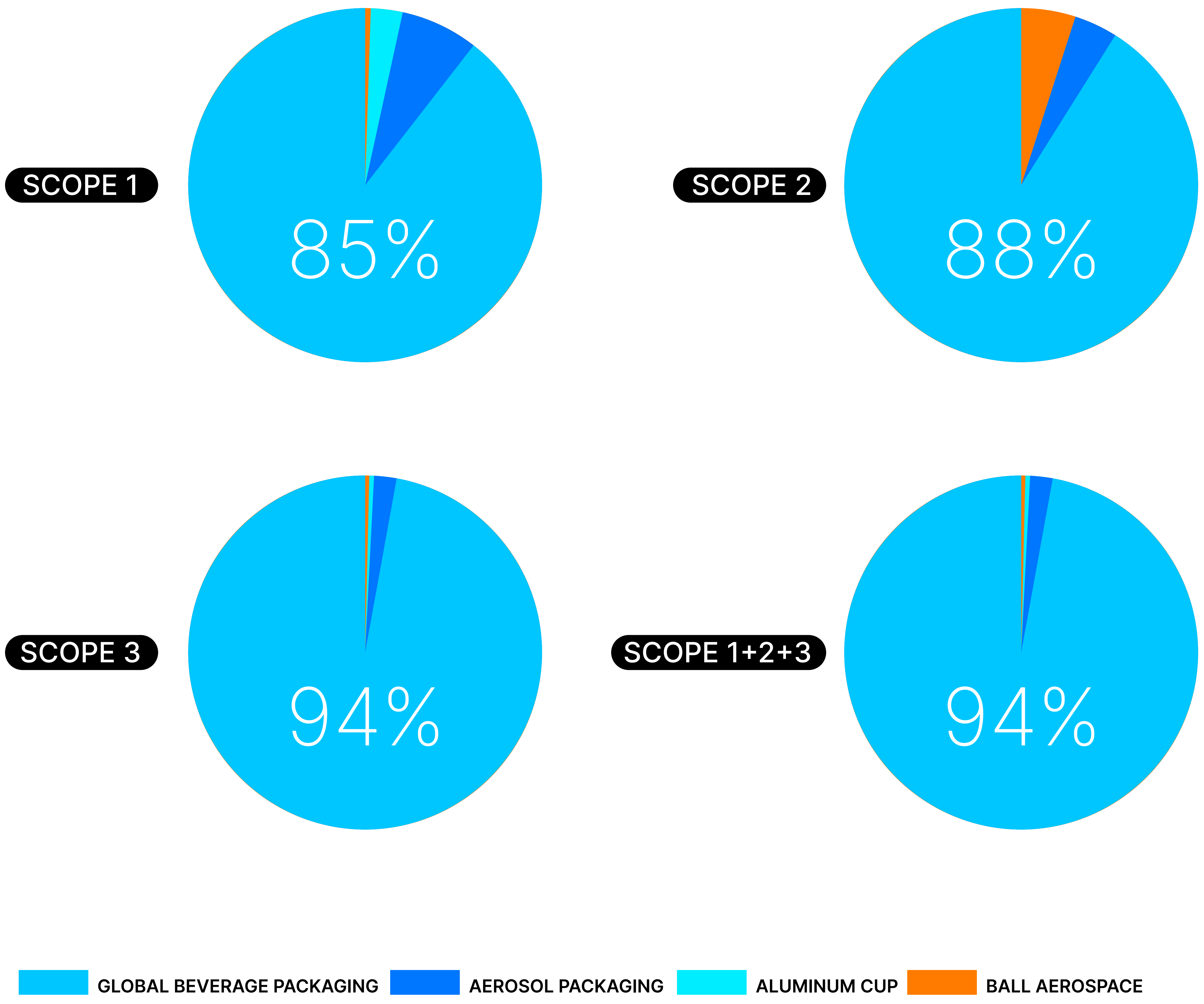
Despite the significant growth we have experienced since 2017, we have been able to reduce our Scope 2 emissions by 32%, largely driven by our successes procuring renewable electricity.

This growth has also led to a 21% increase in our Scope 3 emissions. Increased demand required additional purchased goods and services, like aluminum, inks, and coatings, as well as additional spend on capital goods. Scope 3 emissions also increased due to improvements in our rolled aluminum coils (i.e. can sheet) suppliers' GHG accounting and the completeness and accuracy of their recycled content and GHG data.

In 2022, our Global Beverage Packaging business represented 94% of Ball Corporation's Scope 1, 2 and 3 emissions (Figure 3). Due to the materiality of this business, our Climate Transition Plan focuses on Global Beverage Packaging and its related value chain. It is important to note that many of the decarbonization levers discussed here are equally applicable to our Aerosol Packaging and Aluminum Cup businesses and exemplary actions are also highlighted in this report. Ball Aerospace, responsible for 0.3% of Ball's GHG emissions, has established their own climate transition plan. More relevant are the instruments and missions they deliver which inform Earth and Climate science (see Chapter 5).

FIGURE 3

BALL CORPORATION'S 2022 GREENHOUSE GAS EMISSIONS PER BUSINESS



2 HOW TO READ THIS REPORT?

FIGURE 4
A GLOBAL VIEW
OUR BUSINESS REGIONS

We have positioned our climate transition plan into two time horizons, near-term and long-term.

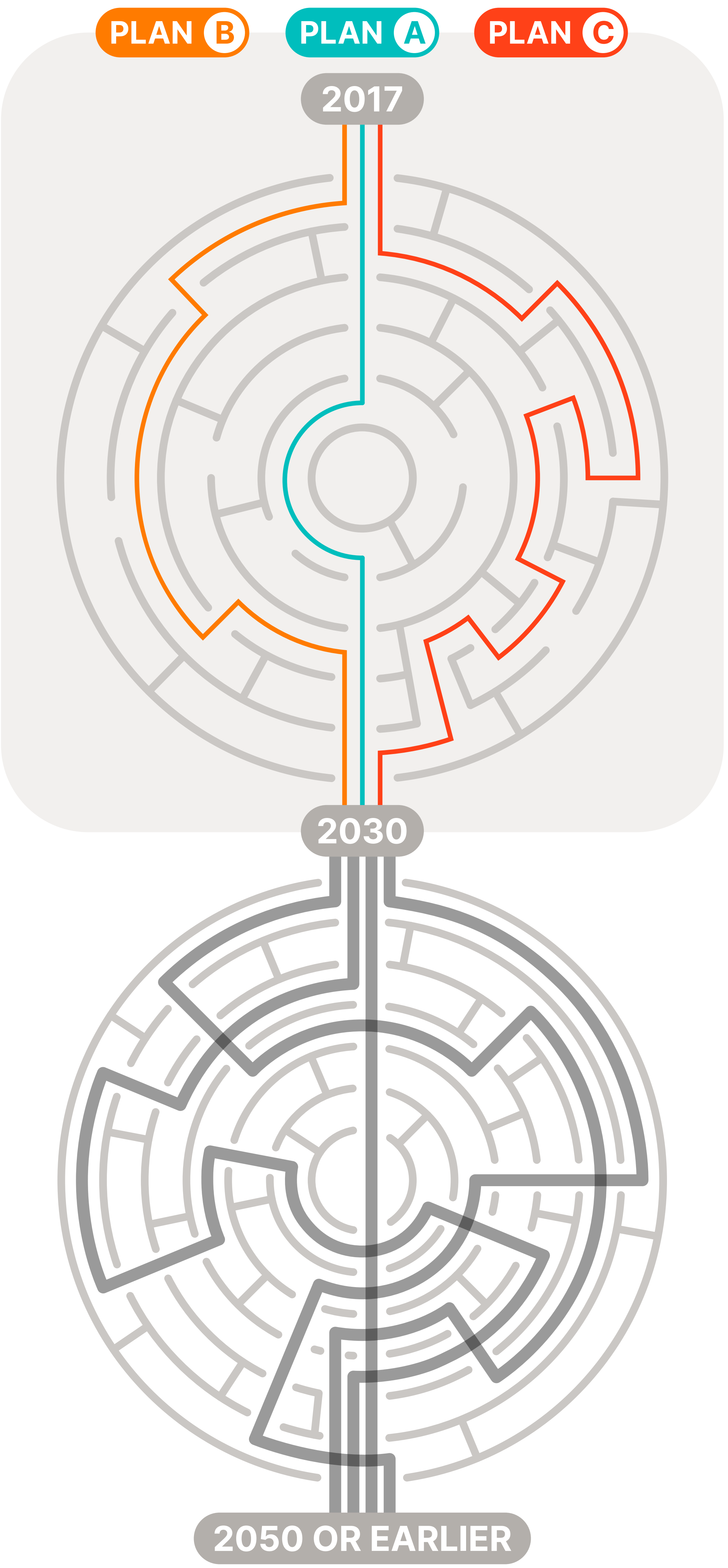
Near-term: Our 2030 goal is to reduce absolute emissions across our value chain (Scope 1, 2 and 3) by 55% against a 2017 base year. We have a broad set of *Product Stewardship* targets that will enable us to deliver this goal. In particular, we are aiming for a 90% recycling rate and 85% recycled content in aluminum beverage cans, bottles and cups across all markets by 2030.

Long-term: Our 2040-2050 goal is to reduce all emissions to a residual level. This goal comes with a higher degree of uncertainty because it will partly rely on government policies and subsidy schemes to accelerate the development of new, carbon-free technologies. The impacts of policy and technology will vary in timing and geographical reach, but our pathway will evolve alongside these new developments. We are confident the global economy will continue its low-carbon transition, and in the meantime we will focus on the near-term – on actions that we can implement today and tomorrow.

ONE CORE NEAR-TERM SCENARIO AND TWO BACK-UP PLANS

Climate transition pathways designed around the world have the potential to be derailed by a whole range of factors. In fact, given the numerous variables, accurate modeling is a real challenge. It is, for instance, impossible to predict with certainty the regulatory landscape or growth rates that will prevail in years and decades to come. In light of this uncertainty, our analysis presents a holistic perspective on the system interventions that are required across our value chain, cutting through the complexity of modeling to provide a reality check on our progress towards 1.5°C compliance by 2030 and 2050. A broad variety of possible pathways exist, covering a wide range of regulatory, cost and geopolitical developments. This report describes the most technically credible, economically viable, socially acceptable and geopolitically reasonable near-term pathways to 2030 among the many we have identified (see next page *2030 Scenarios*). While our projections are not perfect, we cannot afford to delay, and the key purpose of our scenario analysis is to drive progress. We intend to refine our analysis on a regular basis.

Our core 2030 scenario (Plan A) represents an ideal path, which assumes 85% recycled content of aluminum packaging enabled by improved global collection rates in our business regions (Figure 4), aligned to gradual decarbonization of primary aluminum production as predicted by the MPP and produced in collaboration with the Aluminium Institute (IAI) and endorsed by major global aluminum producers. The second scenario (Plan B) assumes that best practice circularity policies are not implemented across all of our regions fast enough, and that the desired 90% global collection rate for aluminum beverage cans, bottles and cups will not be reached by 2030. The third scenario (Plan C) assumes that the decarbonization of primary aluminum occurs slower than required as per *MPP's 1.5°C scenario*.



2030 SCENARIOS

This report focuses on four near-term scenarios. It briefly mentions the Business-as-Usual scenario to discuss the impacts of unmitigated scaling of the system, and for which no additional system interventions impinge on the way our business is operating or on recycling policy, infrastructure expansion or innovation. Reference through the document to our Plan B scenario is made in the context to circularity targets, and reference to our Plan C scenario is made in the context of primary aluminum decarbonization targets only.

PLAN A

SIGNIFICANT SHIFT TOWARDS BOTH CIRCULARITY AND LOW-CARBON PRIMARY ALUMINUM

The first scenario foresees that continued and rising public support for climate change action accelerates efforts to foster a circular, low-carbon economy, with brands increasing their commitment to reusable and/or high recycled content packaging. In tandem, there will be a rise in collection rates and recycling and remelt capacities, plus a rapid transition to a low-carbon primary aluminum sector supported by carbon regulation, subsidy schemes, and targeted investment by aluminum producers.

PLAN B

NOT REACHING 90% COLLECTION RATES IN OUR BUSINESS REGIONS

In this scenario, policy changes do not happen fast enough to reach 90% global collection rates for aluminum beverage cans, bottles and cups by 2030, perhaps because Deposit Return Schemes (DRS) are not adopted fast enough, or because extended producer responsibility (EPR) policies in various countries are not ambitious enough. To compensate for the shortfall, Ball would have to work even more closely with suppliers to activate other levers to increase recycled content, for instance by ensuring that recycled aluminum cans are not migrating into other aluminum product families such as the automotive sector.

PLAN C

PRIMARY ALUMINUM DECARBONIZING SLOWER THAN EXPECTED

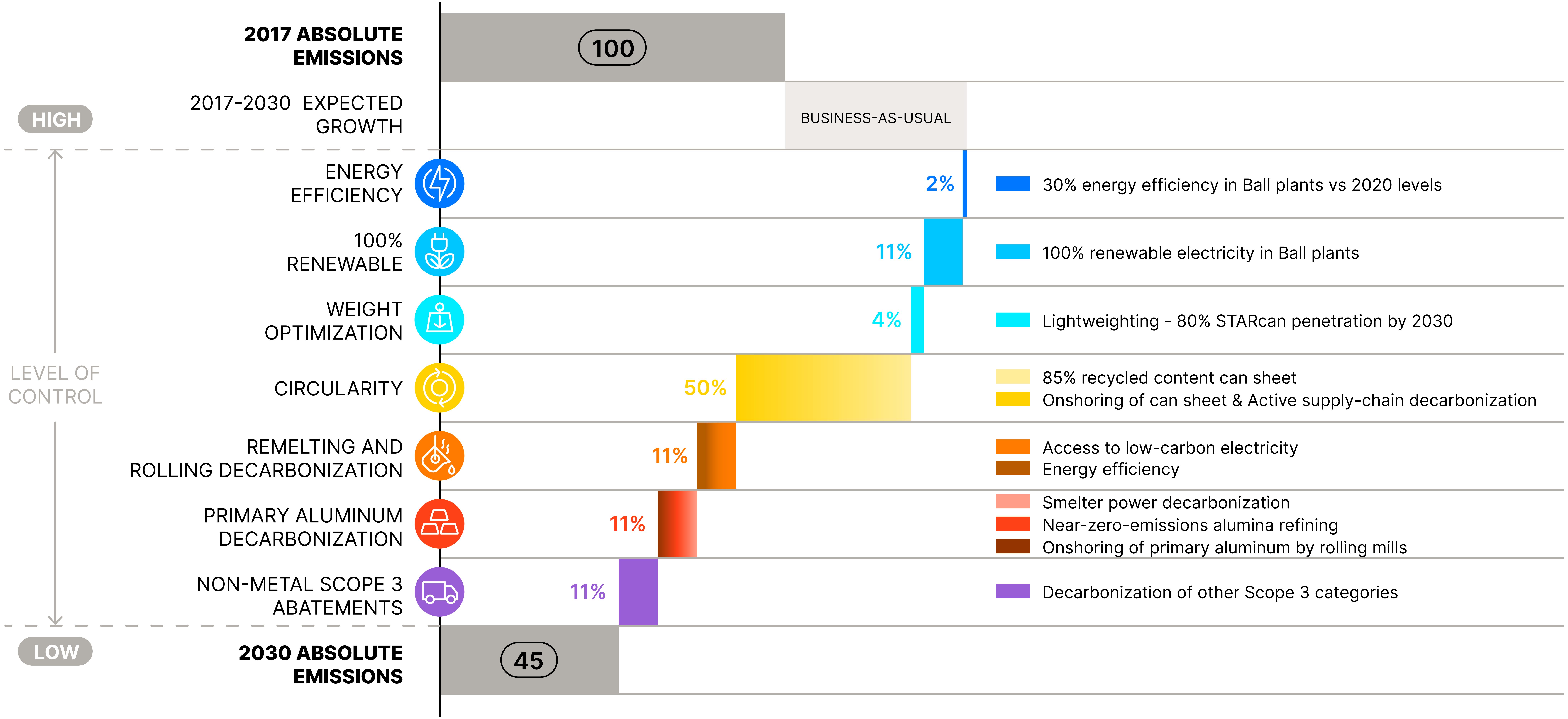
Under the third scenario, primary aluminum decarbonizes more slowly, perhaps due to higher than expected costs. To compensate for this shortfall, we will have to partner closely with our can sheet suppliers to ensure we are able to buy low-carbon primary aluminum wherever it is available across the globe. One of such collaboration strategies could be tied to the current trend of reshoring policies for critical raw materials to their region of origin, in which aluminum is increasingly seen as vital for low-carbon economic sectors such as mobility, batteries, renewables, construction and packaging.

3 OUR 2017-2030 PATHWAY

FIGURE 5

BALL'S 2017-2030 DECARBONIZATION LEVERS

% CONTRIBUTION | INDEX 100 = BASE-YEAR 2017



Across our value chain, we are committed to identifying and acting upon every available opportunity to achieve our targets, including those from energy efficiency improvements and the use of renewables to weight optimization of cans (Figure 5 previous page). Each will contribute to the reductions needed.

Demand for aluminum beverage cans has begun to accelerate over the past few years, and the environmental benefits of aluminum should help to sustain our strong business growth. In parallel, our aluminum aerosol business is undergoing a transformational shift to offer sustainable options for products that have historically been packaged in other substrates, such as personal care and beauty. This projected growth across Ball will make our absolute emission reduction goals even more challenging and important to deliver.

Our near-term climate transition plan is largely the extension of our already approved *2030 Product Stewardship goals* in carbon terms: 30% energy efficiency compared to 2020 levels, 100% renewable electricity across our organization, lightweighting of our products, and 85% average recycled content in the aluminum we use in our beverage cans, bottles and cups.

We also expect to see two key changes within our value chain:

- for our tier 1 suppliers' remelting and rolling activities as well as our non-metal supply chain, a 6% year-on-year carbon intensity decrease over the 2017-2030 period.
- for our tier 2 metal suppliers and beyond, an average carbon intensity of no more than 5 t CO2e /t Al Cradle-to-Gate for the primary aluminum contained in our products – a threshold which is already achievable with currently available technologies.

The next chapter covers our 2030 pathways and related actions that can enable us and our value chain to stay on a 1.5°C pathway.

Demand for aluminum beverage cans has begun to accelerate over the past few years, and the environmental benefits of aluminum should help to sustain our strong business growth

WITH OUR EXPECTED GROWTH, A 55% ABSOLUTE REDUCTION IN GHG EMISSIONS REQUIRES EVEN MORE IMPROVEMENTS PER PRODUCT

We will face very different situations around packaging and packaging waste regulations and consumer preferences in North and Central America, South America and EMEA. We therefore expect pathways that will evolve differently over time and that are unique to each geography and product group. In general terms, reducing our absolute emissions by more than half by 2030 means an even more drastic drop in the carbon footprint of each of our products from a life cycle assessment (LCA) standpoint.

As LCA plays a more prominent role, methodology is becoming better at accounting for the positive environmental impacts associated with real recycled materials. The IAI, for instance, has just published a reference document on how to treat scrap flows in carbon footprint calculations for aluminum products. In addition, carbon accounting has become more formalized, especially for Scope 3 emissions.

Today, emissions calculations are usually based on estimated activity data, along with average regional emission factors. This kind of approximated accounting would never be accepted in the financial world. Because the aluminum industry is extremely heterogeneous from a carbon perspective, the use of regional averages hardly reflects best practice.

However, we expect accurate, reliable, asset-level emissions data to be available and third-party assured for every product in the supply chain. This means that every kilogram of CO2 saved by our suppliers will be reflected in future LCAs and reporting.

Our customers will be able to take advantage of these methodological, accounting and decarbonization advances and will see the footprint of their aluminum packaging drop considerably. They would even be able to strengthen their sustainability claims if they decide to re-evaluate their portfolio, disposing of hard-to-abate, non-circular and carbon-intensive packaging and switching into circular and lower-emissions aluminum packaging.

3.1 REDUCING BALL'S SCOPE 1 & 2 GHG EMISSIONS BY 55%

Achieving 30% Energy Efficiency

We are committed to improving the energy efficiency of our manufacturing operations by 30% from 2020 to 2030. This primarily means cutting back on the use of electricity and natural gas in our Global Beverage Packaging business, which accounted for 90% of our 4.6 million megawatt hours energy consumption in 2022.

Our global manufacturing network implemented multiple energy efficiency projects between 2017 and 2022, ranging from capital projects such as upgrades to compressors and vacuum pumps, the installation of variable frequency drives and LED lighting, to employee education and engagement. The installation of a new real-time energy monitoring system will also provide opportunities for continuous energy improvements in the future. Energy efficiency in our global beverage can manufacturing sites improved by 2% since 2017. The lower than expected rate of improvement was driven by a deceleration of demand in North and South America in the second half of 2022, which led to lower than anticipated asset utilization following a multi-year period of global plant additions since 2017.

Each Ball business has developed plans to work towards the 30% improvement challenge. These plans are all based around five themes:

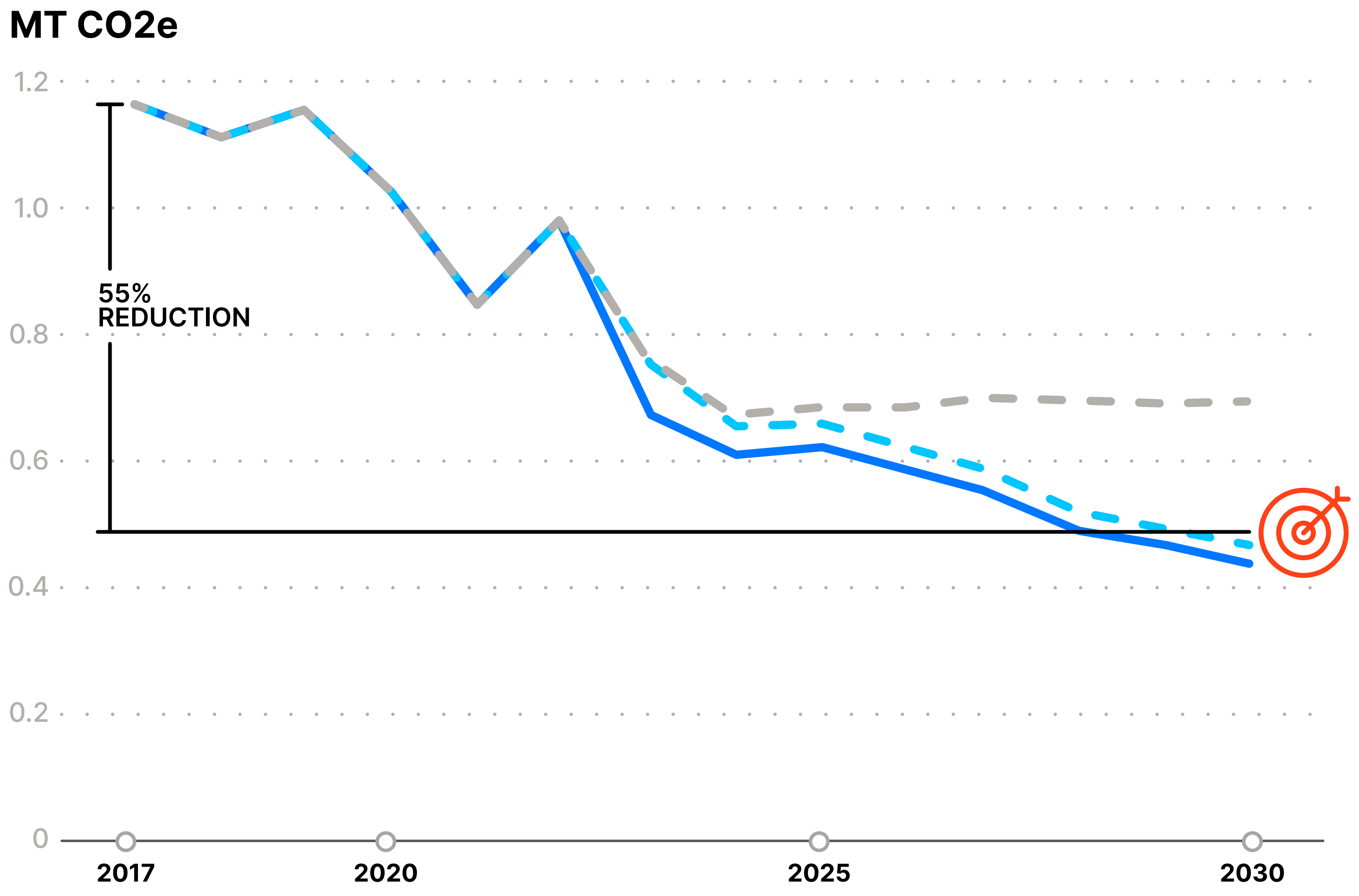
- the creation of new and highly efficient plants
- capital project upgrades on gas and electricity
- employee-led actions, supported by smart-metering, that will save energy in plants through behavioral changes
- the implementation of a dedicated new sustainability engineering organization
- the development of radically new manufacturing technologies

We have a clear idea of the detailed pathway we need to follow in order to get there. We have taken the necessary steps to understand what must be done and know exactly what we need to do to make continued progress. Figure 6 shows what it will take to hit the target..

FIGURE 6

WHAT IT TAKES TO ACHIEVE A 55% ABSOLUTE REDUCTION IN SCOPE 1 & 2 EMISSIONS

MILLION METRIC TONS CO_2e



2030			
COMBINATION 1	COMBINATION 2	COMBINATION 3	
100%	97%	85%	RENEWABLE ELECTRICITY
30%	45%	20%	ELECTRICITY EFFICIENCY IMPROVEMENT IN BEVERAGE
20%	30%	20%	ELECTRICITY EFFICIENCY IMPROVEMENT IN AEROSOL
15%	20%	10%	IMPROVEMENT IN OVEN FUEL EFFICIENCY
10%	6%	1.5%	CONVERSION OF THERMAL OVEN LOAD TO ELECTRIC

100% Renewable Electricity

Achieving 100% renewable electricity globally by 2030 is a pivotal part of our climate transition plan. We've also set an interim target of achieving 75% renewable electricity globally by 2025, which we aspire to achieve sooner to showcase our rapid decarbonization efforts in our largest markets.

Renewable energy is not only critical to Ball's overall carbon footprint; it is an important component in reducing the carbon footprint of our packaging. In our *LCA modeling* we have shown that the use of 100% renewable electricity in manufacturing reduces the carbon footprint of an aluminum beverage can by 10-18%, depending on the region in which the manufacturing takes place and the type and size of the packaging.

Having decided to engage in projects that add new renewable electricity capacity to the grid, and in keeping with our commitment to exercising principles of prudent financial stewardship and supporting EVA®, we did not purchase Guarantees of Origin (GOs) in 2022. This resulted in a year-over-year decrease in renewable electricity coverage for Ball.

Our strategy on renewable electricity is based on additionality and proximity, signing Virtual Power Purchase Agreements (VPPAs) where it makes sense, while taking a market-by-market approach to identifying the most suitable and cost-effective solutions.

In 2022, Ball procured over 285,000 MWh of renewable electricity from a VPPA wind power project in the United States, and over 250,000 MWh in Spain and Sweden. Through a recent VPPA agreement announced in May 2022, we expect to procure 600,000 MWh of clean energy each year from a new Texas-based wind energy project, covering more than 50% of Ball's North and Central American electricity load. We are also looking into a number of onsite and near-site renewable energy projects for our European facilities and have signed contracts in South America that will begin delivering renewable electricity from the grid during 2023.

Making Our Products Even Lighter

Innovation is an integral part of our ability to drive profitable growth across our organization, and it plays a critical role in the conceptualization, design, manufacturing, filling and delivery of final products to our customers and consumers. Often unknown to the outside world, many of Ball's successful product and process innovations provide significant environmental and economic benefits to the company, our customers and consumers. One of these innovations is the lightweighting of cans.

Our goal is to make the lightest metal containers possible, while at the same time meeting the performance requirements and expectations of our customers. Even small weight reductions save significant amounts of energy and emissions when multiplied by the billions of containers that we produce each year. That is why weight optimization represents an important pillar within our climate transition plan. Since the 1970s, beverage can weights have decreased by more than 40%. Today, cans have the ability to be produced with a wall thickness of 0.097 millimeters – as thin as a human hair. Our global portfolio of STARcans is setting new benchmarks: compared to other beverage cans of the same size, the STARcan design reduces weight by 3 to 8% depending on the size and shape of the aluminum container. In 2021, we announced a new commitment to use lightweight STARcan designs in 80% of our global beverage can production. By the end of 2022, STARcans accounted for 31% of the global volume of cans we produced and we think we can make big progress in the next three years. We continue to identify new opportunities and we are already working on the next iterations of lightweight can and end designs. So we are confident that, in collaboration with our customers, we will make aluminum cans, as well as bottles and cups, even lighter in the future. With each microgram saved per product, we are contributing to our and our customers' decarbonization.

There is also scope for in our Aerosol business, which has lightweighting developed a new iteration of ReAl®, a lightweight alternative to standard aluminum slugs that are used in impact extruded can manufacturing. The latest version of ReAl®, which went into commercial production in 2021, allows for the production of containers that are up to 30% lighter compared to a standard impact extruded can. Looking ahead, in 2023 Ball will further lighweight its extruded bottle portfolio by commercially introducing NextGen aluminum slugs and bottles with 50% recycled content.

3.2 CIRCULARITY: OUR BIGGEST DECARBONIZATION LEVER

Today, more than 70% of the material used in aluminum cans is recycled into new products , making them the world's most recycled beverage container. These figures are much better than those for other beverage and personal care packaging substrates, but they are still not good enough. If aluminum cans are to be a textbook fit for a circular economy, then the recycling rate needs to be close to 100%. We believe it is possible by 2030.

Circularity accounts for half of all the carbon reductions in our Plan A scenario. This is because primary aluminum production is energy-intensive. Depending on the electricity source used in the process, the carbon footprint of primary aluminum varies between 5 t CO2e/t Al Cradle-to-Gate (see box on the right) - in hydropower-based regions - to more than 20 t CO2e/t Al in regions that rely primarily on coal-based electricity generation (Figure 7). By contrast, recycled aluminum uses just 5% of the energy required for primary production, and thus emits significantly less GHG emissions, about 0.5 t CO2e/t of recycled aluminum.

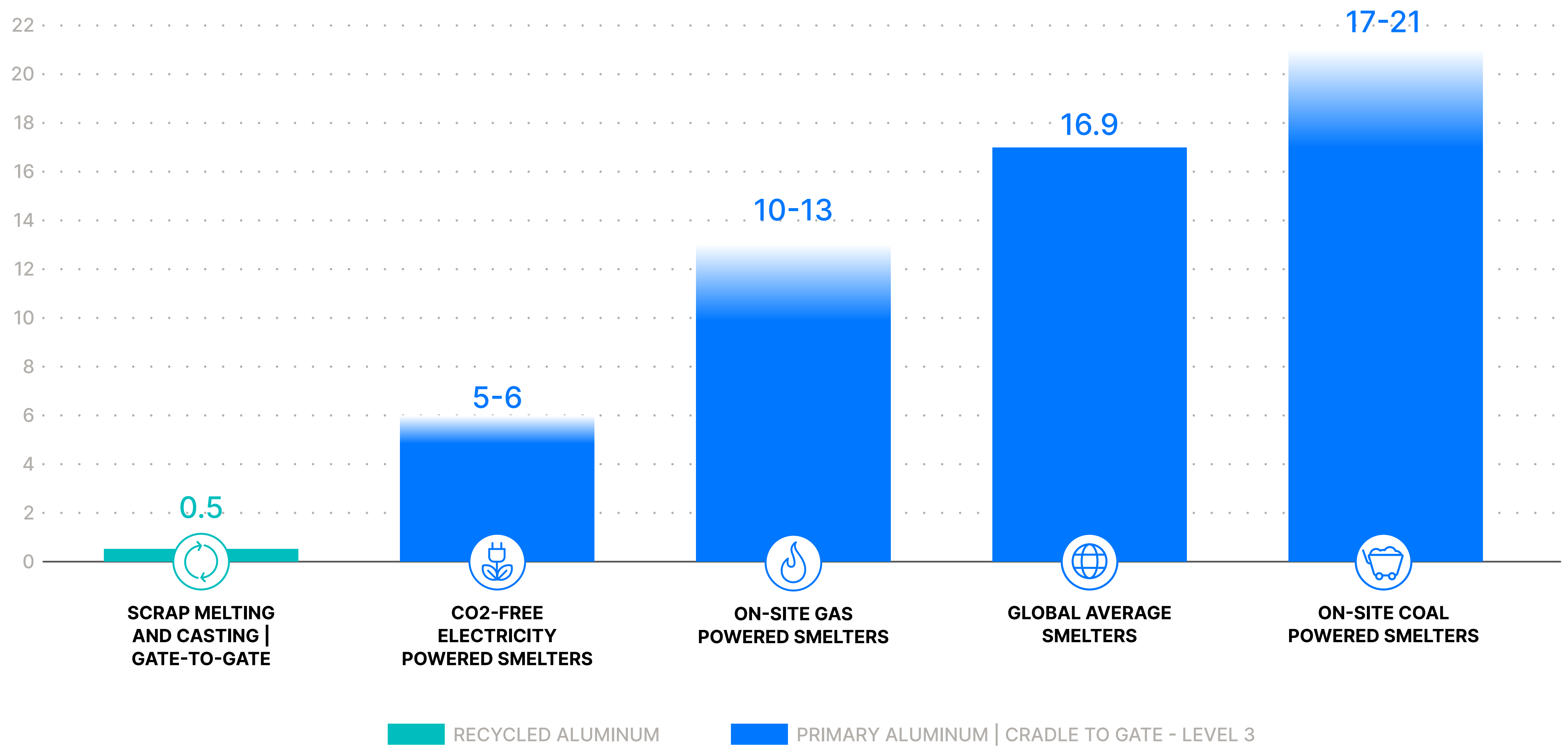
Increasing recycled content in our products represents by far our biggest decarbonization lever. This will be achieved through a combination of ambitious government recycling policies that will result in a greater amount of cans being collected, plus industry investment in remelting and rolling plants in our main regions. The good news is that this is happening. Ball has invited suppliers, customers, governments and other stakeholders to work together to achieve our 2030 Circularity Vision for aluminum beverage cans, bottles and cups in the regions where we operate. The vision is comprised of two main goals:

- a 90% end-of-life collection rate, and
- a 85% average recycled content.

FIGURE 7

GREENHOUSE GAS EMISSIONS OF PRIMARY ALUMINUM PRODUCTION AND RECYCLING PROCESS

t CO2e/t Al



Source: *Ball estimates based on IAI Life cycle Inventory data and European Aluminium Circular Action Plan*

WHAT DO WE MEAN BY CRADLE-TO-GATE?

The International Aluminium Institute (IAI) defines three levels of GHG emissions accounting and disclosure for primary aluminum production. For Ball's Climate Transition Plan, we modelled primary aluminum using IAI's Level 3 carbon accounting guidance, i.e. a complete Cradle-to-Gate carbon footprint of primary aluminum ingot. This includes all GHG emissions from bauxite mining, alumina production, carbon anode production, aluminum electrolysis and ingot casting processes, raw materials transport, electricity and heat generation, and aluminum dross processing. It also includes the production of ancillary materials and fuels required for primary aluminum production.

Maximizing Can-to-Can Recycling

The environmental benefits of creating a strong circular system come from displacing primary resource production – ensuring that recycled materials are used to create new, high-quality products instead of using virgin resources. However, not all levels of recycling are the same. Closed-loop recycling enables the material to come back into the market to serve the same purpose as the original product for multiple uses. This is the preferred method because the recycled product maintains similar quality with the primary material, and the process can be repeated over and over again. This means that the material can be used repeatedly, and there is less waste. Open-loop recycling is when the recycled material is used to make a different product. This can lead to compromised material quality because there can be a change in chemistry or an increase in contamination in the new product. The new product could also be a lower grade than the original material and not recyclable. This is called downcycling, and it means that the material is degraded and can no longer be recycled. An open-loop system or downgrading can be semi-circular or nearly linear.

To move towards a real circular economy, we need to change the way we think about products, markets, ownership, and resources. Simply recycling more is not enough. Instead, we need to focus on preserving the value of materials through activities that can keep them in use at their highest and best value for as long as possible. A real circular economy requires a systemic solution that maintains a flow of resources, regenerates them, retains their value, or even adds value to them over time (Figure 8).

Aluminum cans are a textbook example of a packaging option that is well-suited for this new paradigm as used beverage cans (UBCs) are consistently recycled back into new beverage cans, with a minimal loss of material value. UBC closed-loop recycling (also called can-to-can recycling) truly preserves aluminum value over time.

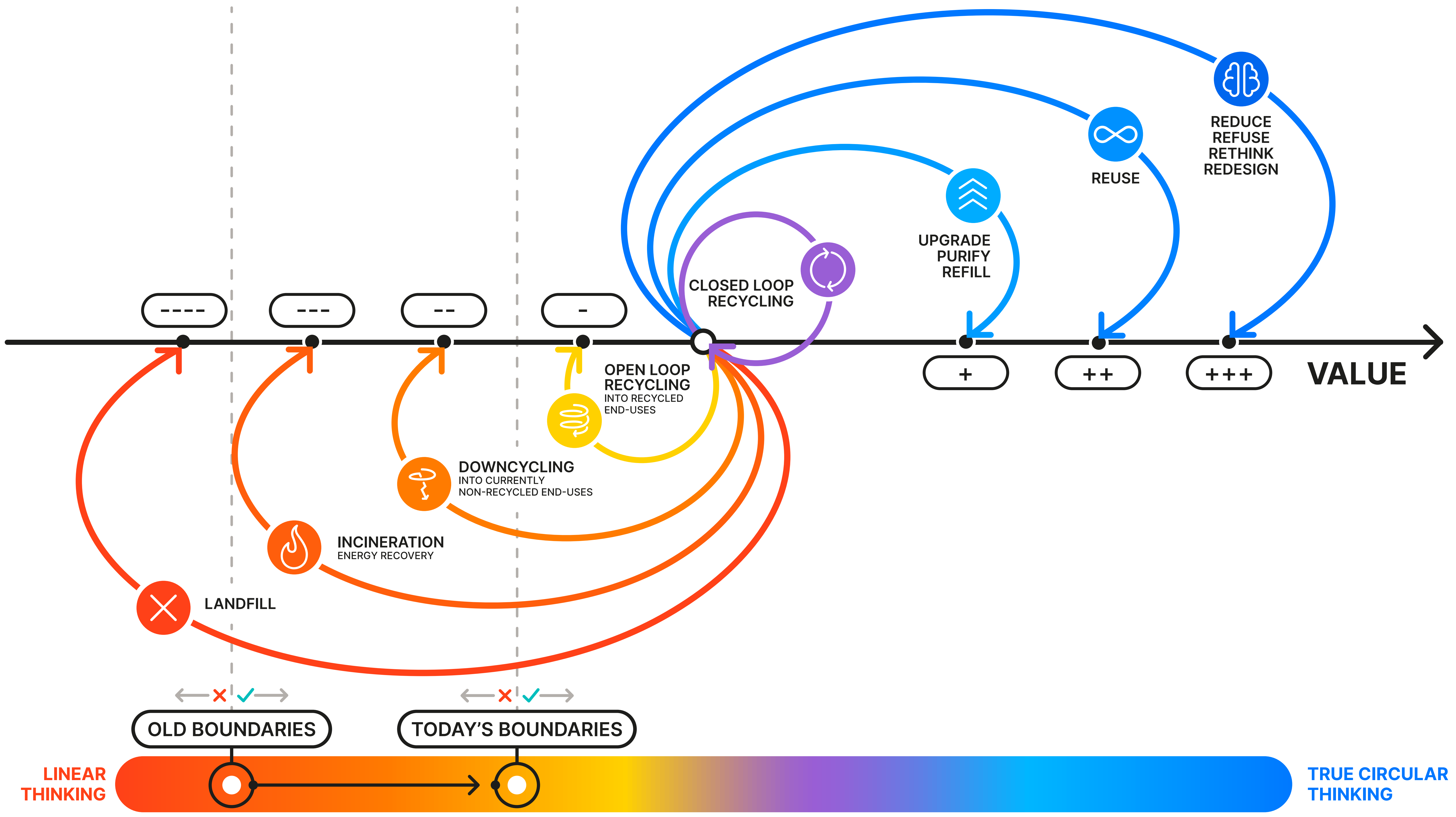


FIGURE 8

SHIFTING THE PARADIGM FROM WASTE MANAGEMENT TO VALUE PRESERVATION

Source: *Ball*

Raising can-to-can recycling exponentially increases the recycled material that is kept in the loop

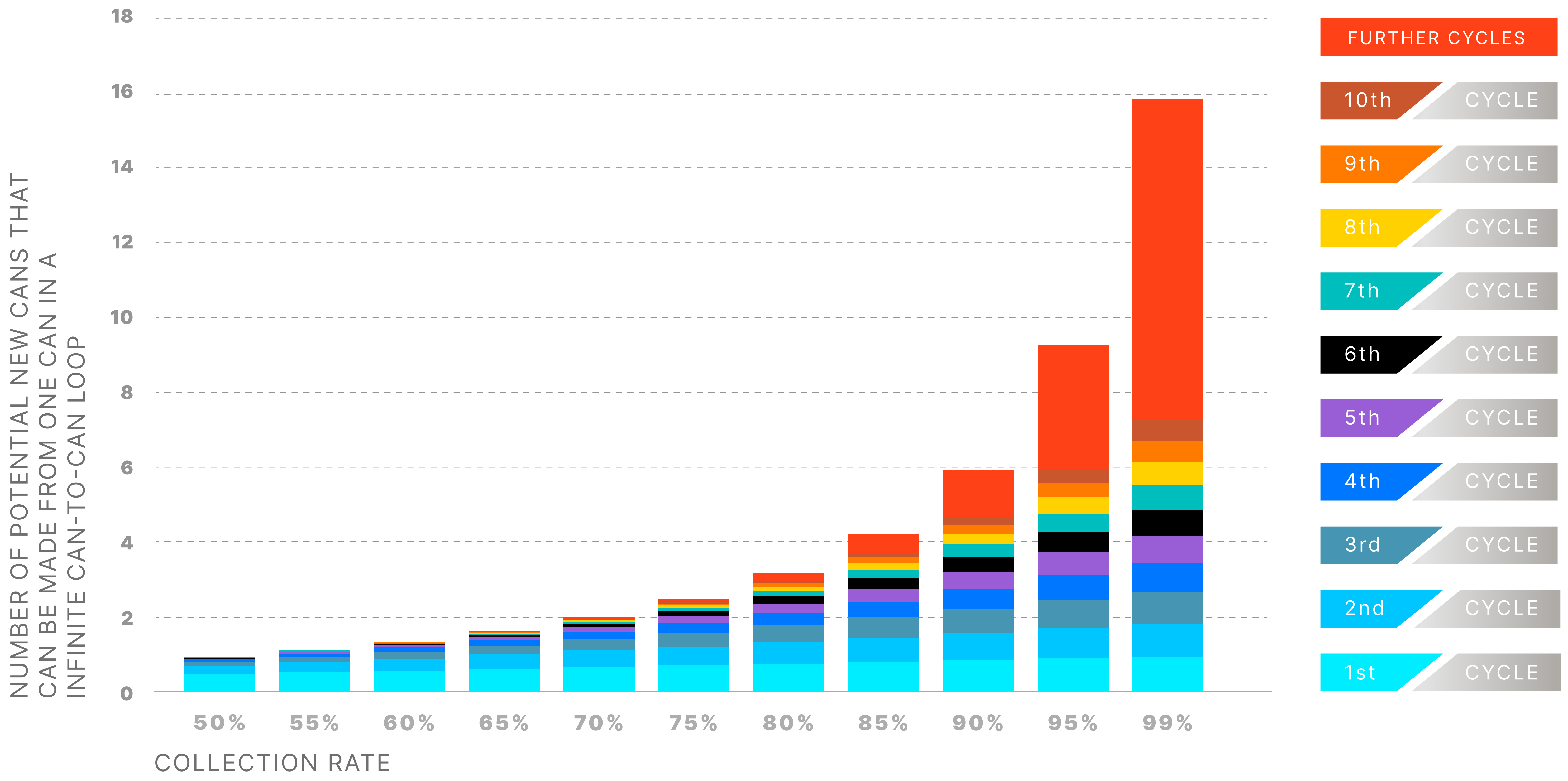


FIGURE 9

CUMULATIVE IMPACT OF HIGH CLOSED-LOOP RECYCLING RATES

NUMBER OF POTENTIAL NEW CANS THAT CAN BE MADE FROM ONE CAN IN A INFINITE CAN-TO-CAN LOOP, ASSUMING 5% RECYCLING LOSSES (SORTING, SHREDDING, TO OTHER INDUSTRIES)

Source: *Ball estimates based on Eunomia idea*

In addition, a closed-loop process drives also a virtuous cycle of high recycling rates and a high percentage of recycled material used to create a new version of the same product. Raising can-to-can recycling exponentially increases the recycled material that is kept in the loop, unlocking the circular potential of the aluminum beverage can. Figure 9 highlights the marginal benefit of reaching very-high collection rate (from 90% to 99%) for aluminum cans which more than doubles the number of cans that can be produced from a notional unit of "original" aluminum cans.

The amount of material that is kept in the loop depends on the losses at each stage of the recycling value chain: collection, sorting, re-melting and then making a new can. In 2019, of the over 3 million tons of aluminum beverage cans that were put on the market in Ball's key regions, 67% of them were collected for recycling, 62% were actually recycled, and 46% were recycled back into beverage cans (Figure 10 next page). Since packaging aluminum has high recycling yields and is sorted with inexpensive technologies, the biggest opportunity is continuing to increase collection.

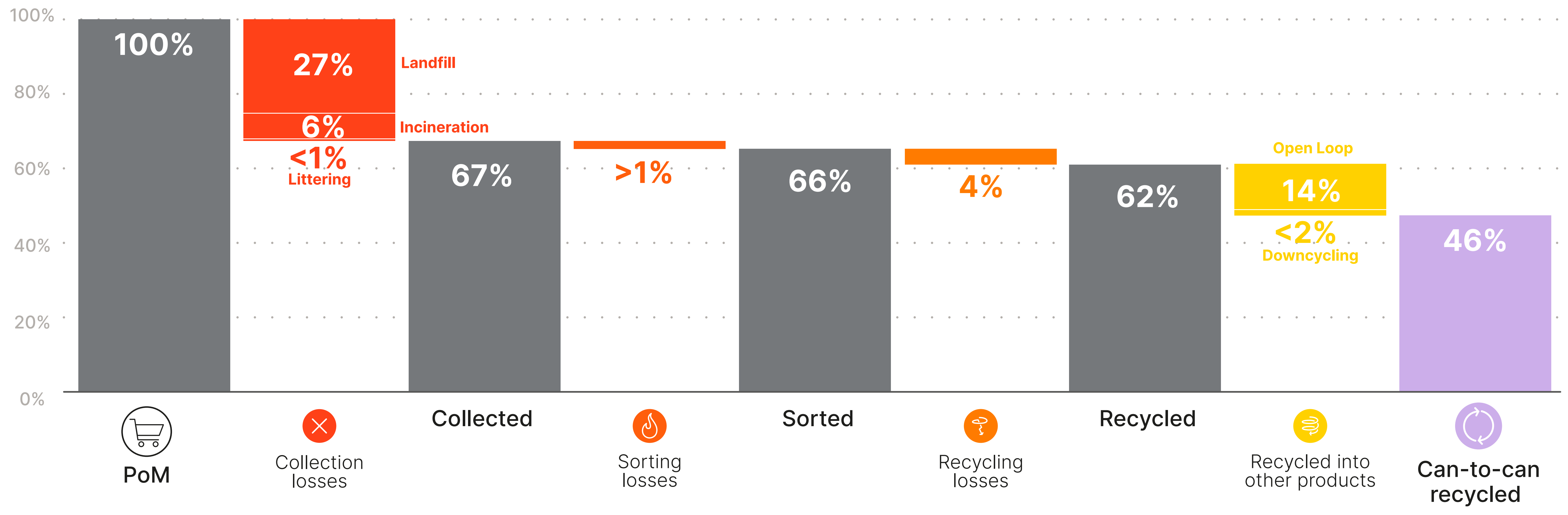
Closing the can-to-can loop is also a major economic opportunity for waste collectors, recyclers, industrial materials users, recycling equipment providers, and other stakeholders. Moving in this direction will also give rise to significant job creation across our key business regions. For illustrative purposes, we have begun evaluating the potential benefits of increasing the United States recycling rate for aluminum beverage cans to 90%. A 90% recycling rate of aluminum at current consumption rates would mean an additional 104,000 jobs that would be created in the United States waste management industry (*Resource Recycling Systems*). Wages in related industries would rise nationwide from $2 billion to $5 billion.

The limitations of the current system provide levers to improve beverage can circularity in the future. We must work to increase collection rates and reduce diversion to non-can uses and aim for the perfect circle – 100% collection, 100% sorted, 100% recycled, 100% back to recycled content – so that aluminum can circulate at its highest economic value in a closed can-to-can loop. We can reach a very high can-to-can recycled content by 2030 in our key regions (Figure 11) when the value chain works together and alongside governments to develop high performance collection systems.

FIGURE 10

2019 MASS FLOW OF BEVERAGE CAN MATERIAL, BALL BUSINESS REGIONS

Source:
IAI alucyle, Ball estimates based on Eunomia (2023). Achieving Real Circularity in Aluminum Beverage Cans.



Aluminum cans have the potential to achieve near-perfect circularity

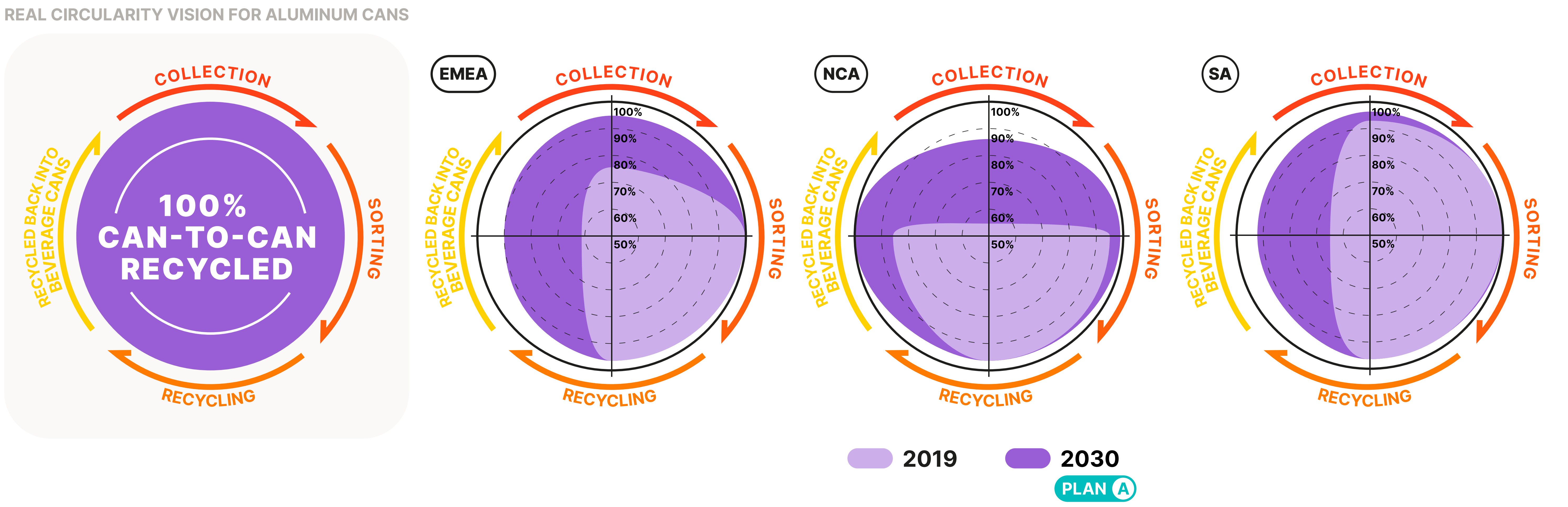


FIGURE 11

HOW CLOSE TO A PERFECT CIRCLE CAN ALUMINUM CANS GET? 2019-30 MASS FLOW BY REGION

PLAN A

Source:
Ball estimates based on Eunomia (2023). Achieving Real Circularity in Aluminum Beverage Cans.

Closing the collection gap

The first step in the process is to collect used cans. If they are not collected, then they cannot be recycled. Once collected, losses of aluminum from the recycling process are relatively low – unlike for other materials. Losses due to lack of collection are far greater, with 33% of all cans not being collected at all. This is the greatest challenge we face in North America, especially in the United States where the recycling rate has stagnated around 50% over the last decade. More than 40 billion cans, approximately $1 billion of aluminum, end up in landfills every year in the region.

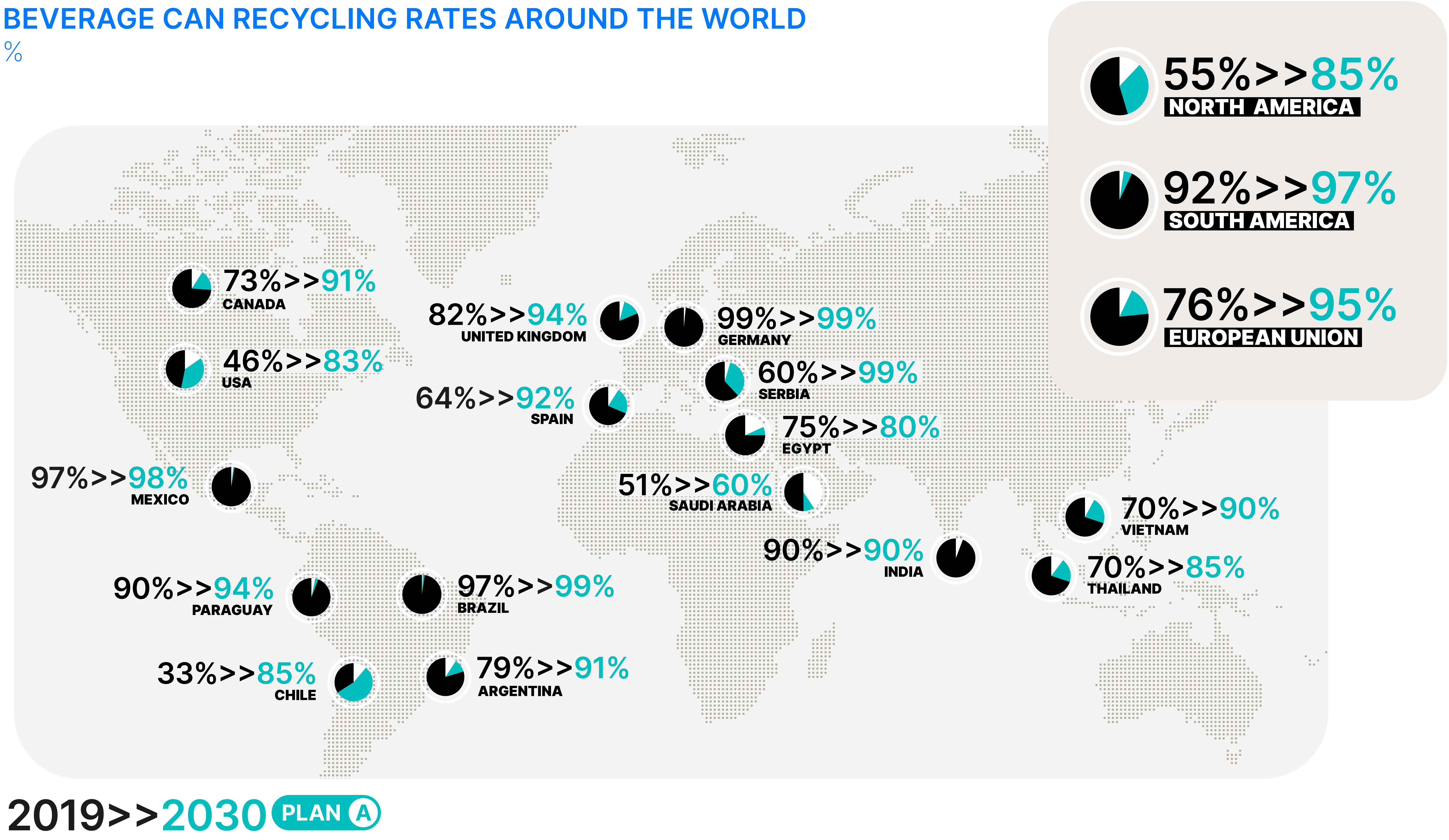
Despite collection challenges, we do believe that a 90% collection rate is achievable in our key regions (Figure 12, Figure 13 next page). European countries such as Germany have recycling rates very close to 100%, as do countries in the Southern hemisphere such as Brazil and Mexico. In fact, with a collection rate of almost 99% in 2021 and an average of more than 95% over the past 15 years, Brazil is a leader in aluminum can recycling (see BRAZIL: HOW A THREE DECADE EFFORT TO INCREASE RECYCLING PAID OFF).

There is no structural economic barrier to achieving high recycling rates. In Europe, the average collection rate for aluminum cans is already higher than 75%, and collection rates above 90% are commonly achieved in countries where a robust Deposit Return Scheme (DRS) is in place. DRS applies an extra monetary charge in the form of a deposit on beverage containers which is returned to consumers when they bring them to recycling collection points. It has been proven as a tried and tested method of increasing recycling rates all over the world, including in the United States, where the average amount of aluminum recycled in DRS states is more than three times higher than in non-DRS states.

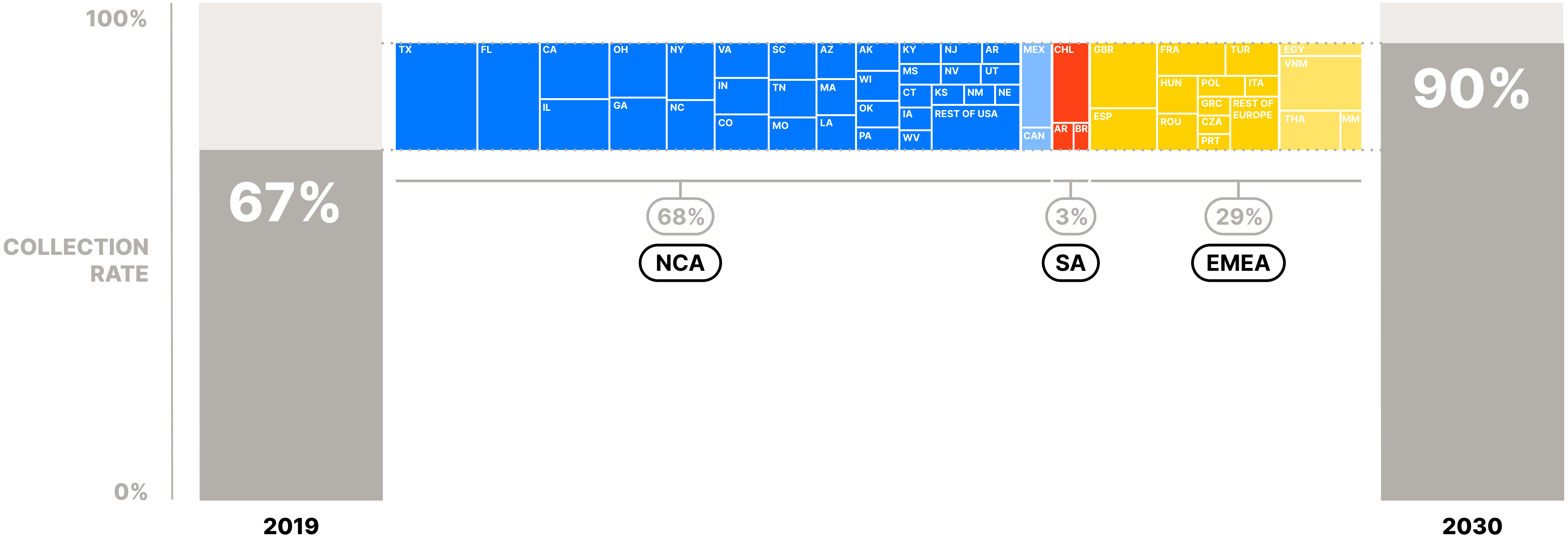
FIGURE 12

BEVERAGE CAN RECYCLING RATES AROUND THE WORLD

%



Source: *Ball estimates based on Eunomia (2023). Achieving Real Circularity in Aluminum Beverage Cans.*



In the United States, where the greatest opportunity for increased can collection and recycling exists, there are early signs of systemic improvement. Across much of the United States local governments and rate payers/tax payers bear the operational and financial responsibility recycling and disposing of packaging, this is why the concept of having producers pay for the packaging they put onto the market is gaining traction. The need to financially strengthen local recycling programs coupled with goals beverage brands have set to increase the recycling rates and recycled content for their packaging has led to strong momentum behind EPR legislation at the state level. While EPR is gaining traction at the state level there is growing momentum in the industry around the implementation of DRS to achieve optimal recycling rates alongside an EPR to create comprehensive recycling systems. We are closely following this discussions and working with industry partners to influence these legislative efforts at the state level.

While DRS is the only proven policy solution in developed countries that can quickly achieve 90%+ collection rates, we are exploring other opportunities to address the collection gap in the interim. We are exploring legislation to incentivize material recovery facilities to install better sorting equipment to increase aluminum recovery. Lastly we are also exploring incentives for states to achieve 90% collection targets for beverage packaging at the federal level.

In Southeast Asia, EPR policies have recently been introduced in India and Vietnam (the biggest can markets in Asia apart from China), and are under discussion in Thailand. These will accelerate the transition to a circular economy in the region.

FIGURE 13

COLLECTION RATE INCREASED REQUIRED TO MEET AVERAGE 90% ALUMINUM BEVERAGE CAN COLLECTION RATE ACROSS BALL REGIONS

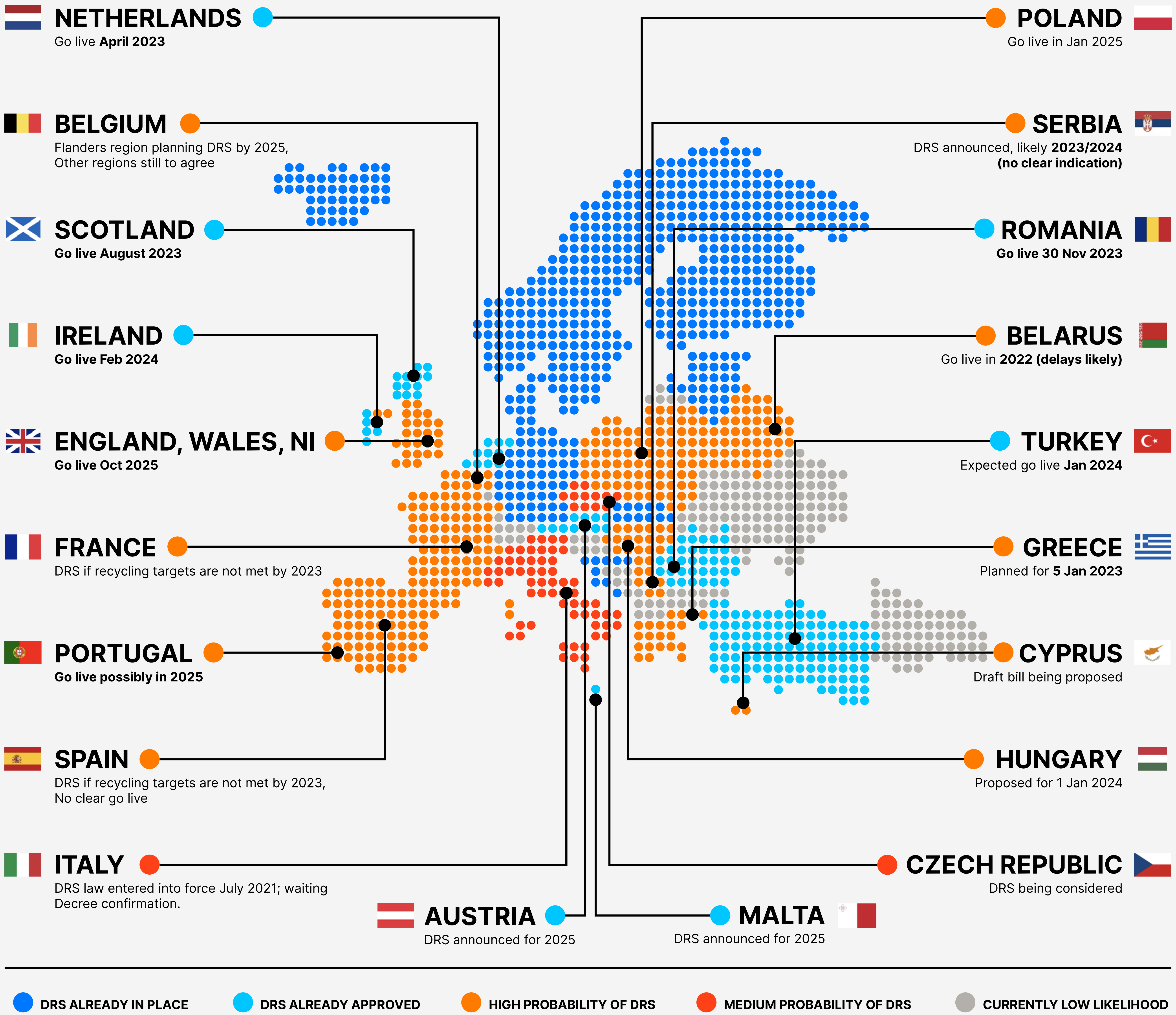
PLAN A

Source:

Ball estimates based on Eunomia (2023). Achieving Real Circularity in Aluminum Beverage Cans.

FIGURE 14

IMPLEMENTATION OF DEPOSIT RETURN SYSTEM IN EUROPE (AS OF MARCH 2023)

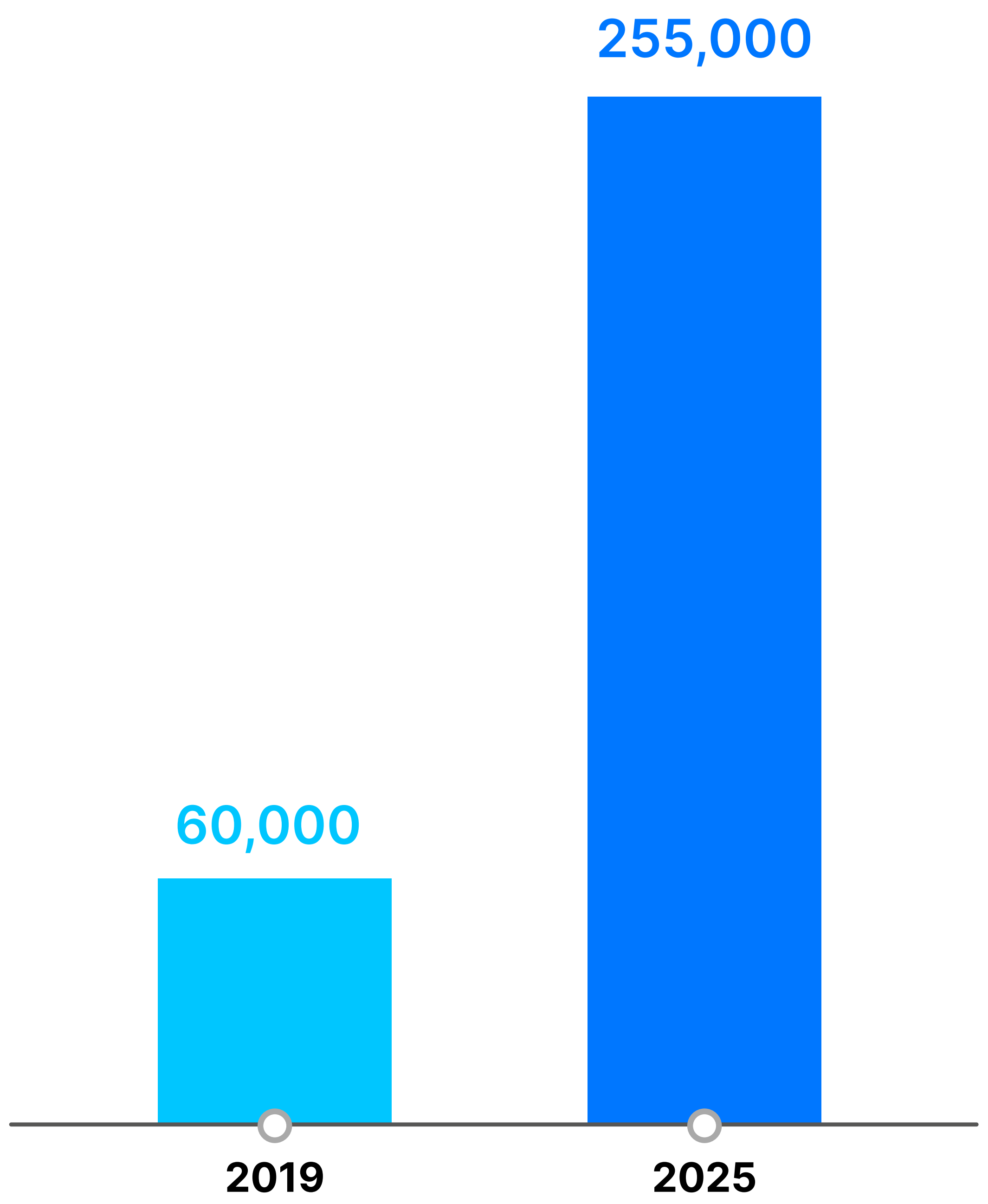


Source: *Ball estimates based on Reloop's Global Deposit Book 2022 and national announcements*

Under EU's Packaging and Packaging Waste Regulation, cans and plastic bottles will be in a mandatory DRS from 2028, unless they achieve a 90% collection via other collection (Figure 14). The development of modern, well-designed DRS in Europe is likely to increase collection rates by as much as 17 percentage points by 2030, raising the rate to 93% according to Plan A. If preferential access is provided for UBCs to be recycled back into cans, then more aluminum will be available to raise recycled content in new cans.

FIGURE 15

EXPECTING SIGNIFICANT GROWTH IN REVERSE VENDING MACHINES (RVMs) MARKET, EUROPE



Source: *Envipco, Company presentation 2022*

In South America, Brazil and Paraguay have already reached a very high collection rate through the informal sector. We expect the regional collection rate in South America to increase from 93% in 2017 to 96% in 2030, an increase that will be achieved mainly by emerging EPR policies in Argentina and Chile.

Brazil: how a three decade effort to increase recycling paid off

Brazil is one of the largest consumers of cans in the world. In 2021, the country produced a staggering 33.4 billion aluminum cans. But what is the most impressive is the recycling rate: 99% of all these cans got recycled. This result came after 30 years of investment in recycling programs and a historical partnership with policy makers, cooperatives, waste pickers associations and local businesses. The math is simple: over 410,000 tons of cans are recycled each year, adding USD 1 billion to the annual income of more than 800,000 families, cooperatives and thousands of businesses that are involved in transforming the used cans into brand new ones. And this process takes only 60 days, meaning a very liquid, and powerful, source of income. The UBCs can generate as much as 60 times more value per ton than other materials. Brazil's can recycling rate has been above 95% since 2004, and is a great example of the power of a collective effort towards real circularity.

Photo: *Mateus Bruxel / Agencia RBS*

Ensuring Cans are Recycled Back into Cans

The large majority of collected UBCs are used to produce new aluminum can sheet. However, sometimes, in countries with lower performing collection systems, the amount of UBCs leakage to other products can be significant, mainly due to the fact that cans become co-mingled with other materials at collection. Once different qualities of aluminum are mixed together, these alloyed materials often cannot be re-used into the same product again. Instead, mixed volume becomes cast aluminum, which is used in applications such as motor blocks for cars (open-loop recycling).

> 93% of cans collected are closed loop recycled in the United States
>
> THE ALUMINUM ASSOCIATION

Also, some European countries that have a vested interest in waste incineration are recovering aluminum from the bottom ashes from waste incineration and waste-to-energy plants. However, the level of oxidation and contamination of the recovered aluminum would require significant further treatment to make it suitable for rolled products. That is why today, that material tends to replace primary aluminum use in casting products today.

Several trends indicate that leakage into non-can uses will significantly decrease over the next few years:

- The UBC stream will grow and come with less contamination. DRS not only guarantees a high quantity of recyclates, it also provides a higher quality of them because beverage packaging is no longer mixed with other packaging such as yogurt containers or food trays. Widespread adoption of DRS in Europe means more clean aluminum scrap of the same composition and of sufficient quality will go straight to remelt centers. And because UBCs are not comingled with other waste streams, less material will be lost to casting.
- Increased collection rates mean less UBCs end up at incineration facilities, generating less aluminum-containing bottom ash, which is not well suited for can-to-can recycling and lost to casting.
- Open-loop recycling has been a successful strategy because of the high demand for cast aluminum alloys for the production of combustion engines, but this is expected to change with the electrification of the automotive industry. As casted aluminum applications such as car engines and other parts are no longer needed in electric cars, there is a natural move towards keeping aluminum alloys separate and recycled within its alloy range. In the future, aluminum casting is forecast to take a lower proportion of overall aluminum production, while the proportion of aluminum rolled product is estimated to increase.
- The emergence of a low-carbon high-recycled-content market will create an economic incentive for further sorting of comingled aluminum scrap streams.

Reshoring of Can-to-Can Remelting and Rolling to their region of origin

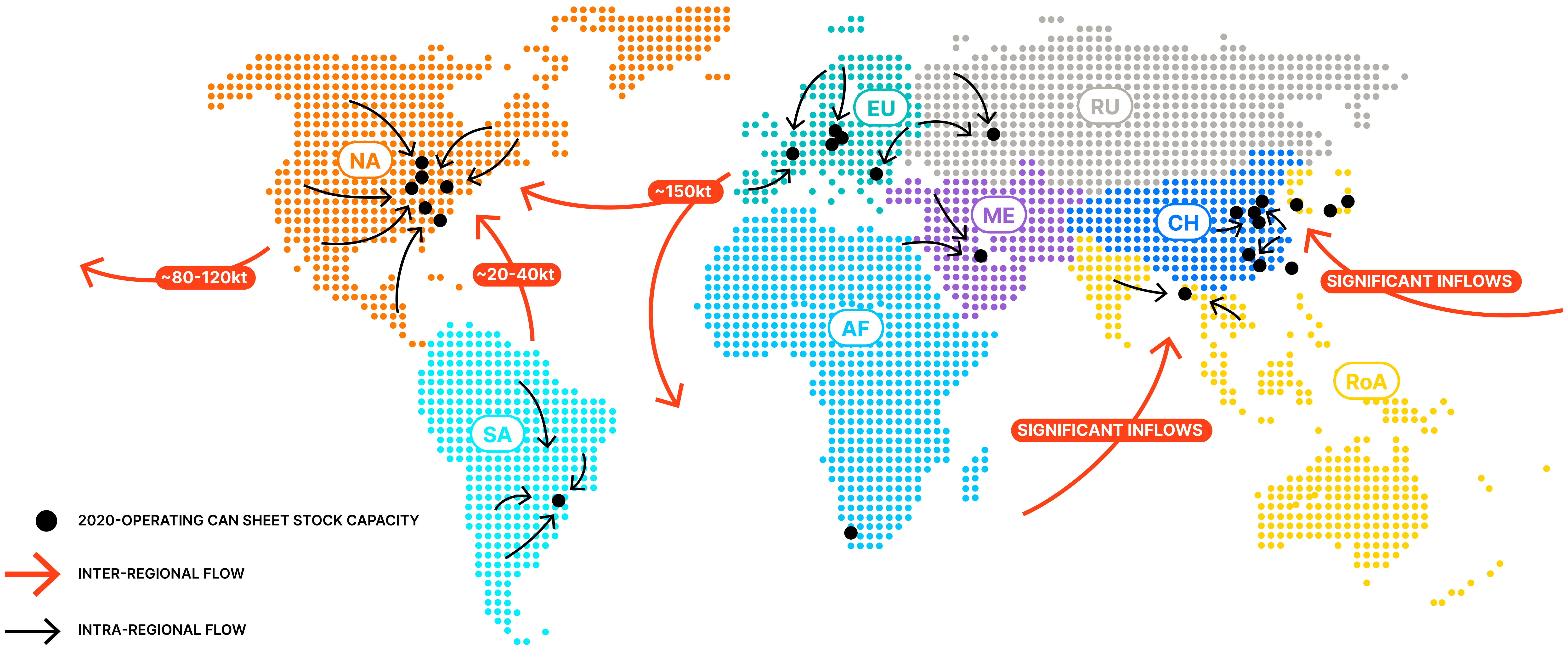
For some time now, a significant number of collected UBCs have been escaping the regional can-to-can recycling loop through export (Figure 16) – partly because some regions just don't have enough capacity to recycle all that is collected. This is the case, for instance, in Europe. In other countries, different factors are at work – in Vietnam, for example, surplus cans are diverted to non-can uses because an export tax on UBCs makes it uneconomic to export them to Asian remelt plants; and in Argentina, an export ban on UBCs prevents them from reaching local remelt facilities.

Over the next few years, the likelihood of UBC import and export will decrease, with UBCs being "reshored" to their region of origin, rather than sent further afield. With increased recycling capacity they will be remelted and rolled within the region/continent where they originated. As evidence of this, since 2022, we began to see significant investments in remelting/casting and rolling infrastructure to take advantage of the increasing availability of a clean stream of domestically-collected UBCs in our key regions. Historically, our key business regions have been net importers of aluminum can sheet and net exporters of UBCs to be remelted abroad.

In Brazil, Novelis has announced a 100,000 ton capacity extension at their facility in Pindamonhangaba, which is currently producing 680,000 tons of aluminum sheet and remelting about 490,000 tons.

Further investments in can sheet rolling and remelting capacity are also expected in Europe, incentivized by upcoming DRS policies which should raise collection rates up to 90% by 2029. European UBCs recycled will nearly double by 2030. Constellium, for example, is investing to add around 130,000 tons of recycling slab capacity at its Neuf-Brisach facility in France.

FIGURE 16
CURRENT GLOBAL UBC & MILL GRADE SCRAP FLOW TRENDS



Source: *Ball estimates based on Panjiva, U.S. International Trade Commission*

In the United States, for instance, new greenfield rolling mills with remelting centers were announced in 2022. This is remarkable, since the last investment in that area was made four decades ago. These facilities will supply sheet products to the packaging, automotive, aerospace and other markets. Novelis in Bay Minette, Alabama (see box on the right), is building a 600,000 ton facility. Steel Dynamics in Columbus, Ohio, announced a 650,000 ton facility.

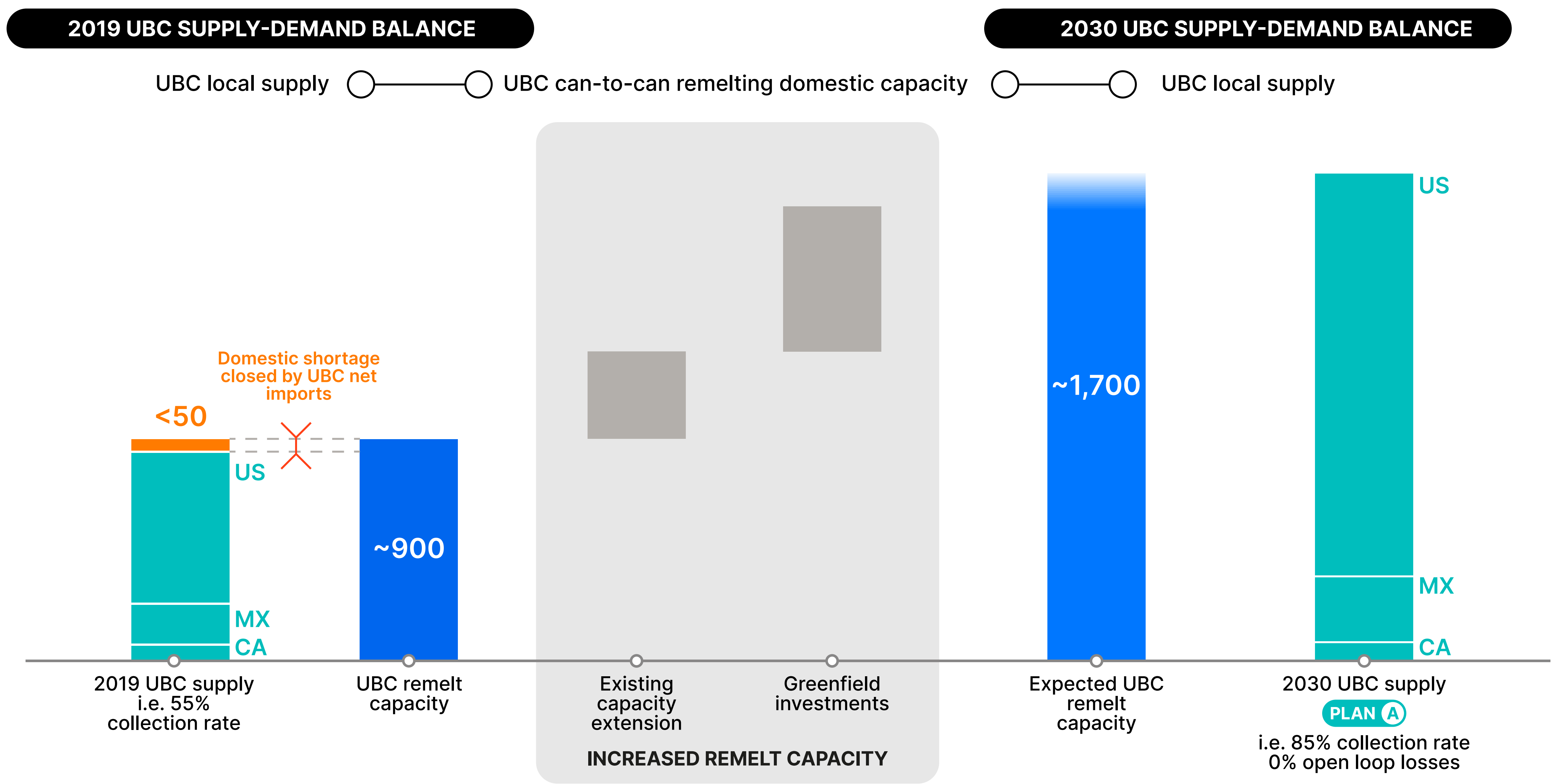
Reshoring of can sheet supply reduces dependency on imported can sheet, and related supply chain transit costs, emissions, and risks. It also reinforces the case for very-high regional UBCs collection rates (Figure 17) for North American market, as regionally-collected UBCs make much more economic, social, environmental and geopolitical sense than importing them from other regions. Through reshoring, Ball and its customers will gain greater supply chain security and supply choice flexibility, as well as carbon advantages with supply and demand being balanced on a regional basis.

FIGURE 17

UBC SUPPLY-DEMAND BALANCE, NORTH AMERICA

KT PER YEAR

PLAN A



Source: *Ball estimates based on Aluminum Association, Eunomia, and United States International Trade Commission*

Expanding capacity at Novelis Bay Minnette, USA

Novelis' new facility in Bay Minette, Alabama will have an initial 600,000 tons of finished aluminum goods capacity per year, focused on the beverage container market but with flexibility for automotive and specialty production as well.

- $2.5 billion investment over three years
- Fully integrated aluminum manufacturing facility including recycling/casting, hot rolling and finishing for beverage can and automotive markets
- Aim is to be carbon neutral for Scope 1 and 2 at the facility
- Powered with renewable electricity
- Using recycled water and operating as a zero-waste facility

Our Global Recycled Content Glide Path to 85% by 2030

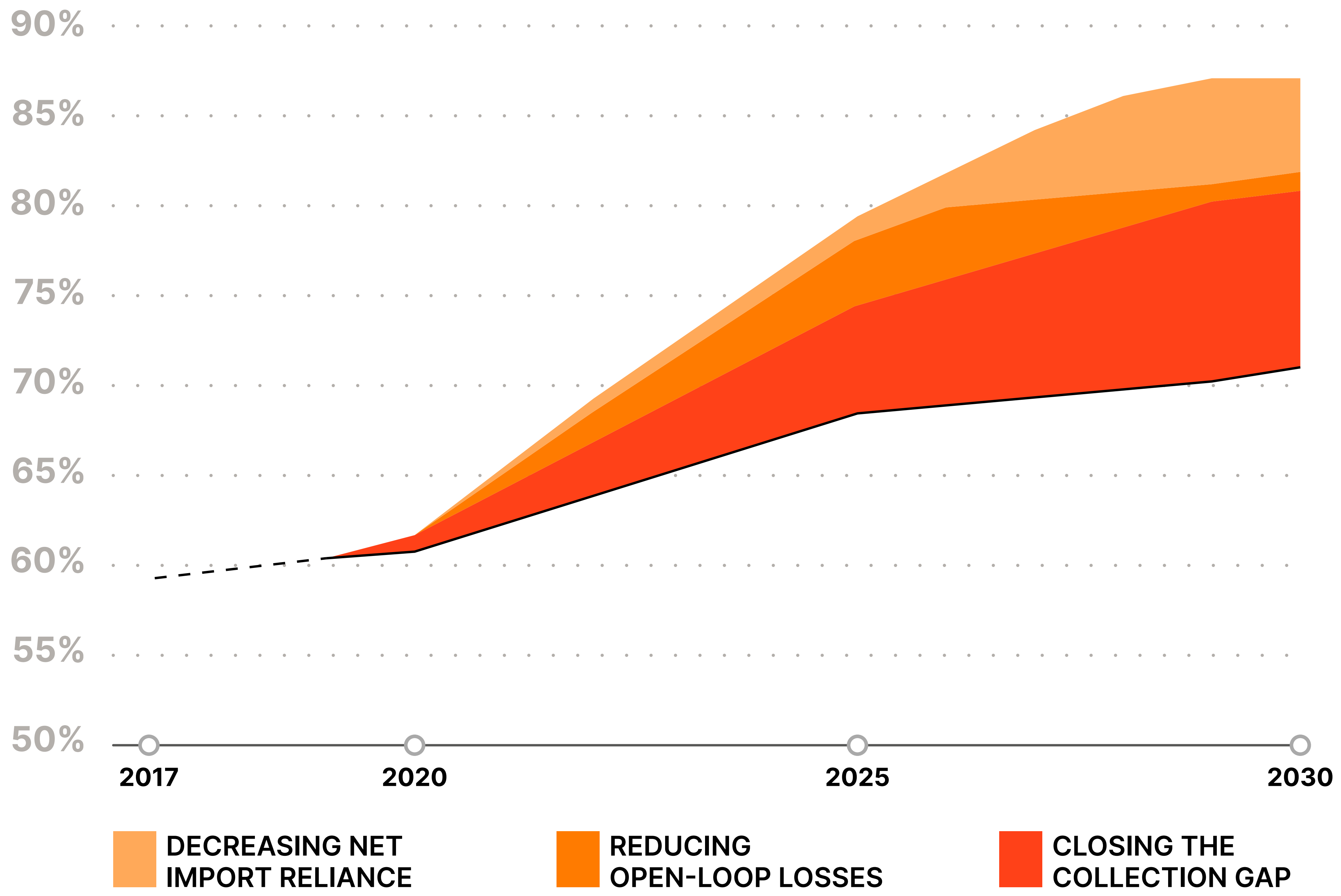
Our global recycled content goal of 85% by 2030 will be driven by a combination of different factors (Figures 18, 19, 20 and 21 below and on the following pages).

FIGURE 18

BALL'S GLOBAL GLIDE PATH TO MEET THE 85% RECYCLED CONTENT GOAL BY 2030

% OF RECYCLED CONTENT

PLAN A



Source: *Ball estimates*

> *When it comes to can sheet – our single largest market – the benefits of recycled content are clear. From the high-recycled-content composition of the coils we send to packaging makers to the billions of UBCs we collect and recycle each year, the aluminum beverage market represents one of the most efficient closed-loop-recycling systems in the world.*

Suzanne Lindsay-Walker
VICE PRESIDENT OF GLOBAL SUSTAINABILITY
NOVELIS

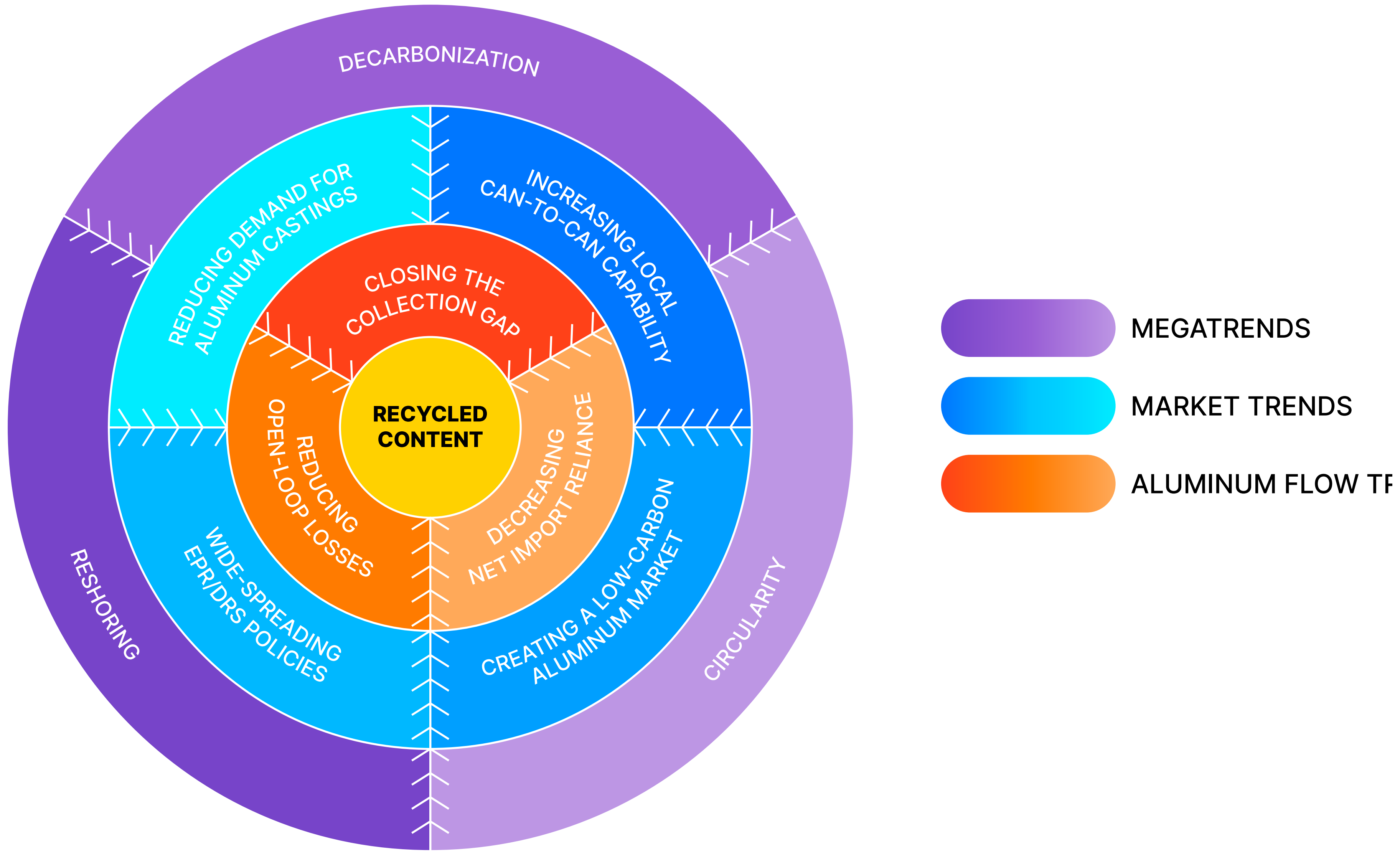


FIGURE 19

THE RECYCLED CONTENT CASE FOR ALUMINUM PACKAGING

FIGURE 20

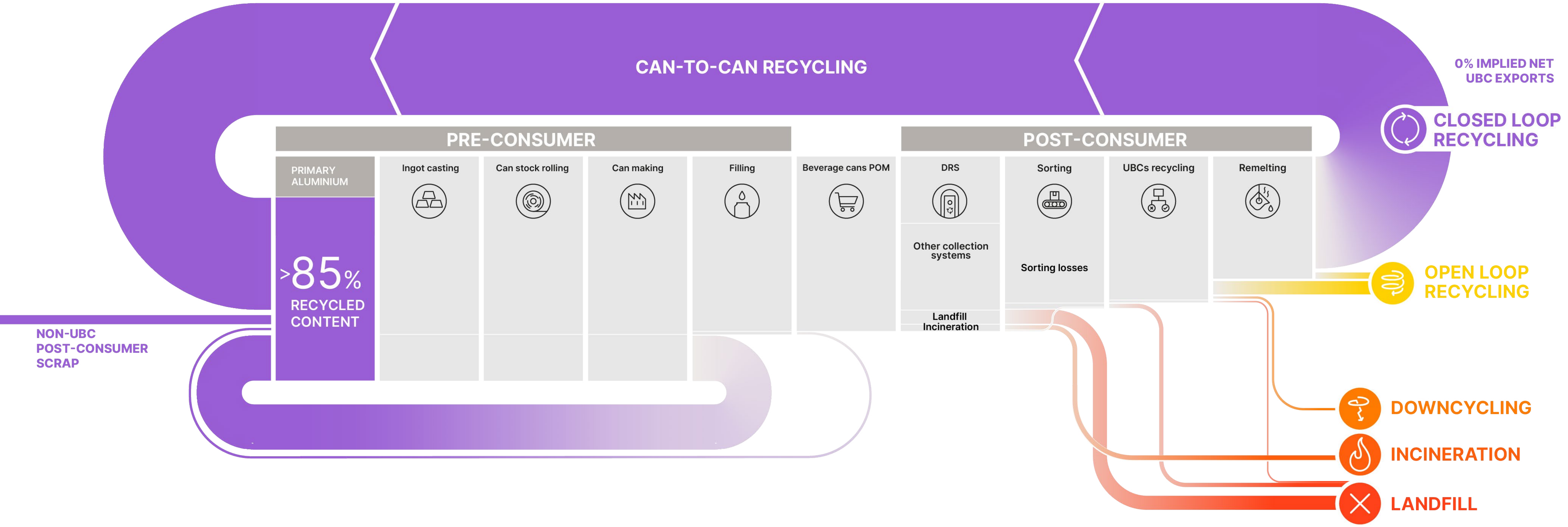
HISTORICAL ALUMINUM FLOW CIRCULARITY OF BALL BEVERAGE CAN

2019

FIGURE 21

HISTORICAL ALUMINUM FLOW CIRCULARITY OF BALL BEVERAGE CAN

2030



PLAN B NOT REACHING 90% COLLECTION RATES IN OUR REGIONS, ADDRESSED WITH ALTERNATIVE RECYCLED CONTENT

As already stated, we have good reason to believe that open-loop leakage will significantly drop, given that local remelting capacity will align with expected increase in clean UBCs volumes captured by improved collection systems. On the other hand, we are conscious that reaching 90% collection in the United States by 2030 is a tough ask, as it is a target that depends strongly on the implementation of recycling policy frameworks that are robust enough and fast enough. We cannot rely on strong regulations, despite increasing brand engagement for effective circularity policy and the related economic and job benefits.

Therefore, there are several different strategies available to reach 85% recycled content without a 90% collection rate in our key regions:

- **Pre-treatment of beverage can scrap**: UBCs collected, but not of sufficient quality to go to remelting plants, can be further processed to create high grade UBC material. In order for aluminum scrap to be effectively used to make a new product, the contamination must be removed by sorting, segregation and cleaning. This extra cleaning step makes sense where infrastructure in the recycling system is not sufficient to efficiently and effectively sort different materials and alloys. It is common in Europe and does not require new research and development. Many scrap dealers are investing in UBC pre-treatment.
- **Further optimizing sorting technologies in Material Recovery Facilities in the United States**, for example by installing secondary eddy currents and optical sorters to capture more aluminum and create cleaner streams.
- **At the Alunorf remelting and rolling plant in Germany, a world's first Batch Intelligence System (BIS) started operating in early 2023.** This investment, supported by the German Environmental Ministry, is for a smart logistics and charging system, enabling the efficient use of different aluminum scrap sources and ultimately more recycled and less primary aluminum. It is estimated that BIS will enable CO2e savings of around 500,000 tons per year.
- **Purification technologies such as Alcoa's ASTRAEA™ process**, which can convert any aluminum scrap to quality levels exceeding the purity levels at commercial smelters, improving the supply of post-consumer scrap that can be used as a raw material. This technology is unlikely to be widely available before 2030 and could benefit from government support to scale-up.
- **High-recycled content canstock will also be produced outside our key markets**. We will be able to leverage our close relationships with our key tier 1 suppliers to find friend-shoring benefits.

3.3 DECARBONIZATION OF REMELTING AND ROLLING

Remelting

UBCs arrive at remelting plants in highly compacted bails. The bails are then shredded, dried and de-coated (if needed) at around 500°C before being fed into a remelt furnace. A typical furnace melts scrap at around 700°C and can process up to 10 tons per hour. From the remelt furnace, the molten aluminum is fed into holding and alloying furnaces to create the exact alloy composition needed for can sheet. Then molten aluminum is poured into chillers that produce 30 ton ingots. Once the aluminum is solidified the ingots are sent on to the rolling mill.

Aluminum remelting only needs around 5% of the energy required to produce primary aluminum. Yet the process still uses about 1.18 megawatt hours of energy per ton of aluminum produced. Most of it (75%) is in the form of natural gas, which is required to generate thermal heating and creates a carbon footprint of around 0.4 t CO2e/t Al.

The carbon intensity of remelting has decreased considerably over the last decade. Progress over the recent years can be mostly attributed to process efficiency improvement, especially economies of scale (today's recycling facilities are larger than before) and scrap feedstock quality improvement. We expect that decarbonization of remelting continues at its current rate through 2030.

To achieve net zero for remelting, our rolling mill suppliers will need to switch to renewable electricity and find other energy sources to produce thermal heating. While green hydrogen is considered a future fix for many thermal heat uses across many industries, remelt furnace manufacturers' research and development programs are focusing on other innovative technologies that will allow for full decarbonization of remelting beyond hydrogen.

For the various steps during remelting and the different types of furnaces used and temperatures needed, several carbon-free technologies will have to be deployed. Whatever the solution, ultimately the entire process will be electrified – whether through induction holding furnaces, plasma remelt furnaces or other technologies. What could lead to quick adoption of those new technologies is the fact that some of the new systems are retrofittable with existing furnaces, leading to lower transition costs. We expect the first industrial-scale carbon-free remelting pilots to be installed by the middle of this decade, and we are optimistic that the technology can then quickly become the new norm for large remelting operations globally.

Rolling

Aluminum ingots are prepared for the rolling process by removing imperfections from the casting. They are then put into a pusher furnace, where at temperatures of around 500°C they are softened in preparation for the hot rolling process.

During hot rolling, a reversing mill rolls the ingot from a thickness of about 75 centimeters to about 25 millimeters, after which the finishing hot mill rolls it into "hot band" which is about 2.5 millimeters thick. At the cold mill, coils may be annealed to give the aluminum the desired workability and the thickness is then reduced to between 0.2 and 2 millimeters and cut into the required width and length.

Aluminum rolling uses roughly 1 megawatt hour of energy per ton of aluminum, with gas-fired thermal energy representing approximately 50% of the energy needs, generating around 0.5 t CO2e/t Al. Today, almost all pusher and annealing furnaces burn natural gas to create the required heat. Decarbonizing these furnaces can be achieved by switching to biogas, green hydrogen, or renewable electricity. In our climate transition plan, full decarbonization of the rolling process at scale is only considered from 2035 onwards.

Our can sheet suppliers began investing in new remelt and rolling capacity around the world that will contribute to the industry's decarbonization. In addition, many of our suppliers have established ambitious carbon reduction roadmaps for their operations and products. Examples include (as of March 2023):

- **Novelis: 30% reduction in carbon footprint by 2026 (vs 2016) and carbon neutral by 2050**
- **Constellium: Reducing Scope 1, 2 and 3 GHG emissions intensity by 30% by 2030 (vs 2021)**
- **Speira: Net zero by 2045 (including Scope 2 by 2035, Scope 1 by 2040, Scope 3 by 2045)**
- **Ma'aden: Developing decarbonization solutions for the entire aluminum and can sheet value chain, aiming for carbon neutrality by 2050**

3.4 PRIMARY ALUMINUM DECARBONIZATION

Primary aluminum is produced from mined bauxite and used for a variety of applications, including beverage cans, cars, buildings and electronics. It is estimated that less than 8% of the global primary aluminum consumption goes to the manufacture of beverage cans (IAI).

We can work directly with our suppliers to increase recycled content in our can sheet since they control the charge mix used in casting. Most of our suppliers source the primary aluminum they need from either primary aluminum producers directly or via commodity traders.

Not all primary aluminum is created equal, especially as it relates to carbon emissions. There are considerable regional and inter-regional disparities in production carbon intensities mostly due to the sources of electricity used. The MPP estimates that these won't converge until at least 2035. In addition, aluminum is a global commodity and supply is imbalanced in many regions. For example, most than half of primary aluminum used for cans put on the market in Europe is imported and 60% of the raw materials used to produce primary aluminum is sourced through imports from other regions (with bauxite produced mainly from Guinea and Australia, and alumina refined in Australia or Brazil) according to IAI. Therefore, countless factors influence the carbon content of the primary aluminum used in our cans, and will add uncertainty to any modeling.

We have to make sure the embedded carbon in the remaining 15% primary aluminum of our can sheet takes us onto a 1.5°C compliant trajectory. To do this, we have to cut through complexity and first understand our baseline, then where and to what extent regional primary aluminum production may decarbonize. As a result, instead of working with weighted average regional data that poorly reflects reality, we have come up with a target figure for the GHG emissions per ton for which we should be aiming.

5 CO2e/t Al as a Point North to Navigate the Low-carbon Primary Aluminum Market

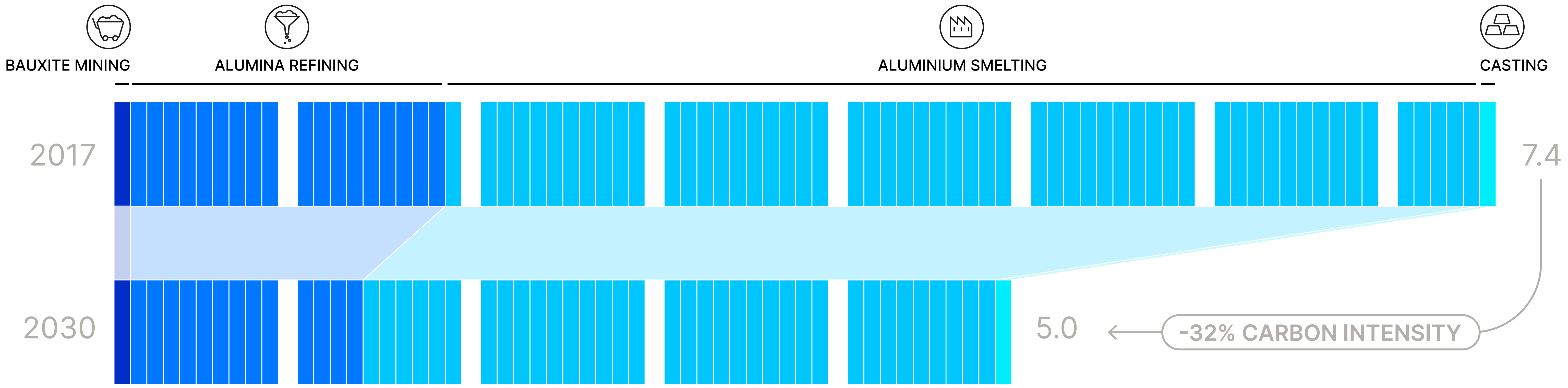
In 2017, we determined that primary aluminum in our can sheet generates a weighted-average of 7.4 t CO2e/t Al Cradle-to-Gate, with refining and smelting responsible for more than 95% of that carbon intensity.

By 2030, our Plan A scenario assumes that the carbon intensity of primary aluminum used by our suppliers and in our own aluminum slug furnaces will be reduced to 5 t CO2e/t Al Cradle-to-Gate Level 3 (Figure 22). This is achievable with proven technologies that are available today. It is the archetype of cradle-to-gate emissions from smelters using electricity from zero-carbon power sources such as hydropower, other renewable sources, and nuclear. It is also the widely used threshold used for referring to "low-carbon primary aluminum".

We do not expect reshoring of primary aluminum to be a driving force within the can sheet market, but preference for locally produced aluminum will be given in some markets and under certain conditions in light of local carbon policies. Primary aluminum is, after all, a high-profile target of the range of carbon border taxes that are now being implemented.

This 5 t CO2e/t Al threshold provides a realistic and achievable reference point. To get there, aluminum needs to be produced in smelters using low-carbon electricity, and from alumina refined with near-zero-emissions digestion technologies. On the next pages, we describe what it takes to increase the use of low-carbon primary aluminum in can sheet.

FIGURE 22
GHG EMISSIONS IN PRIMARY ALUMINUM PRODUCTION
Cradle-to-Gate | Level 3
PLAN A



Source:
2017 baseline:
Associação Brasileira Do Aliminio (2017): A Sustenibilidade Da Indústria Brasileira Do Aliminio
Aluminum Association (2013): The Enviromental Footprint of Semi-finished Aluminum Products In North America
European Aluminium (2018): Enviromental Profile Report
World Aluminium (2017): Life Cycle Inventory Data And Enviromental Metrics For The Primary Aluminum Industry
2030: Ball estimates

Accessing Low Carbon Power Supply

Decarbonizing electricity used in smelters is the aluminum industry's top priority – and the biggest short-term opportunity to decarbonize primary production. Smelters with access to low-carbon electricity sources represented around 20 of the 67 million tons of total global primary production in 2021 (30%) according to Aluminium Stewardship Initiative (ASI).

A more granular analysis based on MPP's 1.5°C scenario leads us to believe that this low-carbon aluminum market could be even bigger by 2030. Taking into account expected capacity extensions to be added this decade, 64% of global production capacity is expected to have access to low-carbon electricity sources by 2030 (Figure 23) according to Plan A. That production capacity becomes 75% if we consider our key regions.

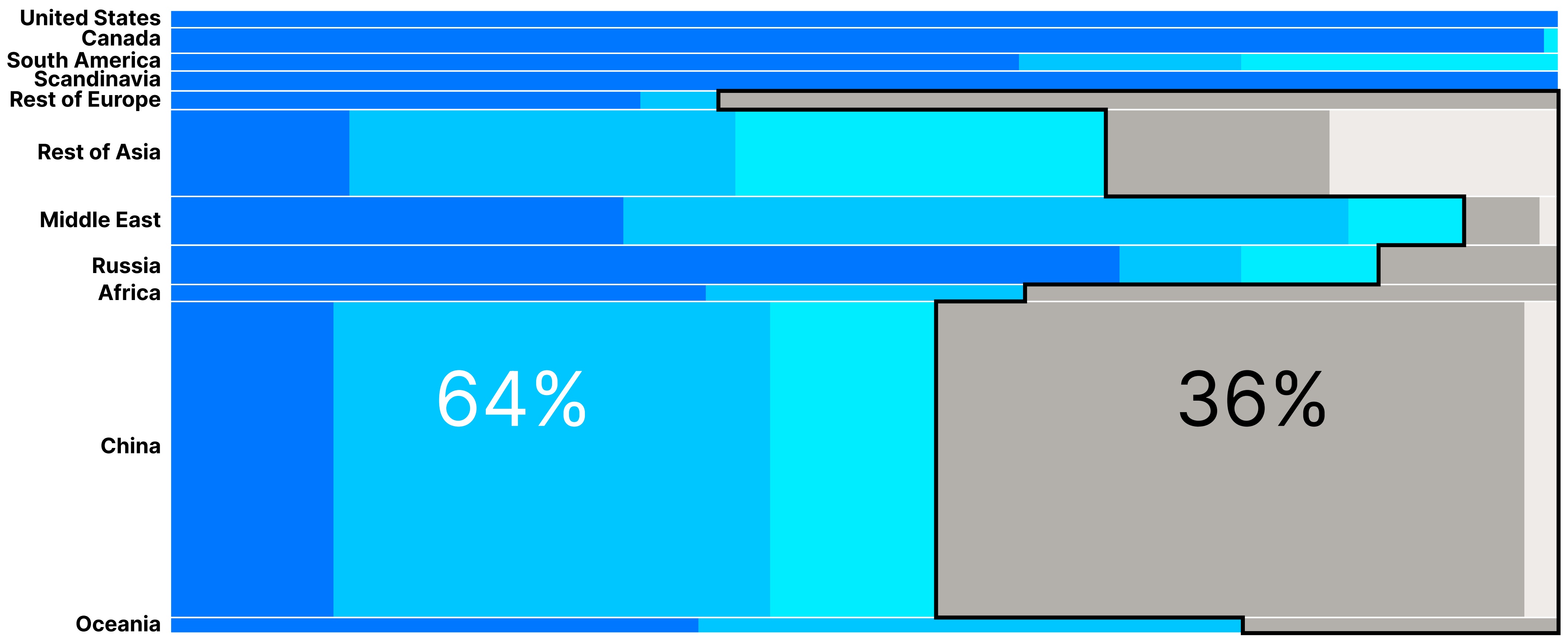
Although this is ambitious for the current global economic environment, policymakers, industry decision-makers and financial institutions have the power to unlock availability of low-carbon power.

Since 2020, primary aluminum producers are increasingly adopting ambitious climate goals and developing pathways to get there. They have secured several renewable electricity power purchase agreements (PPA) over the last few years. Examples include Alumar aluminum smelter in Brazil and Aluar in Argentina. Based on its strong solar resources and financial strength, the Middle East has the ability to diversify its economy towards solar energy and support the electricity intensive aluminum sector in its transformation. The region has a significant opportunity to become a major exporter of low-carbon primary aluminum, much sooner than other non-hydropower based primary aluminum production regions. Saudi Arabia announced in early 2023 that it will invest $270 billion in clean energy by 2030 to help decarbonize industries, including the aluminum sector. Current aluminum production in the country is only 1 million tons, but with access to low-carbon power there could be economic advantages in growing such production in the future. By the end of 2022, the UAE had already committed $163 billion to its net zero pledges, which will help local aluminum companies such as Emirates Global Aluminum to transform the way they produce primary aluminum in two local smelters with a capacity of 2.4 million tons. Australia is another region benefiting from a combination of solar potential and a strong vertically integrated aluminum sector – in addition to several aluminum refineries. The country is home to four smelters with a combined capacity of 1.5 million tons. The government of New South Wales recently provided a grant to support the decarbonization of Australia's largest aluminum smelter and electricity consumer in Tomago, which is committed to switch entirely from coal-fired power to renewable electricity by 2029.

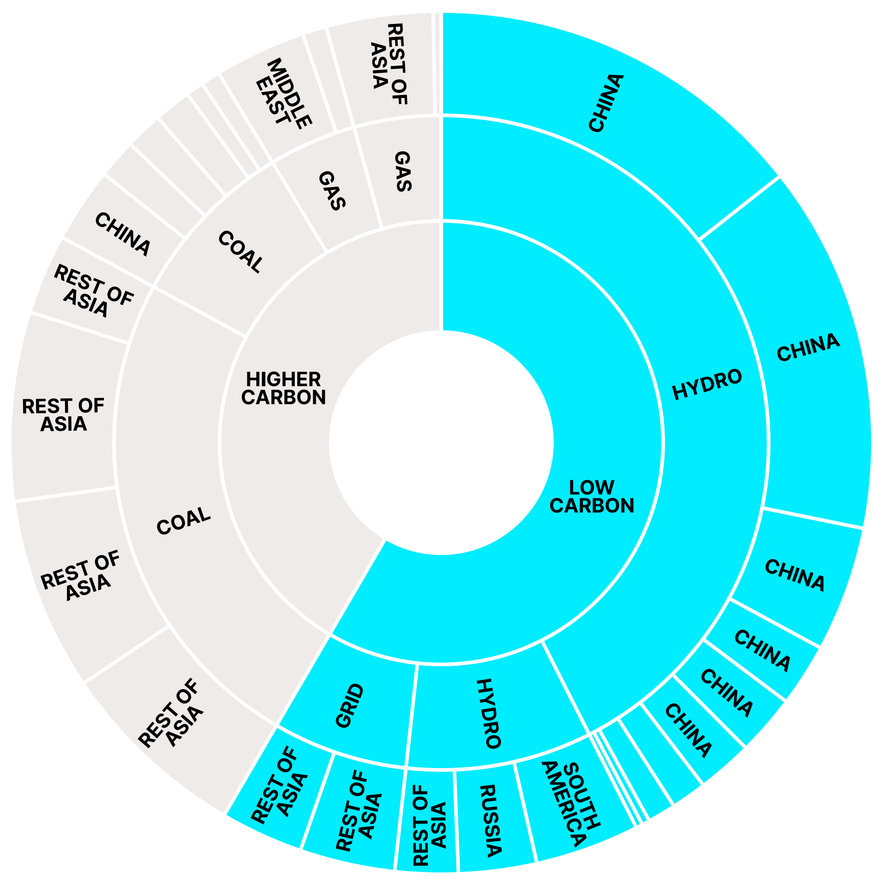
FIGURE 23

ACCESS TO LOW-CARBON POWER[1] BY 2030 PLAN A

% OF 2030 SMELTING CAPACITIES



MAJOR 2020-2030 SMELTER PROJECTS
% OF 2030 PRIMARY ALUMINUM CAPACITY



- 2020-operating smelters connected to low carbon energy
- 2020-operating smelters able to secure renewable power
- New smelters able to access low-carbon power
- 2020-operating smelters unable to access low-carbon power
- New smelters unable to access low-carbon power

Source: *Ball estimates based on Aluminium Sector Transition Strategy Model (2022), CRU background data*
[1] Includes captive hydropower, renewables, PPAs, and grids with carbon intensity currently less than 100 g CO2/kWh. defined by geolocational data for smelters with local capacity factors for solar PV or wind power greater than 20% or 30%, respectively.

Source: *CRU*

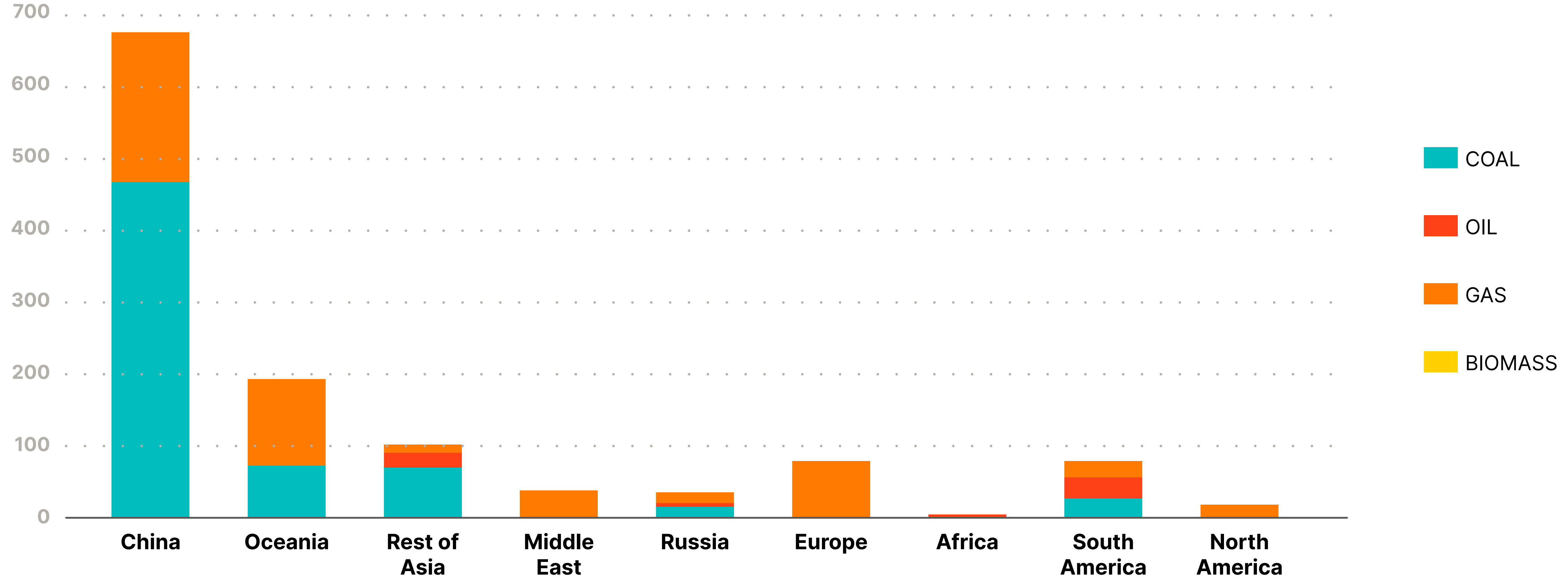
Deploying Near Zero Emissions in Alumina Refineries

Secondary to addressing the carbon footprint of smelting, refining alumina is another high-impact opportunity for decarbonization. Prior to smelting, mined bauxite is refined in a two-step process to alumina. First, it is dissolved in a caustic soda and lime mix, which is heated between 100-320°C (digestion). This solution then gets filtered, precipitated, and ultimately calcinated at temperatures between 1,000-1,300°C (calcination). That is why on average across the world in 2020, 90% of the energy used in refining is thermal energy and it currently emits on average 1.7 t CO2e/t Al (*IAI*). In 2020, coal was the dominant fuel used in refining, ahead of natural gas (Figure 24). Some alumina refineries are using biomass and natural gas and already only emit 0.3-1.2 t CO2e/t Al Scope 1 & 2.

There are two commercially-viable near-zero emissions technologies that can be retrofitted and deployed at scale from 2027 onwards, as per *MPP's 1.5°C scenario*:

- **Mechanical Vapor Recompression (MVR)**, which replaces natural gas boilers for steam production in alumina refineries. This process captures, recompresses and recycles waste steam that would otherwise vent to the atmosphere. It is estimated that MVR could reduce an alumina refinery's carbon footprint by up to 70%. However, MVR requires both access to renewable electricity and additional trials at scale. Alcoa announced in early 2023 that it is mounting a 4 megawatt MVR module at its Wagerup alumina refinery in Western Australia.
- **Electric and hydrogen boilers**, which are being piloted in several refineries to reduce fuel use. To maximize their emissions reduction potential, electric boilers in alumina refineries need to be coupled with the use of low-carbon electricity. Rio Tinto has joined with the Australian Renewable Energy Agency to understand if hydrogen boilers can replace its natural gas boilers at its Yarwun alumina refinery in Queensland, Australia.

FIGURE 24
2020 ENERGY CONSUMPTION FOR ALUMINA REFINING
PETAJOULES



Source: *MPP' Sectoral Transition Strategy*

Alcoa, supported by the Australia government, announced pilots in 2021 and 2022 to use MVR and electrification to displace fossil fuels in alumina refining. According to Alcoa, both technologies combined could reduce a refinery's carbon emissions by about 98%. Norsk Hydro has signed a 20-year agreement to access green electricity from a 531 megawatt solar farm in Brazil for its Alunorte refinery, which will receive about 60% of the electricity generated by the plant.

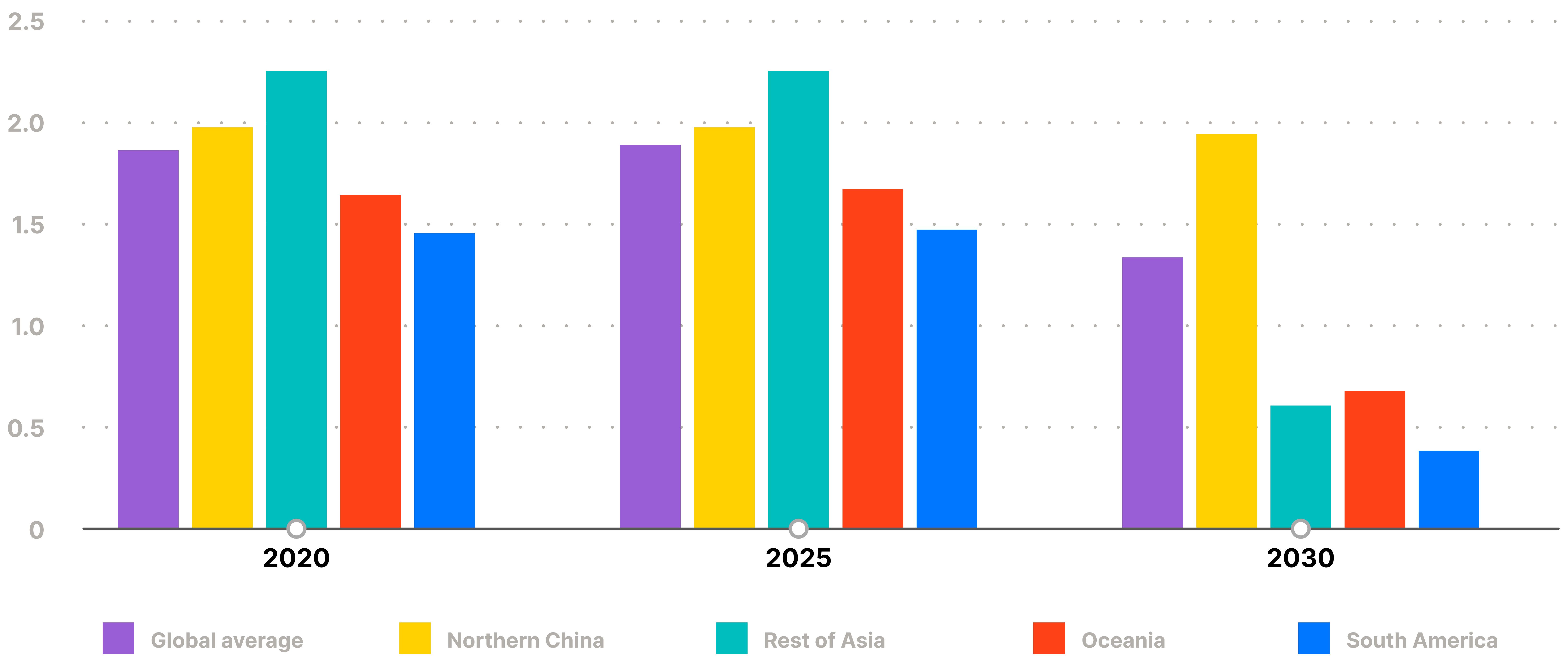
A third of alumina production might be produced using near zero carbon steam production by 2030. Based on MPP's 1.5°C compliant pathway, alumina refinery emissions will shrink significantly by 2030, especially in South America, Oceania and the rest of Asia, meaning around 40% of the world's alumina production is expected to be around 0.5 t CO2e/t Al (Figure 25).

40% of the world's alumina production is expected to be around 0.5 t CO2e/t Al under Plan A scenario

FIGURE 25

2020-30 EMISSIONS INTENSITY (SCOPE 1 & 2) FOR ALUMINA REFINING PLAN A

t CO2/t Al



Source: *MPP' Sectoral Transition Strategy - 1.5°C scenario*

Inert Anodes are the Next Frontier

Pushing carbon emissions below 3 t CO2e/t of primary aluminum is the next frontier, requiring advances and significant investments in new technologies such as inert anodes (smelting), MVR and electric or hydrogen boilers and calciners (refining). As a founding member of the World Economic Forum's *First Movers Coalition*, Ball has pledged to buy 10% of all primary aluminum that we purchase ourselves with less than 3 t CO2e/t by 2030.

Aluminum is currently produced by using anodes and cathodes in the aluminum smelter to dissolve alumina powder in a molten bath of sodium aluminum fluoride at a temperature around 950°C. An electrical current is passed between carbon anodes and a carbon cathode in the cell, reducing alumina to aluminum that deposits on the cathode surface. Carbon anodes are consumed in this process, generating direct CO2 emissions. These process emissions amount to, on average, 2.3 t CO2e/t Al in 2021 (*IAI*).

The use of an inert anode eliminates all direct GHG emissions from this process since it emits oxygen instead. Alcoa and Rio Tinto, with the help of the Quebec government, are developing this technology in a venture called *Elysis*. In 2023, the technology will be demonstrated in commercial-size cells and the aim is to have its technology available for installation from 2024, with the production of larger volumes by 2026.

Ball recently collaborated with its customer AB InBev as well as Rio Tinto and Novelis to bring *ultra-low carbon beverage cans* to the Canadian market made of high recycled content and inert anode primary aluminum.

Other primary producers and technology companies also started working on inert anodes and cathodes, further enhancing the technology readiness levels. In parallel, Norsk Hydro continues to perform research and development around chloride-based electrolysis (*HalZero*), which converts alumina to aluminum chloride prior to electrolysis in a process where chlorine and carbon are kept in a closed-loop and only oxygen is emitted.

BEING READY FOR LOW CARBON ALUMINUM

A low-carbon aluminum market is not just a thing of the future. On the demand side, environmentally-conscious consumers are creating a significant pull for "green labeled" aluminum and on the supply side companies are responding positively. Low-carbon aluminum brands have grown in number over the past few years and that has been mirrored by a number of primary aluminum producers also going down the low-carbon route.

Trusted, traceable and transparent information documenting the footprint of materials and production from bauxite mining to rolled coils will unlock the low-carbon aluminum market. *ASI's* standards, *Environmental Product Declarations*, third-party certification bodies and blockchain will all increase traceability of the metal throughout their entire life cycle. This fosters circularity, transparently tracing the carbon footprint and recycled content of aluminum.

In addition, carbon costs are expected to rise as subsidies and discounts are gradually removed, significantly impacting can sheet market pricing in various regions. Some will have legally binding targets and climate change laws in place, with carbon levies popping up in many jurisdictions. Border carbon adjustment policies have recently been adopted in the EU, are being proposed in Canada, and are being discussed in the United States. Government policy could also target the upstream supply chain through subsidies for low-carbon aluminum production, further weakening the high-emission producers' license to operate.

As a result, low-carbon premiums are emerging for aluminum and will depend on policy traction and supply–demand balance. On the demand side, the need for low-carbon aluminum is expected to also grow exponentially, mainly driven by automotive and packaging demand. But experts (*CRU*, *McKinsey*) say that the low-carbon aluminum market should remain slightly oversupplied by 2030, leading to limited low-carbon premiums.

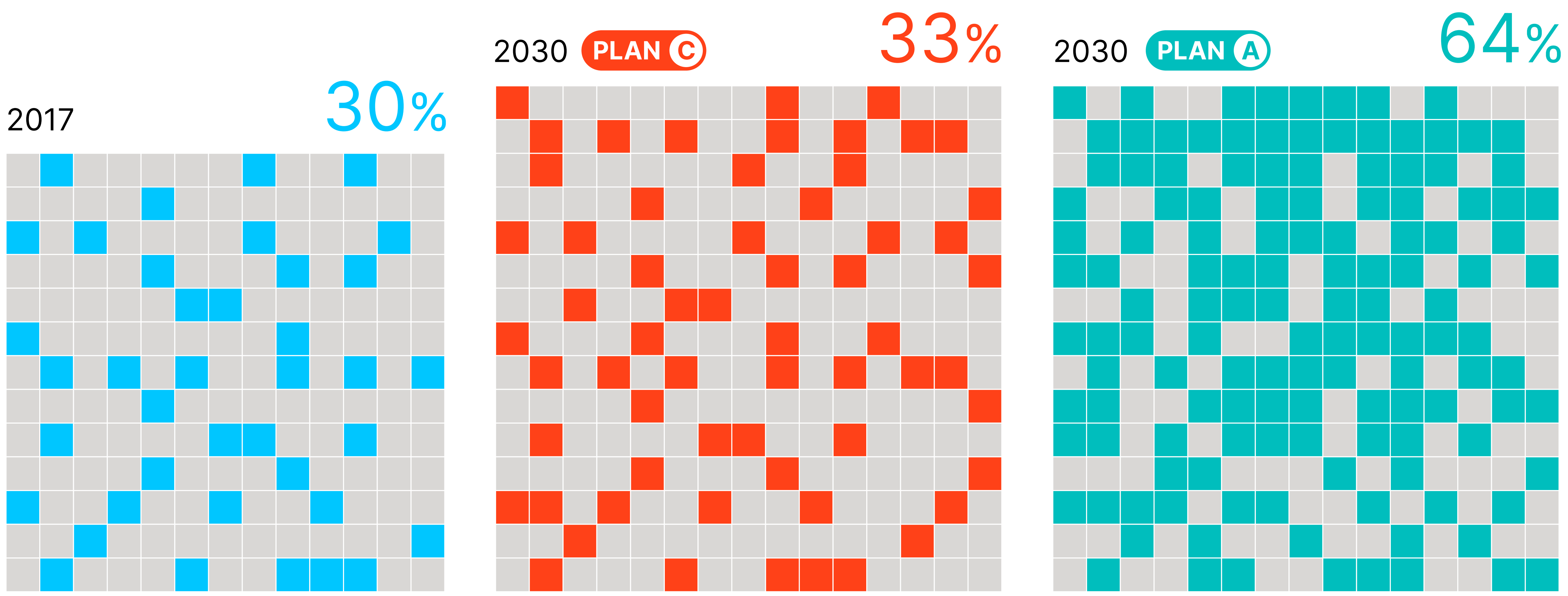
We are following this nascent low-carbon market very closely in collaboration with our suppliers, having already adopted a strategic posture. As for any premium market, economics will be a matter of finding the right balance between several factors such as extra carbon cost implied, the ability to pass costs through the value chain, end customers' willingness to pay for sustainable packaging, and progress against climate goals.

PLAN C PRIMARY ALUMINUM DECARBONIZING SLOWER THAN EXPECTED

The aluminum sector's transition to net zero emissions is gaining traction, but there is also uncertainty about the tools that governments will use to drive change, as well as about where in the supply chain these actions will have the largest impact. Even if primary aluminum does not decarbonize as fast as expected, there is still a significant low-carbon production base. This foundation of progress to date is significant when compared to other materials that have to build low-carbon supply chains from scratch to meet growing demand.

According to Plan A, 64% of primary aluminum production will access low-carbon power supply. A more conventional Business-as-Usual scenario would suggest access limited to 33% by the same date. Given that only less than 8% of the world's primary aluminum consumption is used for beverage cans, our ability to remain below 5 t CO2e/t Al is reasonable. Even if primary aluminum is not decarbonized as fast as expected, we will still be able to adjust our level of commitment to secure enough low-carbon primary aluminum from available sources, reassessing potential tradeoffs between can sheet price and carbon intensity.

ACCESS TO LOW-CARBON POWER
% OF PRIMARY ALUMINUM PRODUCTION



Even if primary aluminum is not decarbonized as fast as expected, we will still be able to adjust our level of commitment to secure enough low-carbon primary aluminum from available sources, reassessing potential tradeoffs between can sheet price and carbon intensity

3.5 NON-METAL SCOPE 3 REDUCTIONS: IDENTIFYING POCKETS OF OPPORTUNITY BEYOND METAL

Our scope 3 emissions cover 15 different categories in line with the Corporate Value Chain (Scope 3) Accounting and Reporting Standard. Aside from purchased goods and services, which made up 80% of our GHG emissions in 2022, other major contributors were capital goods (6.3%), fuel and energy related activities (2.6%) and upstream transportation (2.5%). All of these areas have levers which can be pulled to help to decarbonize them.

Industrial equipment and machinery makes up roughly 1% of worldwide carbon emissions when broken down by sector. While this is a relatively small contribution in itself, it represents a much larger lever in some sectors, including the aluminum industry. For Ball, investment in equipment that enables greater energy efficiency is crucial to reaching our scope 1 and 2 emissions reduction targets. In the European Union, access to €1 trillion of funding and finance support has been offered as part of the "European Green Deal", and with carbon border adjustments and other policies stimulating growth in green energy both in the EU and Unites States, such measures are likely to help to bring down carbon emissions associated with the manufacturing of capital goods.

There has been a substantial increase in country-level commitments to renewables. It is anticipated that this trend in investment will continue, with renewables becoming more cost competitive than ever.

According to PwC, an annual decarbonization rate of 6.3% is needed to limit warning to 2°C. We applied the same rate in our modeling to estimate 2030 Ball's non-metal scope 3 emissions (Note that Ball's overall trajectory is 1.5°C compliant).

Low-carbon energy policy instruments are also predicted to ramp up further investment, along with increased demand from industry, meaning a likely acceleration in the reduction of carbon intensity of capital goods manufacture and scope 3 activity relating to fuel and energy products.

A 6% year-on-year cut in the carbon intensity of our scope 3 upstream logistics operations is also anticipated, based on projections made by the MPP on Net Zero Trucking and the International Maritime Organisation, both of which have targets for emissions reductions that are consistent with the Paris agreement.

4 ACHIEVING NET ZERO BEYOND 2030

Today, we are optimistic about the feasibility of our decarbonization journey through 2030, especially considering that technology and policy levers are well understood, mature and proven. However, our climate transition plan beyond 2030 reflects greater uncertainty due to even more variables and interdependencies. To predict and quantify each lever with a reasonable degree of confidence quickly turns into a time-consuming exercise of limited value. It is simply not feasible to predict the exact development pace for each technology, which depends on technical factors, government interventions, and systemic interdependencies beyond our industry.

Therefore, the approach we have taken, is to describe the key variables, factors and levers that can be addressed beyond 2030, as well as providing some guardrails to reassure stakeholders about the realistic and credible net zero pathways available for Ball. If ambitious government policy measures and decarbonization support are implemented, we believe that net zero emissions could be achieved as early as 2040, in line with the commitments made by many of our customers.

If well-designed DRS/EPR policies take off in the United States, enabled with innovations such as bag drop systems, bulk RVMs and the right incentives for industry, collection rates could reach well above 95%, or even 99% as in Germany today. Increasing recycled content beyond 90% is something we believe will be feasible at scale beyond 2030 through stronger collaboration with our suppliers. Disruptive innovations such as recycling-friendlier alloy design and purification technologies will unlock near-100% recycled content near-zero carbon aluminum packaging in the same timeframe.

> We believe that net zero emissions could be achieved as early as 2040, in line with the commitments made by many of our customers

Decarbonizing electricity, the key contributor in primary aluminum decarbonization, is another accessible lever that could be accelerated with the right governmental support. By 2040, refineries and smelters could implement only near-zero-carbon technologies and 1 t CO2e/t Al would be the new standard of primary aluminum production.

Switching from natural gas to renewable el ectricity and alternative fuels on remelting, casting, and rolling operations are less advanced technologies, but they will benefit from government policy on hydrogen and other innovations needed for other industries such as chemicals, fertilizers or steel. We believe the business case for reaching 700°C for aluminum remelting will have a more attractive business case and therefore, earlier pathway to net zero, than many other industries.

Non-metal related Scope 3 emissions will reduce alongside the decarbonization of the grid. Our inks, coatings and compound suppliers are determining their own path to 1.5°C compliance. Net zero steel will find its way into the equipment we purchase (capital goods), sustainable aviation fuels will contribute to net zero transport (business travel) and electric and hydrogen trucks will help decarbonize up-and downstream transportation.

Rigid aluminum packaging is a strong candidate to be one of the first industries to achieve net zero, among the “hard to abate” sectors, mostly due to its circularity potential and the recycling policies that are being established across the globe.

> Rigid aluminum packaging is a strong candidate to be one of the first industries to achieve net zero, among the ‘hard to abate’ sectors

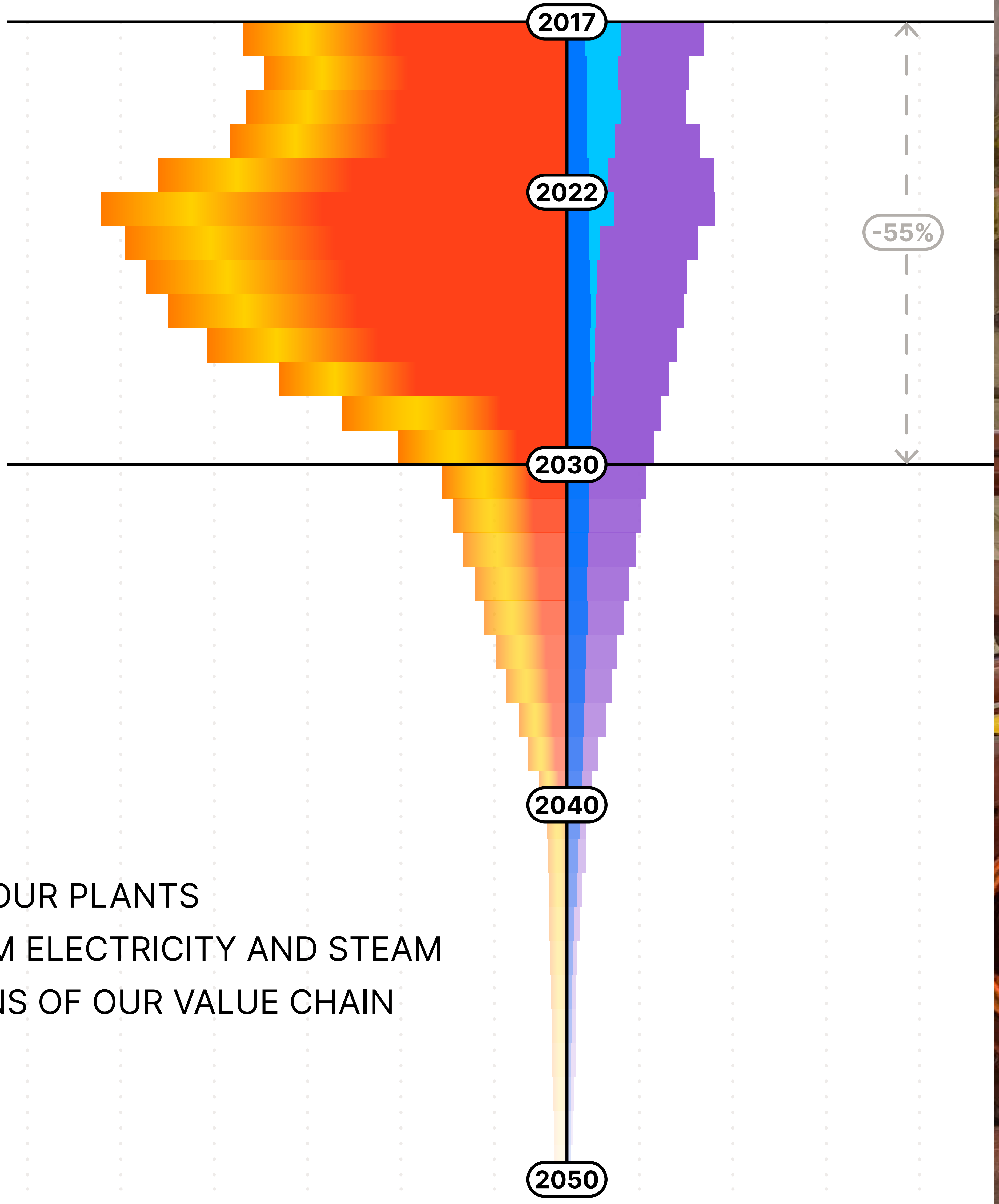
We believe that societal pressures by NGOs, investors, retailers, brands and governments will increase dramatically, exacerbated by the unprecedented transparency coming from the combination of satellite environmental monitoring and artificial intelligence. In addition, with new data-dependent regulations such as carbon border taxes and disclosure requirements for companies, the emergence of digital product passports will drive the need for full supply chain traceability and granular carbon footprint information. We see Ball Aerospace playing a key role using satellite monitoring to support tracking, accounting and assuring the carbon markets.

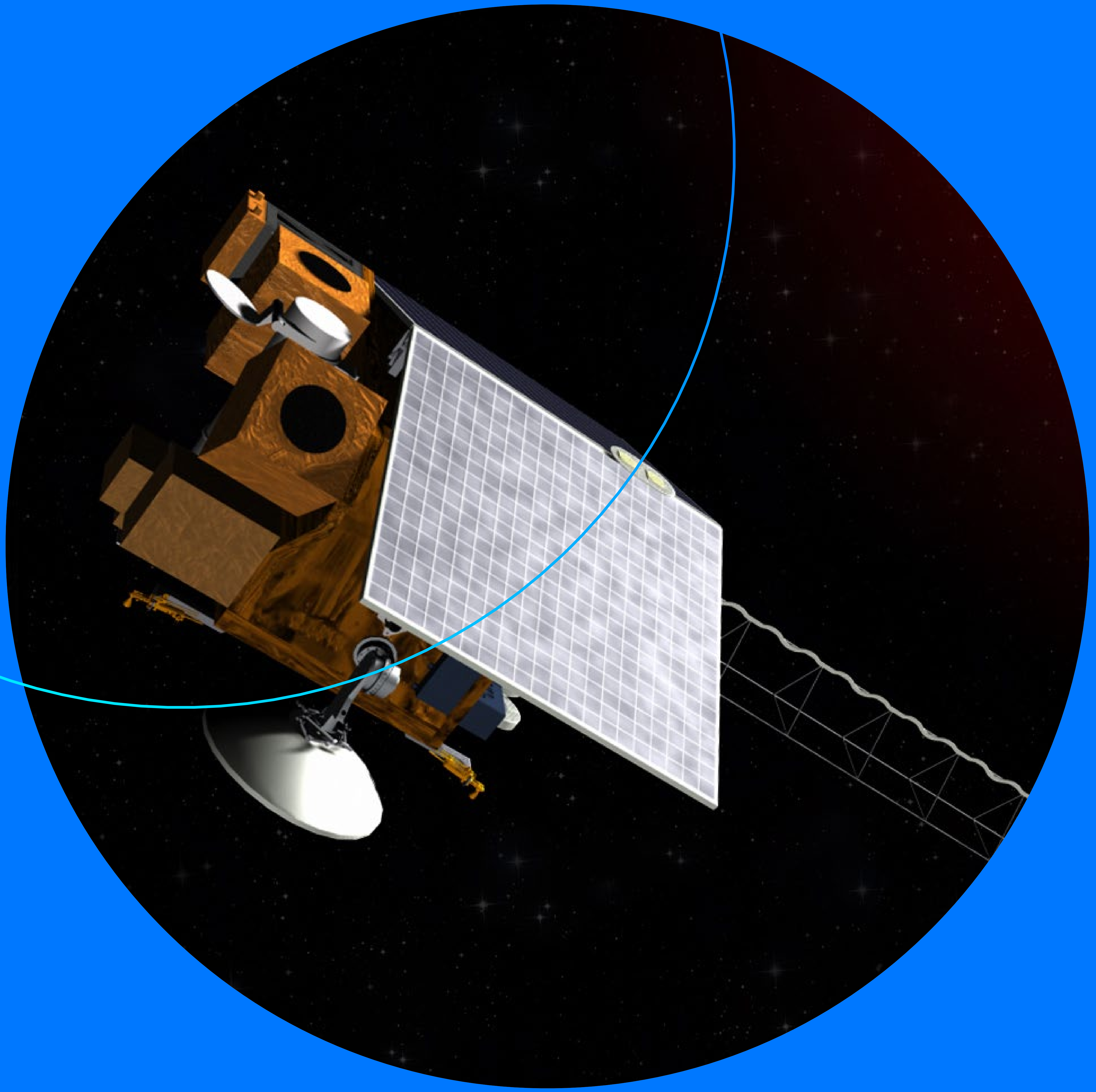
Once emissions have been reduced to the full extent possible, there will still be some residual emissions we will seek to remove in line with SBTi criteria in order to achieve net zero emissions. Given that the requirement to neutralize residual emissions for long-term science-based targets is further into the future, we await further guidance before developing effective neutralization strategies.

FIGURE 26

BALL CORPORATION'S CLIMATE TRANSITION JOURNEY

MILLION METRIC TONS CO2E





5 BALL AEROSPACE DRIVING CLIMATE SCIENCE AND ACCOUNTABILITY

BALL AEROSPACE DRIVING CLIMATE SCIENCE AND ACCOUNTABILITY

Ball is demonstrating innovative and robust climate leadership through Ball Aerospace, supporting global climate action and environmental protection by producing unimpeachable data and leveraging our aerospace division's history of working on the most important Earth and space observation missions for science and defense.

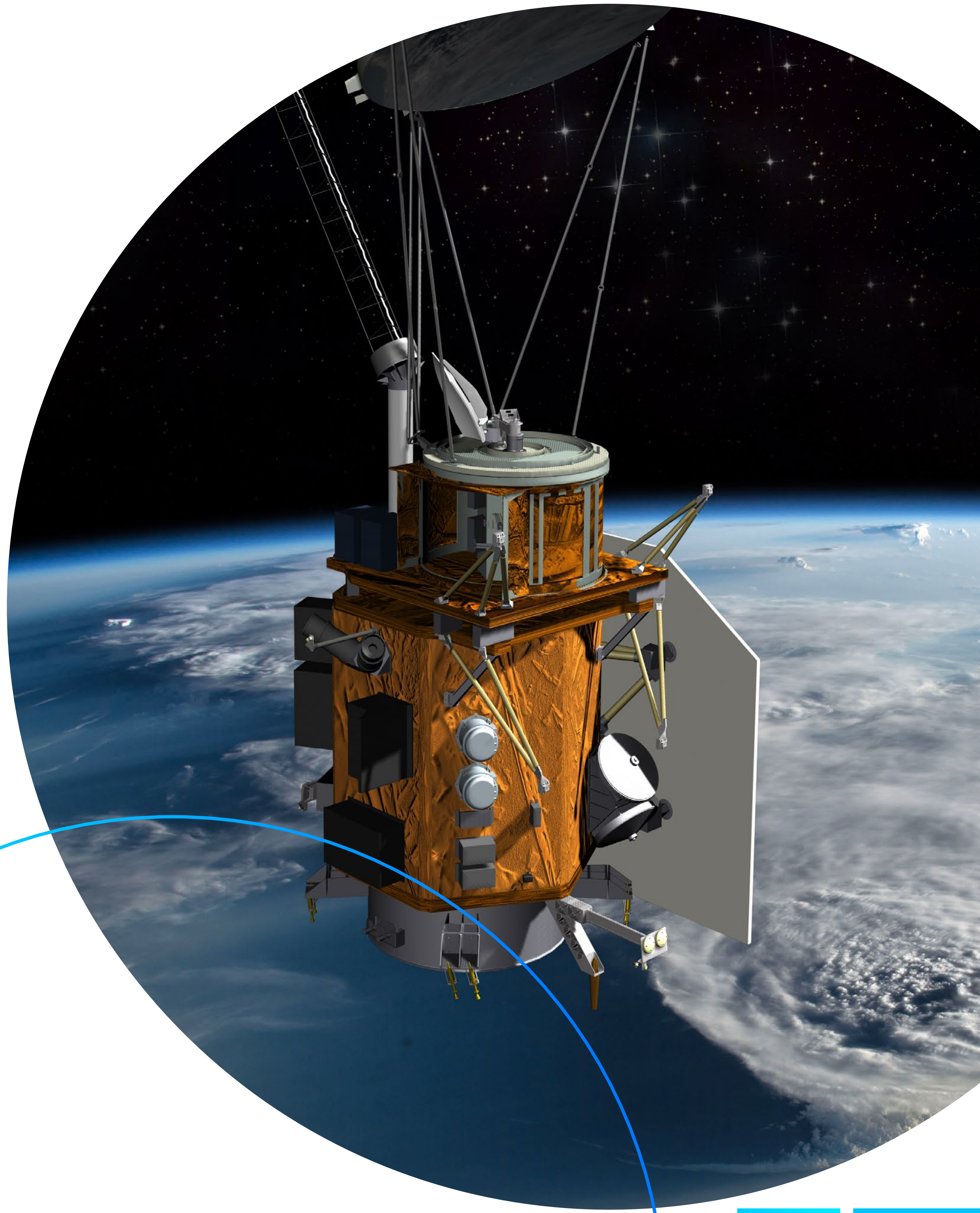
As the scientific community, corporations, financial institutions, governments, and civil society lean into the climate change challenge, environmental intelligence based on data of high precision, spatial resolution, and frequency is needed to reliably make the high-value decisions to build a climate-resilient, zero emissions world. In this sense, the exquisite instruments and satellites under constant development at Ball Aerospace solve for subjective data, insufficient granularity and timeliness, poor concordance, material blind spots, lack of claim verifiability, and scant risk transparency.

Equipping satellites with sensors of higher spectral, spatial and temporal resolution allows for the visible and invisible to be observed at ever smaller scales which, combined with machine learning and advanced analytical techniques, underpins climate science advancement, driving transparency and enabling accountability to both trigger action and track progress.

The advanced suite of Ball Aerospace's environmental intelligence missions supports the following applications:

- the measurement of methane and carbon dioxide at resolutions that enable attribution to physical assets;
- the tracking of chemical and biologial traits, day or night, enabling companies to understand their impacts on nature including pollution of air and water, impacts on land use and biodiversity; and
- early warning of natural and climate hazards such as hurricanes, floods and wild-fires, enabling communities and businesses to anticipate risks and take timely avoidance measures.

Ball Aerospace's capabilities to continue improving satellite monitoring technology are on track to substantively support the efforts to cut global emissions in half, halt and reverse nature loss and build resilience within this critical decade for climate change, and beyond.



THE MOST ADVANCED METHANE-TRACKING SATELLITE IN SPACE

Cutting oil and gas methane emissions is the single fastest, most impactful thing we can do to slow the rate of warming today, even as we work to decarbonize the energy system. Commissioned by the *Environmental Defense Fund (EDF)*, MethaneSAT is designed to locate and measure methane emissions around the world more effectively and faster than ever, with a precision and at a scale never before achieved to track, quantify emissions, and catalyze faster, more effective reductions and document results.

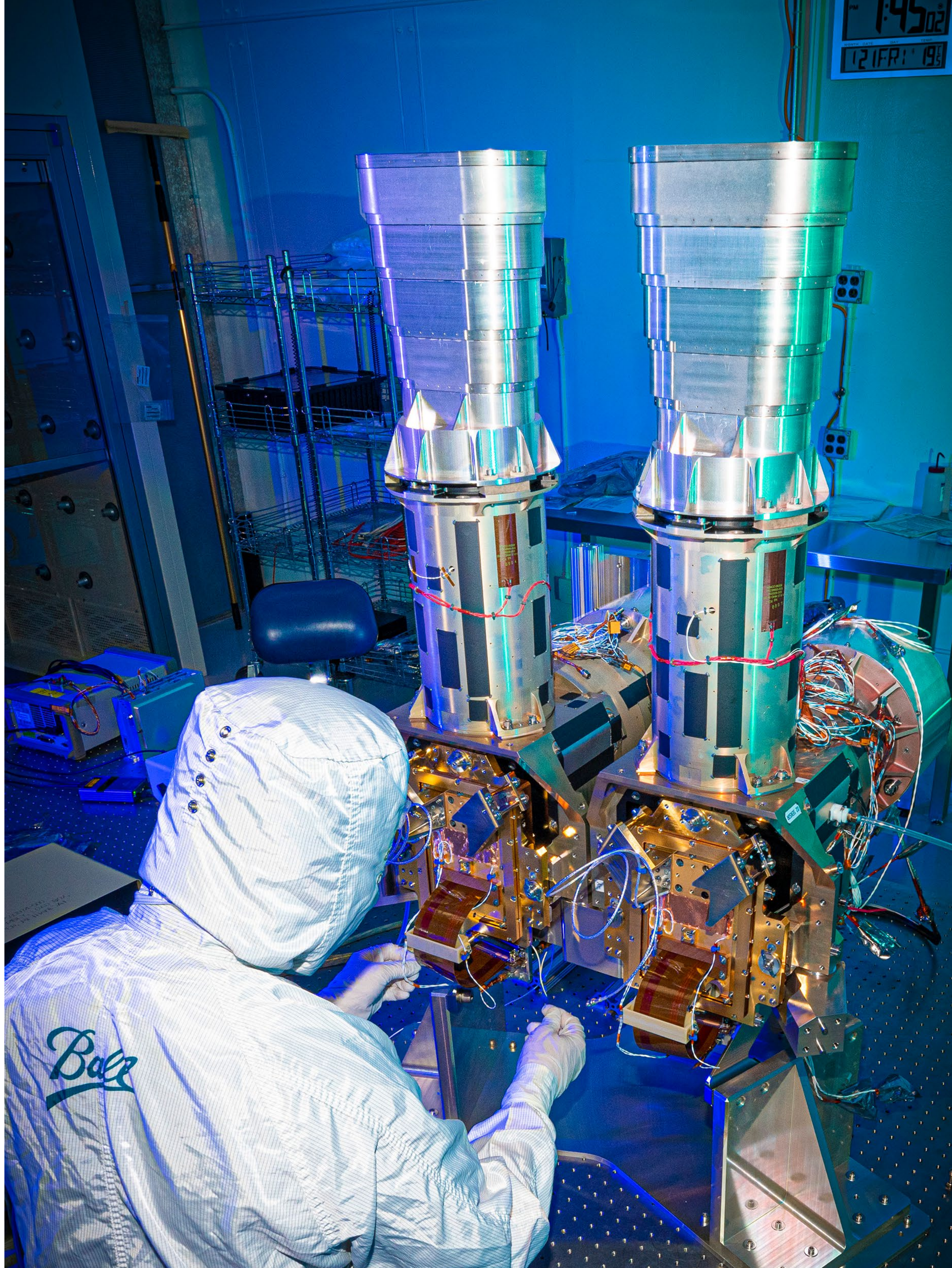
Ball designed and developed the instruments, and provided the flight systems integration as well as the missions systems engineering.

As a result, MethaneSAT's sensor will be capable of monitoring regions accounting for over 80% of global oil & gas production, with higher sensitivity and higher precision measurements than any current or planned satellite, and data available in days, and offered free to everyone, enabling companies and countries to identify, manage, and reduce their emissions, and allow investors, gas buyers and public to assess results.

NEXT-GEN SOLUTIONS FOR ASSET-LEVEL MONITORING OF CARBON DIOXIDE AND METHANE

Ball is developing next-generation climate data solutions data will disrupt ESG and revolutionize accountability, including:

- ~30m ground resolution
- Day and night sensing capability
- "Super-emitters" and smaller emitters
- Constellation of 6-10 satellites for weekly revisit



REVOLUTIONARY APPROACHES FOR HIGH SPATIAL AND TEMPORAL AIR QUALITY MONITORING

Poor air quality is one of the three main causes of premature morbidity, and 99% of the world's population experiences air pollution levels exceeding World Health Organization guidelines. Yet, our ability to mitigate poor air quality and the damage it causes is hampered by a lack of actionable information. Key pollutants must be monitored with reasonable temporal and spatial resolution to understand sources and changes over time, and robust, objective data is needed to drive transparency, accountability, and action. Ball is leveraging the know-how and technology we've developed, providing high spatial and temporal resolution hourly measurements of ozone, its precursors and aerosols.

The Ball-built GEMS space-based instrument is a geostationary scanning ultraviolet-visible spectrometer launched in 2020 that tracks trans-boundary pollution events for the Korean peninsula and Asia-Pacific region, improving early warnings for dangerous pollution events. Ball designed and built GEMS under a commercial contract with the Korea Aerospace Research Institute (KARI) for the National Institute of Environmental Research in the Ministry of Environment of South Korea.

GEMS is the Asian element of a global air quality monitoring constellation of geostationary satellites that includes the ESA Sentinel 4 stationed over Europe and the Tropospheric Emissions: Monitoring of Pollution (TEMPO) spectrometer that will be stationed over the US, Mexico, and Canada. We're building TEMPO for NASA Langley Research Center and Harvard Smithsonian Astrophysical Observatory. TEMPO will provide hourly daylight measurements of ozone, nitrogen dioxide, sulfur dioxide, formaldehyde and aerosols across North America, from Mexico City to Canada and from coast to coast.

6 OUR INDUSTRY ADVOCACY AND POLICY INFLUENCE

6.1 OUR APPROACH TO CLIMATE ADVOCACY

We believe that companies need to align their advocacy efforts with their climate transition plans and, in doing so, are guided by the global *Standard On Responsible Corporate Climate Lobbying*. We are committed to maintaining transparency on our advocacy aims, which are mostly focused around our #1 climate change lever of circularity. This document provides further information about our climate change advocacy and activities. Our sustainability and public affairs team is integrated and includes technical experts on packaging recycling, EPR and DRS, which are the focus areas for our advocacy.

We are publicly committed to aligning our climate change lobbying with the goal of restricting global temperature rise to 1.5°C above pre-industrial levels. This commitment applies to all Ball businesses and subsidiaries in all of our operating jurisdictions. We are taking steps to help align our memberships, associations, alliances and coalitions around 1.5°C. Ball's CEO is engaged at board level for oversight of our climate change and lobbying advocacy, with the Chief Sustainability Officer responsible for its day-to-day implementation.

We regularly review our advocacy positions, policy objectives, memberships, associations, alliances and coalitions against our climate transition plan.

We acknowledge that we are a relatively small player in the wider packaging supply chain for beverages and personal care industries, and as such, our voice may be less likely to be heard than bigger players downstream, such as global brands and retailers. Therefore, we focus many of our efforts on trying to reach a consensus with the downstream and upstream players in our value chain.

Positive momentum is created when a sector has broad support from within to create positive change through policy and action. This so-called "ambition loop" can be extremely effective in effecting change when businesses across the value chain make ambitious commitments towards similar goals.

The sustainable development challenge ahead of us calls for systemic change that not only delivers against climate goals. Circularity, nature positive and human rights are other key issues our entire value chain needs to tackle together to support effective and just transitions. We aim to drive change by striving for 100% real circularity and unwaveringly committing to foster responsible production, sourcing and stewardship of aluminum.

Advocacy and leadership together accelerates progress

6.2 OUR MAIN POLICY POSITIONS

Our biggest, and most impactful, lever to address climate change is circularity. Therefore we focus on advocating for policies that will enable a 90% collection rate for aluminum cans, bottles and cups by 2030. We are one of the most progressive and ardent advocates of DRS and EPR. To our knowledge, we were the first company in our industry to advocate for DRS globally in advanced economies.

We believe the most effective way for us to present a credible voice on climate and circularity topics is through thought leadership. That is why our strategy, and our sustainability and public affairs teams, focus on understanding the combination of technologies, policies and business models that can accelerate each of the decarbonization levers enumerated in this document. This allows us to have more enlightened dialogues with our key stakeholders and to shape the narrative and discussion from the outset. Ball's thought leadership spans new research, pioneering climate and circularity policy position papers, and meetings that bring together industry and stakeholders to discuss, drive and assess meaningful progress. Our *Vision For A Perfect Circle*, published in 2020, is a pivotal element of our circularity advocacy, and clearly states our position on achieving collection and recycled content goals. And in the *50 States of Recycling* report we offer a ranking of U.S. states based on recycling performance, identifying data, policy and infrastructure investment critical to improve recycling rates. The report, a first of its kind, has become a reference among stakeholders interested in packaging recycling policies.

Alternatives to gas	Energy efficiency should be at the core of energy policies. Our technology scouting and feasibility assessment in finding alternatives to gas goes well beyond hydrogen, which is yet to be scaled economically for our industrial use. We believe government support should also be given to novel technologies to electrify processes and alternative fuels.
Aluminum-specific decarbonization technologies	We believe public-private partnerships will be needed to scale fast decarbonization technologies such as inert anodes or MVR. We often find that aluminum is included in the hard-to-abate sectors with the least attention from governments, and our advocacy efforts focus on increasing visibility of these decarbonization technology opportunities.
Beyond value chain mitigation	We acknowledge that purchasing high-quality carbon credits in addition to reducing emissions along a science-based trajectory can play a critical role in accelerating the transition to net zero emissions at the global level. However, it has to come in the right order, we do not purchase carbon credits yet. We may opt to purchase carbon credits in the future while we transition towards a state of net zero emissions.
Carbon border mechanisms	Carbon border fiscal mechanisms, when designed properly, can be an effective signal to other regions to accelerate decarbonization. Our view is that in order to decarbonize aluminum and to protect domestic production, a holistic, perhaps global, policy must be designed beyond carbon border adjustments, including all policies that affect electricity prices. We believe the ultimate carbon border policy is circularity.
Climate and a circular economy	We advocate for climate policies to include circularity as the fastest and cheapest decarbonization lever. Strong public policies to increase recycling rates have high potential to decrease carbon in materials such as metals. We often find climate policies are linear, and we spend time and effort providing thought leadership on circularity.
Collection and recycling rates	We advocate for reaching 90% collection in all our business regions. Our preference with recycling rate calculations is to conform to the strictest definitions, aligned with the new EU recycling reporting rules.
DRS	We advocate for advanced economies to promote policies for better collection rates through well-designed DRS schemes with all beverages in scope, that are run by industry, and where each substrate pays its collection, sorting and recycling costs separately, with collected UBCs recycled to beverage containers rather than other products.
DRS + EPR	We believe that government policies which integrate EPR and DRS are the ones with the higher success to increase recycling rates.
EPR	We support EPR policies in which producer fees truly reflect the package type's full collection, storage, sorting, and recycling costs to incentivize design for recyclability and the use of materials with strong end markets. A sufficiently fine-level granularity of packaging formats that minimizes cross subsidy between product groups is prerequisite for an efficient EPR fee structure. Also is needed a fee modulation based on recyclability that is itself sufficient to drive change by the packaging producer.
Nature and ecosystems	We recognize a need and importance to protect biodiversity and conserve natural resources. We have taken actions in line with ASI Standards including taking a more intentional approach to biodiversity and water stewardship. We welcome that ASI's forthcoming revised strategy has nature-positive action as one of its sustainability priorities, and move expectations beyond mitigation towards enhancement of biodiversity and ecosystem services.
Recyclability	Our preference is for the strongest standards on recyclability. We feel recyclability classifications are often watered down. We agree there is a need to extend the definition of high-quality recycling and make it quantifiable to develop efficient policies focused on improving the quality of recycling outputs by the entire recycling chain, ultimately ensuring a greater level of resource circularity.
Recycled Content	We believe recycled content calculations need to be harmonized and, to some extent, regulated so that they take into account the reality of losses for each process in the recycling value chain. Our approach is not to make product specific recycled content claims but to focus on improving the recycled content of our entire portfolio. Our 2030 vision includes a goal of reaching 85% recycled content.
Renewable electricity	We advocate for countries, states and jurisdictions to accelerate investments in renewables and the decarbonization of the grid.
Reuse	We are strong advocates for reuse and refill, when it is positive for the climate, which is not always the case. We believe in making science-based decisions that take into account studies comparing reuse/refill with highly circular packaging in individual scenarios. We promote novel refill concepts based on our impact extruded aluminum bottles such as *Boomerang*.

6.3 MEMBERSHIPS

We are active members in leading coalitions of climate progressive companies setting the bar higher and enabling governments to increase political ambitions, such as the Cambridge Institute for Sustainability Leadership's Corporate Leaders Group, CERES and RMI's Horizon Zero. We are also a member of the World Economic Forum, with whom we promote both the circular economy and the potential of satellite technologies to generate environmental data. Within the Forum, we also advocate for industry alignment and value chain mobilization around pioneering commitments as founding member for the aluminum sector of the First Movers Coalition, a global initiative harnessing the purchasing power of companies to decarbonize the corporate ecosystem and unlock the untapped potential of emerging technologies needed to decarbonize the world by 2050.

Ball is also member of some aluminum recycling organizations such as ALUPRO in the UK, the Recycling Partnership in the United States, and Every Can Counts in 19 countries in Europe and Brazil. The aim of these organizations is to improve the collection, sorting and recycling rate of aluminum packaging. We are also members of business trade bodies in some countries, including the Business Roundtable in the United States.

The accompanying table discloses our memberships and annual contributions (as per the exchange rate on December 31, 2022).

ORGANIZATION	GEOGRAPHY
METAL PACKAGING AND CAN MAKING ASSOCIATIONS Ball payments to Metal Packaging and Can Making Associations were €1,645,000 in 2022	
ABRALATAS (Brazilian Association of Aluminum Beverage Can Producers)	Brazil
Brazilian Association of Aerosol (ABAS)	Brazil
Sindicato Nacional da Indústria de Estamparia de Metais (Siniem)	Brazil
IAE (Argentinian Packaging Institute)	Argentina
Czech Aerosol Association	Czech Republic
European Federation of Aerosols (FEA)	Europe
Metal Packaging Europe (MPE)	Europe
Comité Français des Aerosols (CFA)	France
La Boîte Boisson	France
Syndicat National des Fabricants de Boîtes, Emballages et Bouchages Métalliques (SNFBM)	France
Forum Getränkedose	Germany
International Organisation of Aluminium Aerosol Container Manufacturers (Aerobal)	Global
ANFIMA	Italy
Instituto Mexicano del Aerosol (IMAAC)	Mexico
Metalen Verpakkingen Nederland (MVN)	Netherlands
Asociación Latas de Bebidas	Spain
Asociación Metalgráfica	Spain
British Aerosol Manufacturers' Associations (BAMA)	UK
MPMA (Metal Packaging Manufacturers Association)	UK
UK Can Makers	UK
Container Recycling Institute	United States
Household and Commercial Products Association (HCPA)	United States
National Aerosol Association (NAA)	United States
Western Aerosol Information Board (WAIB)	United States
PACKAGING AND BEVERAGE ASSOCIATIONS Ball payments to Packaging and Beverage Associations were €152,000 in 2022	
ARGE Nachhaltigkeitsagenda für Getränkeverpackungen (Sustainability Agenda of the Austrian beverage industry)	Austria
Verband der Getränkehersteller Österreichs (Association of the Austrian beverage industry)	Austria
CENEM (Chilean Packaging Center)	Chile
Czech Association for Packaging and Environment (CICPEN)	Czech Republic
European Organization for Packaging and Environment (EUROPEN)	Europe
Arbeitsgemeinschaft Verpackung und Umwelt (AGVU)	Germany
Bund Getränkeverpackungen der Zukunft (BGVZ) - Beverage packaging of the future	Germany
Associazione dei produttori di bevande analcoliche (ASSOBIBE)	Italy
Istituto Imballaggio	Italy
Nederlands Verpakkings Centrum	Netherlands
Association for Packaging and Environment (ARAM)	Romania
ANFABRA	Spain
ÇEVKO Foundation	Turkey
INCPEN	UK

ORGANIZATION	GEOGRAPHY
RECYCLING PROMOTION ASSOCIATIONS AND ORGANIZATIONS Ball payments to Recycling Promotion Associations and Organizations were €886,000 in 2022	
PRO-ALU-PACK, Verein zur Förderung von Aluminium Verpackungen (Association for promotion and recycling of alumium packaging in Austria)	Austria
Recicla Latas	Brazil
Interessengemeinschaft der Grenzhändler	Denmark
Every Can Counts	Europe
ALUPRO	UK
Bottle Bill Dialogues	United States
Recycle Colorado	United States
Southeast Recycling Development Council (SERD)	United States
State of Texas Alliance for Recycling (STAR)	United States
The Recycling Partnership (TRP)	United States
ALUMINUM ASSOCIATIONS Ball payments to Aluminum Associations were €86,000 in 2022	
Aluminium Denmark	Denmark
Aluminium Deutschland	Germany
Aluminium Stewardship Initiative (ASI)	Global
CIAL	Italy
TALSAD	Turkey
BUSINESS AND MANUFACTURER ASSOCIATIONS Ball payments to Business and Manufacturer Associations were €402,000 in 2022	
UIA (Argentinian Industrial Union)	Argentina
AmCham Serbia	Serbia
Foreign Investors Council (FIC)	Serbia
National Alliance for Local Development (NALED)	Serbia
Business Roundtable	United States
National Association of Manufacturers (NAM)	United States
SUSTAINABILITY AND THOUGHT LEADERSHIP ORGANIZATIONS Ball payments to Sustainability and Thought Leadership Organizations were €358,000 in 2022	
Corporate Leaders Groups (CLG) - Materials and Products Taskforce	Europe
Corporate Leaders Group (CLG)	Europe
First Movers Coalition	Global
World Economic Forum	Global
CERES	United States

Most of the memberships are focused on advancing circularity as a fundamental climate lever, either by promoting ambitious EPR/DRS policies and/or promoting aluminum recycling. Within [HCPA](), we participate in the joint CMI/HCPA aerosol recyclability taskforce. Ball also participates in the Policy Group of the Container Recycling Institute's Business Advisory Council, is a Capstone Partner at Recycle Colorado. Ball also is Chair of the EU Affairs Committee of Metal packaging Europe.

We are a founding member of the *Aluminium Stewardship Initiative*. Across our global beverage and aerosol manufacturing footprint, we achieved ASI certification, which serves as a testament to our unwavering commitment to be part of a responsible and transparent value chain. Our manufacturing locations are Performance Standard and Chain of Custody certified, which drives sustainability across the entire aluminum value chain and demonstrates our responsible production and sourcing practices, including commitments to upholding human rights, worker safety and resource efficiency.

6.4 RECENT IMPACT OF OUR CLIMATE AND CIRCULARITY ADVOCACY

In terms of recent impact, Ball has successfully advocated for bold action in relation to climate change in a number of areas, including by playing our part with other companies and organizations in lobbying the European Commission to include a 90% recycling target and support for DRS in its proposal for packaging waste regulations. We have also supported the EU's climate policies via the CLG, lent our support to design a pioneering EPR bill in our home state of Colorado, and stimulated debate and dialogue about DRS and EPR in our industry in the United States. Through the FMC, we are working to have our value chain partners, be it suppliers or customers, join the coalition.

Ball believes in the value of advocacy and leadership to accelerate progress, and is committed to continue challenging the status quo and fighting alignment around the lowest common denominator. We will continue to advocate for systemic efforts to build net zero circular systems, and are willing to keep up and step up our support to innovative, efficient, and effective EPR and DRS, and informed, transparent discussions around related targets, legislation and regulation.

7

STRESS-TESTING OUR NEAR-TERM CLIMATE TRANSITION PLAN

In its new report *Integrity Matters*, a UN expert panel developed stronger and clearer standards for credible, transparent, and accountable net-zero emissions pledges by companies and speed up their implementation. Moreover, in January 2023 in Davos, Antonio Guterres called on all corporate leaders to act based on the guidelines offered in the report, emphasizing commitments to net-zero cannot be a mere public relations exercise. The recommendations and principles in the report and the call to action by Antonio Guterres inspired Ball's new Climate Transition Plan.

We believe that a credible pathway requires a strong stress test based on several criteria. Our stress-test is founded on understanding our relative control on the levers identified, an analysis of the abatement costs for the different solutions, and the readiness levels of the technologies that the plans rely on.

We are confident in our ability to achieve our Scope 1, 2 and 3 company-wide and product-specific targets by 2030. A high proportion of the levers are in our control, and are cost-efficient for the whole value chain.

TABLE 1

STRESS TESTING OUR NEAR-TERM CLIMATE TRANSITION PLAN

		LEVELS OF CONTROL	ABATEMENT COST FOR THE WHOLE VALUE CHAIN	TECHNOLOGY READINESS[1] AND MARKET APPLICABILITY AT SCALE TO DATE
ENERGY EFFICIENCY		DIRECT	POSITIVE NET PRESENT VALUE	9
100% RENEWABLE		DIRECT	DEPENDING ON ELECTRICITY AND CARBON MARKET REGULATIONS REGION BY REGION	9
WEIGHT OPTIMIZATION		INDIRECT BUT PRODUCT-RELATED INITIATIVE	POSITIVE NET PRESENT VALUE	8-9
CIRCULARITY		RECYCLING POLICY-DEPENDENT	CARBON POLICY-DEPENDENT	8-9
REMELTING AND ROLLING DECARBONIZATION	CO2-FREE TECHNOLOGIES	TIER 1-CONTROLLED	DEPENDING ON ELECTRICITY AND CARBON MARKET REGULATIONS REGION BY REGION	6-9
	ENERGY EFFICIENCY	TIER 1-CONTROLLED	POSITIVE NET PRESENT VALUE	7-9
PRIMARY ALUMINUM DECARBONIZATION	GRID & PPA	TIER 2-N CONTROLLED	DEPENDING ON ELECTRICITY AND CARBON MARKET REGULATIONS REGION BY REGION	9 | LOCATION-DEPENDANT PPAS
	MVR & ELECTRIC BOILERS	TIER 2-N CONTROLLED	REASONABLE LEVELIZED EXTRA COSTS	8-9 | RETROFITTABLE IN ANY PLANT
NON-METAL SCOPE 3 ABATEMENTS		TIER 1-CONTROLLED	TO BE DETERMINED ON A CATEGORY BASIS	8-9

RISK LEVEL: LOW — HIGH

1 - Technology readiness levels are based on a scale from 1 to 9, with 9 being the most mature technology

Source: *Ball estimates based on Eunomia, MPP, IAI, McKinsey, SYstemIQ*

7.1 LEVELS OF CONTROL: OUR HANDS ON THE WHEEL

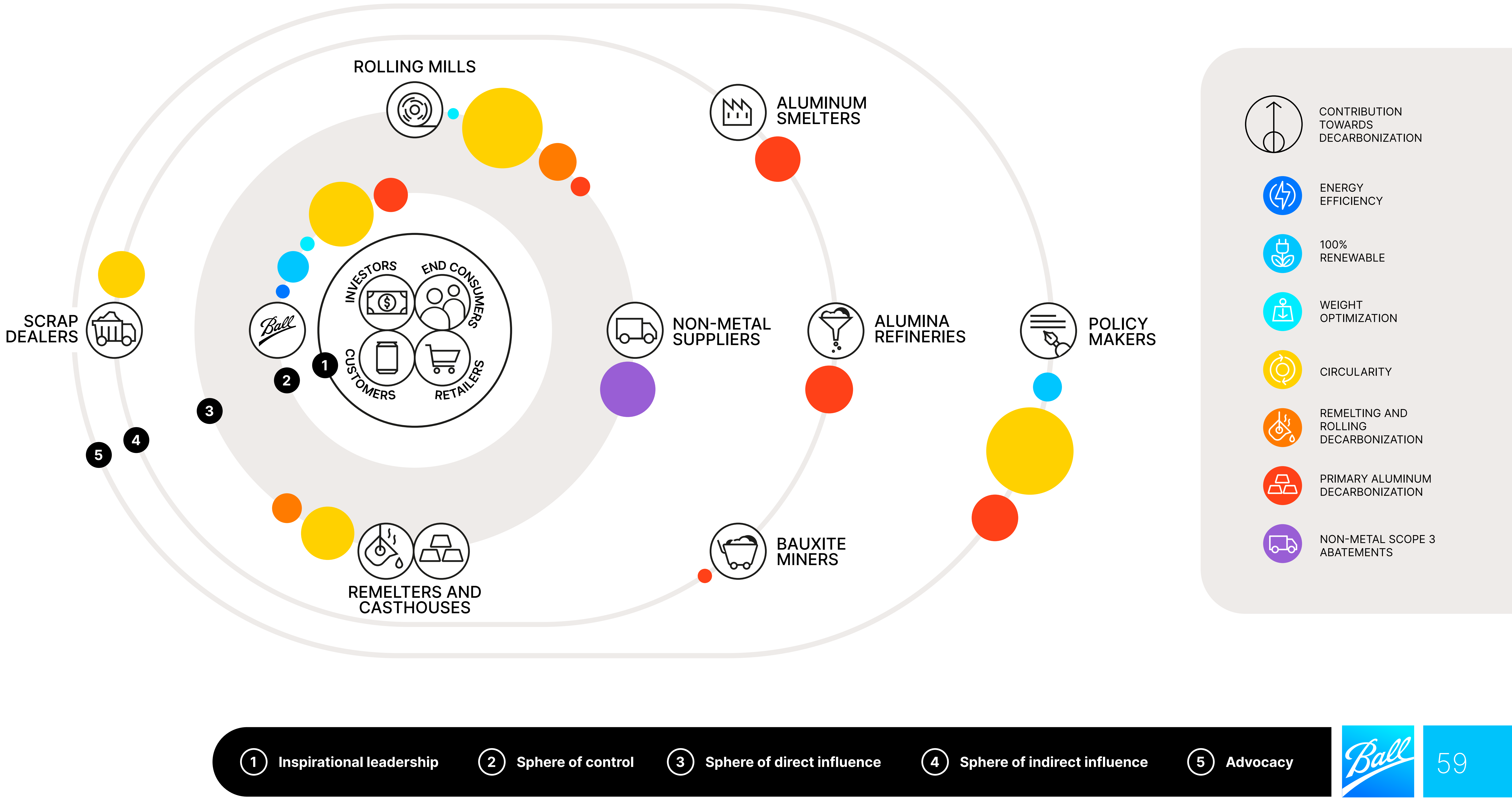
We have various levels of control over our abatement plans (Figure 27). Some, such as switching to renewables or investing in energy and metal efficiencies, are in our direct control. Others, such as lightweighting of materials and increasing recycled content, are in our relative control but will require our rolling mill suppliers to invest and collaborate with us closely.

Other levers, such as increasing access to a low-carbon aluminum can sheet, will require active supply-chain engagement. The aluminum can sheet industry is a concentrated market, with the top 10 operators representing more than 70% of the 2022 global can stock capacity (CRU background data). This means that bonds are strong, relationships are close and the long-term interests of all parties are aligned.

Less directly, we are using advocacy to increase support for a more robust recycling policy. We argue strongly for ambitious, robust recycling policy frameworks that will ensure UBCs can be accessed by the industry and recycled preferentially into beverage cans.

FIGURE 27

SPHERES OF INFLUENCE TOWARDS DECARBONIZATION OF BALL'S VALUE CHAIN



7.2 ABATEMENT COSTS: A MAJORITY OF STRAIGHTFORWARD LEVERS

The economics of moving toward net zero will vary within our industry according to factors such as local infrastructure, regulations, incentives, aluminum prices, technologies and consumer and investor preferences. However, it is critical for us to better understand the business case for each of our decarbonization levers. The next edition of our climate transition plan will include a detailed account of our marginal carbon abatement costs, and will explore not only investment requirements and low-carbon premiums but potential upsides and reduced risks that could be achieved vs Business-as-Usual scenario.

Our exploration of the economic case for change has led us to conclude that our net zero pathway is built on solid economic foundations. A first cost benefit analysis suggests that large areas of our decarbonization process will be cost-neutral, or will even have positive financial benefits when considering the whole value chain. For instance:

- Recycling aluminum cans is a profitable recycling business, displacing primary aluminum production. High can-to-can circularity can be achieved by preserving the material value (see blue box on the right) .From high to very high circularity, there is only a minimal increase in marginal costs in terms of making infrastructure and logistics improvements, yet potentially tremendous environmental and economic benefits. The business case for recycling aluminum cans will even improve in the future - when surpassing a 90% collection rate.
- Energy efficiency, along our supply chain and within our plants, is a textbook win-win scenario. The business case for energy efficiency is even stronger at a time of persistently high electricity and gas prices.
- Lightweighting makes sense from an economic standpoint, although greater innovation will be needed to deliver further incremental benefits.

Low-carbon procurement is rapidly evolving, and we are aiming for excellence in this area. Low-carbon primary aluminum may come at a price, but a balanced supply-demand outlook for 2030 should limit low-carbon premiums – unlike other packaging substrates that are already facing low-carbon supply shortages.

It is widely acknowledged that the cost of inaction on climate change is far greater than the cost of action from a societal perspective. This can also be true from a purely business perspective, especially with the right incentive regulations in place. Policymakers have the power to change the rules of the game and improve the business case for decarbonization even further. For example, they can provide incentives and subsidies for renewable energy projects (such as tax credits or direct grants), impose a price on carbon emissions, and fuel the growth of closed-loop recycling and scrap usage. The recent funding *announcement* by the U.S. Department of Energy illustrates the scale of the challenge and represents the largest investment in industrial decarbonization in American history. By using these tools, policymakers can help create a market for low-carbon aluminum can, making it more accessible and appealing to businesses.

CAN-TO-CAN CIRCULARITY CAPTURES AND MAINTAINS THE VALUE OF ALUMINUM

The overall business case for collecting aluminum cans is very strong, regardless of the region or whether EPR policies are implemented or not. This is mainly due to the physical properties of aluminum, including its small level of recycling losses, the low remelting temperatures required in recycling, high compaction rates, low transport costs and, of course, UBC high secondary value.

UBC price reference points are firmly linked to the price of primary aluminum. Recycled aluminum is generally purchased at a discount compared to the price of primary aluminum depending on type and quality of the scrap, contamination, alloying, geographic region, and other market factors. The less contaminated, the closer UBC value will be to primary aluminum prices. In some European DRS countries, UBCs are paid at more than 80% LME because contamination is very low and no UBC pre-processing is needed prior to being processed in the remelt center.

7.3 TECHNOLOGY READINESS LEVELS: ALL TECHNOLOGIES NEEDED ARE PROVEN

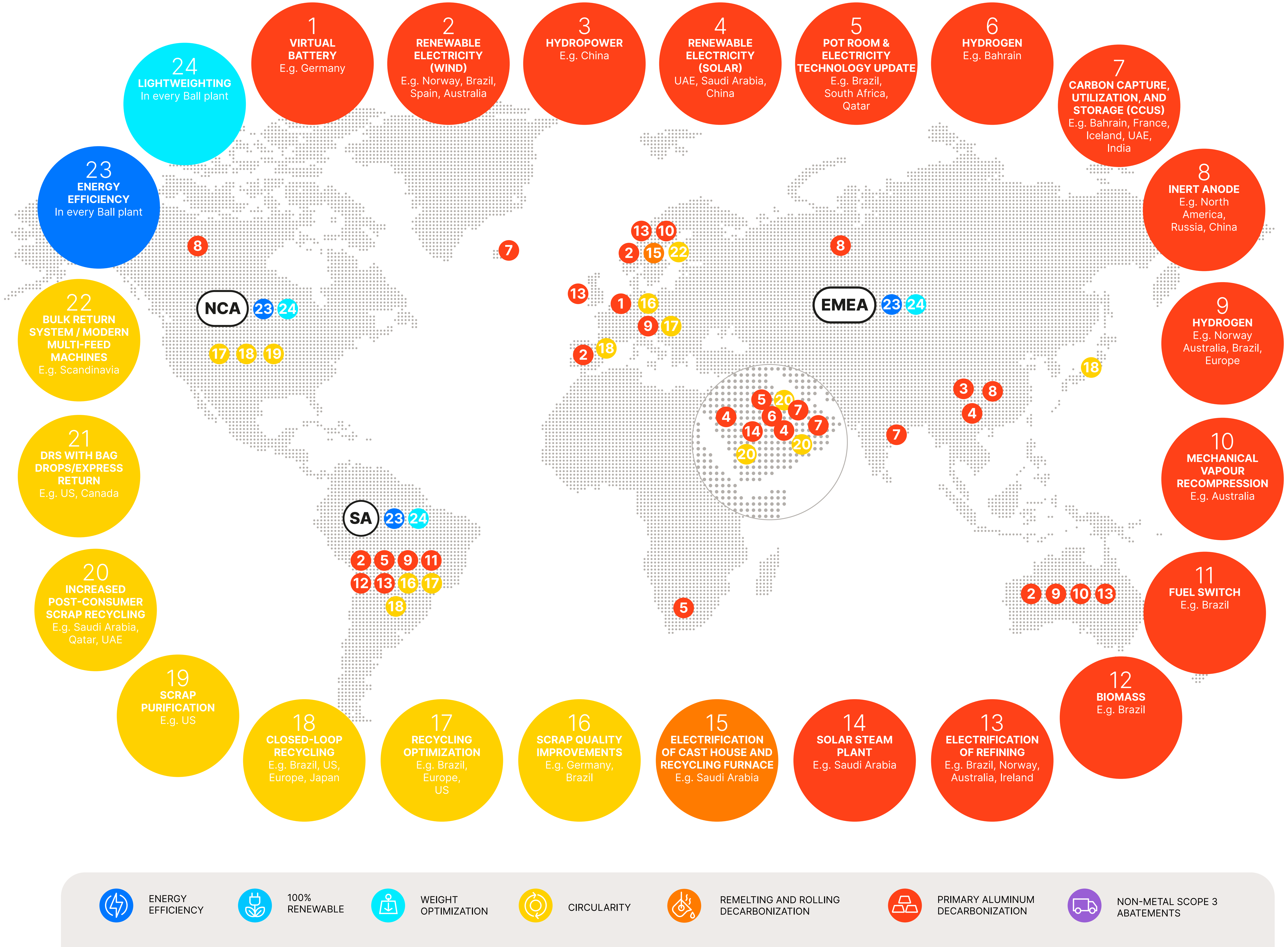
All the technological solutions presented under each of three scenarios already exist, and their implementation is technically feasible. In other words, there is no need to invent anything new to get to our 2030 goals. It is more a matter of timing. Low-carbon high-circular aluminum is unquestionably the right path for us, and so the only question is how quickly we can get there. However, incremental innovation and dissemination of best practices will strengthen the overall business case of low-carbon high-circular aluminum packaging.

Around the world, players in our value chain are investing in projects, new technologies and building critical partnerships that are taking the decarbonization agenda further by 2030 and beyond (Figure 28).

FIGURE 28

EXAMPLE SOLUTIONS OF DECARBONIZATION TECHNOLOGIES

Source: Based on IAI's GHG emission reduction technology



8 THE JOURNEY AHEAD

As outlined above, our greatest sustainability ambitions lie ahead of us. A global low-carbon economy bolstered by the principles of real circularity requires collaboration, innovation, and advocacy. We recognize this Climate Transition Plan will be the first of many for Ball, and that no taking action is the biggest risk of all. Our expectation is that future iterations of our plan will include Science Based Target initiative approval and disclosure of the abatement costs for each lever and scenario. We recognize climate science may also demand even greater climate ambitions. Thus, we commit to updating our plan to align with the latest climate science.

What matters most is leadership during uncertain times. This will be the deciding factor in creating a positive outcome for the aluminum packaging industry, society, and the planet. We hope that this report inspires our industry leaders to take action, make strategic investments, encourage innovation and work together to build net zero circular systems.

FORWARD-LOOKING STATEMENTS

This release contains "forward-looking" statements concerning future events and financial performance. Words such as "expects," "anticipates," "estimates," "believes," and similar expressions typically identify forward-looking statements, which are generally any statements other than statements of historical fact. Such statements are based on current expectations or views of the future and are subject to risks and uncertainties, which could cause actual results or events to differ materially from those expressed or implied. You should therefore not place undue reliance upon any forward-looking statements and they should be read in conjunction with, and qualified in their entirety by, the cautionary statements referenced below. Ball undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Key factors, risks and uncertainties that could cause actual outcomes and results to be different are summarized in filings with the Securities and Exchange Commission, including Exhibit 99 in Ball's Form 10-K, which are available on Ball's website and at www.sec.gov. Additional factors that might affect: a) Ball's packaging segments include product capacity, supply, and demand constraints and fluctuations and changes in consumption patterns; availability/cost of raw materials, equipment, and logistics; competitive packaging, pricing and substitution; changes in climate and weather and related events such as drought, wildfires, storms, hurricanes, tornadoes and floods; footprint adjustments and other manufacturing changes, including the startup of new facilities and lines; failure to achieve synergies, productivity improvements or cost reductions; unfavorable mandatory deposit or packaging laws; customer and supplier consolidation; power and supply chain interruptions; changes in major customer or supplier contracts or loss of a major customer or supplier; inability to pass through increased costs; war, political instability and sanctions, including relating to the situation in Russia and Ukraine and its impact on Ball's supply chain and its ability to operate in Europe, the Middle East and Africa regions generally; changes in foreign exchange or tax rates; and tariffs, trade actions, or other governmental actions, including business restrictions and orders affecting goods produced by Ball or in its supply chain, including imported raw materials; b) Ball's aerospace segment include funding, authorization, availability and returns of government and commercial contracts; and delays, extensions and technical uncertainties affecting segment contracts; c) Ball as a whole include those listed above plus: the extent to which sustainability-related opportunities arise and can be capitalized upon; changes in senior management, succession, and the ability to attract and retain skilled labor; regulatory actions or issues including those related to tax, environmental, social and governance reporting, competition, environmental, health and workplace safety, including United States Federal Drug Administration and other actions or public concerns affecting products filled in Ball's containers, or chemicals or substances used in raw materials or in the manufacturing process; technological developments and innovations; the ability to manage cyber threats; litigation; strikes; disease; pandemic; labor cost changes; inflation; rates of return on assets of Ball's defined benefit retirement plans; pension changes; uncertainties surrounding geopolitical events and governmental policies, including policies, orders, and actions related to COVID-19; reduced cash flow; interest rates affecting Ball's debt; and successful or unsuccessful joint ventures, acquisitions and divestitures, and their effects on Ball's operating results and business generally.

Accelerating Action to Limit Global Temperature Rise to 1.5°C

Ball Corporation's Climate Transition Plan

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