



2024 Ardagh Group Sustainability Roadmap

We make packaging for good

A message from our executive leadership team



During a period marked by profound environmental and social challenges, Ardagh Group remains steadfast in its commitment to sustainable growth and innovation, driven by three core pillars: Emissions, Ecology and Social. We've continued to advance our progress over the past year, investing in technologies to reduce emissions, waste and water usage. Our social initiatives have sought to strengthen our relationships with communities, improve workplace safety, and promote diversity and inclusion.

Although Ardagh Metal Packaging (AMP) experienced increased emissions due to business growth in 2022, this trend was reversed in 2023 overall, due to a notable reduction in absolute Scope 3 emissions. Specifically, the decarbonisation of materials, which make up for the vast majority of AMP's greenhouse gas emissions, has been accelerated mostly through increases in recycled content. The resulting decrease in overall emissions as well as reduction of absolute Scope 3 emissions to a level slightly below AMP's 2030 SBTi target is encouraging as we are continuing our decarbonisation journey.

Ardagh Glass Packaging (AGP) showed marginal progress toward its targets. A downturn in market demand and associated production curtailments resulted in variances in AGP's 2023 environmental data. We expect to yield stronger results in

the future through continued engagement with our customer and supplier bases and a robust renewable energy pipeline.

We're building a culture of sustainability by embedding environmentally friendly practices in daily operations. Our global network of Social Sustainability Ambassadors continues to strengthen engagement with our local communities. Since its inception, the network has helped to restore schools and playgrounds, mobilised worldwide community clean-ups and organised creative recycling activities and biodiversity projects.

Highlights of 2023

In 2021, we launched Ardagh for Education, a global initiative to give back to our local community schools, with a focus on Science, Technology, Engineering and Math (STEM) education programmes. We announced a third major multi-year investment in South

America building on the success of our U.S. and German partnerships.

The Carbon Disclosure Project (CDP) awarded AMP its Leadership Class rating for sustainability performance. This places AMP among the highest-rated companies in all industries scored by CDP. EcoVadis awarded Ardagh its highest distinction, the Platinum rating, for two consecutive years (2022 and 2023), recognising it among the top 1% of rated organisations. In 2024, Ardagh proudly achieved the Gold rating, placing it in the top 5% of companies evaluated. It's important to note that EcoVadis ratings evolve year on year due to increasingly demanding criteria for its upper ratings. We believe the recent ratings reflect Ardagh's ongoing commitment to sustainability.

The Aluminium Stewardship Initiative (ASI) certified AMP against the Performance Standard (V2) 2017 for the manufacturing of beverage can bodies and ends across AMP-Europe and beverage can ends at our

Manaus production facility in Brazil.

AGP realised several important milestones and technological advancements such as:

- Commissioning a groundbreaking hybrid furnace - NextGen Furnace - in Obernkirchen, Germany, with glass bottles produced reaching a consistent 64% emissions reduction¹.
- Constructing a hydrogen electrolyser in Limmared, Sweden.
- Installing an on-site solar-powered facility in Dongen, The Netherlands.

2024 and beyond

This year, AMP and AGP entered a joint virtual Power Purchase Agreement (vPPA) with Sunnic Lighthouse GmbH and parent company, ENERPARC AG, securing a solar energy allocation in Germany to supply AMP's production facilities and AGP's NextGen Furnace. We envisage entering

similar agreements in the future as part of our commitment to a 42% reduction in Scope 1 & 2 GHG emissions by 2030, from a 2020 baseline. Currently at 89% of baseline emissions, AMP has made good progress in Scope 3 GHG emissions reduction.

Click [here](#) for more detail on our sustainability data.

We are pleased to introduce our Sustainability Roadmap representing our current path forward. This roadmap reflects our commitment to achieving our SBTi and other targets.

Herman Troskie,
Chair, Ardagh Group

Oliver Graham,
CEO, Ardagh Metal Packaging

Mike Dick,
CEO, Ardagh Glass Packaging

ISO 14001 97% of sites certified

Sedex² | Member



¹ The methodology used for this calculation was reviewed by a third party using actual and theoretical data (ISO 14067 methodology) ²Applicable to certain sites ³Certification is only applicable to certain metal packaging sites

While we are ahead of our scope 3 decarbonization plans, we have to maintain this momentum if we are to continue to meet our 2030 targets, in light of continued business growth.

Progress to targets AMP

In 2023, despite significant business volume growth, we met our stated Scope 3 GHG emissions target for 2030. We also met our VOC intensity target.

This success is largely due to utilising metal coils with a lower carbon footprint, primarily through increased recycled content, as well as optimising metal coil use through product lightweighting and downgauging. While we are ahead of our scope 3 decarbonisation plans, we have to maintain this positive momentum if we are to continue to meet our 2030 targets, in light of continued business growth.

Our VOC intensity target was also met, despite continued business growth, thanks to strategic investments in the right technologies and materials. We are committed to maintaining this momentum.

Despite significant business growth leading to increased (absolute) Scope 1 and 2 emissions, we have initiatives planned to reverse this trend:

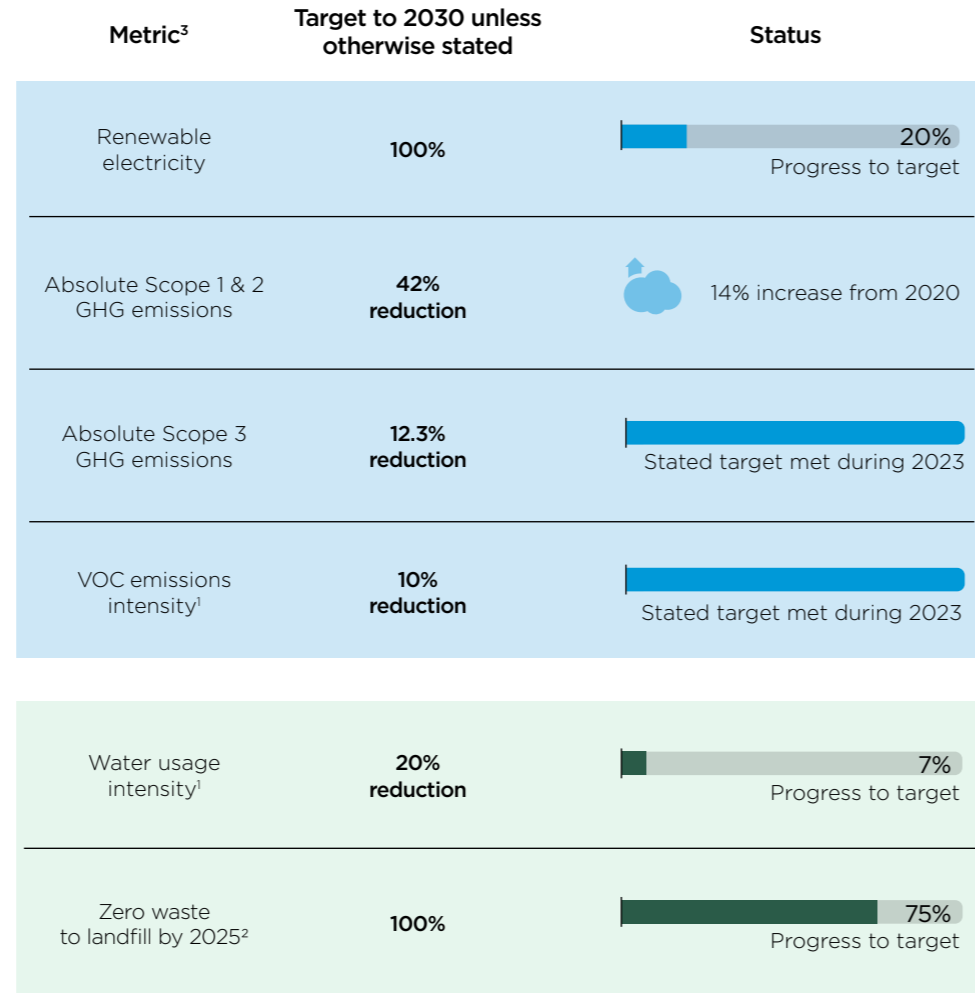
- We are implementing several Scope 1 efficiency projects over the next few years.
- We are evaluating step-change projects for roll-out across our facilities to

reduce Scope 1 emissions.

- In 2024, AMP entered a renewable electricity vPPA with Sunnic Lighthouse GmbH in Germany. Additionally, we signed a vPPA with BNZ in Portugal, which will commence in 2026 for 12 years, to secure 146 GWh annually of renewable electricity certificates, converting approximately 50% of AMP-Europe's continental electricity consumption to renewable power.

In 2023, 75% of our facilities achieved zero waste to landfill (ZWTL), positioning us well to reach our 2025 goal of 100% ZWTL. We also achieved 7% towards our water intensity target and it remains an area of focus. We are actively working to reduce water consumption and to protect this valuable resource.

We continue to invest in initiatives across all pillars to meet our ambitious 2030 targets. While there is more to do, we are encouraged by the progress made and believe we have the right initiatives and partnerships in place to fulfil our commitments.



Emissions

Ecology

¹Intensity metrics shown include can body production facilities only (excluding Huron, Ohio - since this facility produces both cans and ends), as water and VOC emissions from ends production is insignificant. ²Zero waste to landfill for operational waste streams, where allowed by regulation. ³ The Research Institute of Sweden (RISE) provided limited assurance of the acquisition, processing and aggregation of the quantitative data necessary to calculate the principal 2023 environmental and health & safety KPIs reported.

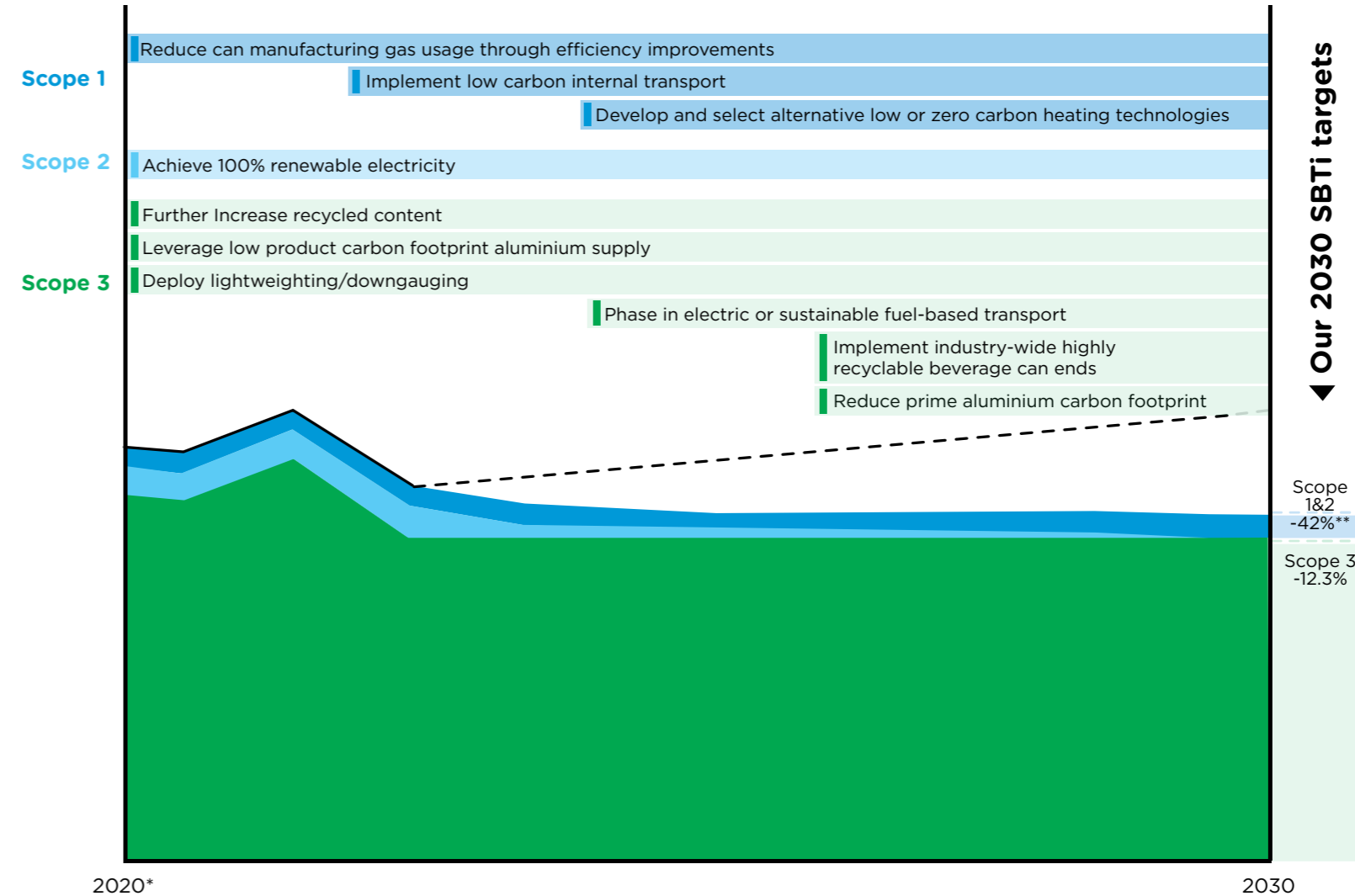
AMP roadmap towards our Science Based Targets

We aim to achieve our 2030 emissions targets through a broad range of actions outlined below while setting the foundations for further decarbonisation beyond 2030.

*Baseline figures for emissions are from 2020

**Scope 2: 100% renewable electricity by 2030

----- Projected business as usual

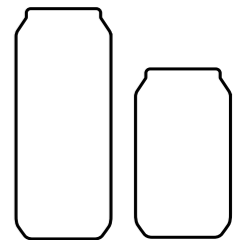


At AMP, we are committed to our sustainability goals and progressing toward our 2030 SBTi targets. Key levers for decarbonising are increasing recycled content in aluminium and transitioning to renewable electricity. We continue to explore other levers to maximise impact this decade and are selecting technologies for sustained decarbonisation beyond 2030 and towards net zero.

Industry-wide decarbonisation requires removal of systemic and technical roadblocks:

- Sufficient aluminium recycling capacity.
- Increased recycling rates (through systems like DRS or EPR).
- Industry-wide standardisation and investment in innovation for highly recyclable beverage can ends.

We continue to collaborate with suppliers, customers, and industry associations to advance beverage can decarbonisation.



The image and information shown is for illustrative purposes only and may not be an exact representation of our roadmap.

Progress to targets AGP

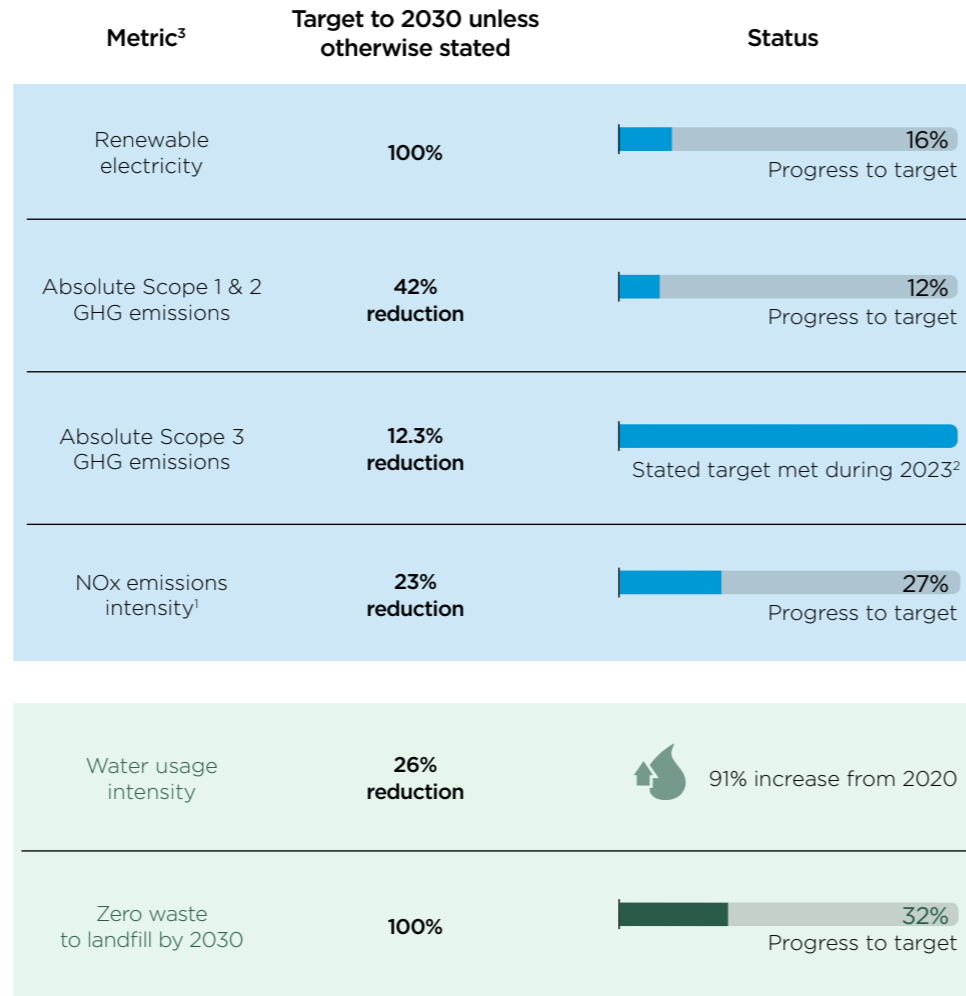
In 2023, AGP experienced mixed sustainability outcomes, influenced by challenging market conditions that led to production curtailments. While these curtailments contributed positively to certain metrics, such as GHG emissions, they negatively impacted others, like water intensity.

Our renewable electricity usage remained stable, but we strengthened our project pipeline, particularly in Europe, where over 80% of our current electricity consumption will be covered by committed projects. Scope 1, 2, and 3 GHG emissions made incremental progress towards targets, driven by projects like the NextGen Furnace in Germany, and,

unfortunately through curtailments and footprint optimisations.

Water intensity improvements seen in prior reports were temporarily reversed due to curtailments, but gains are expected to return as production resumes. While ZWTL efforts remained flat, we saw promising developments in Africa where the team has launched an exciting ZWTL campaign to energise employees in South Africa.

Looking ahead, we anticipate that production curtailments may partially lift increasing GHG emissions proportionately.



Emissions

Ecology

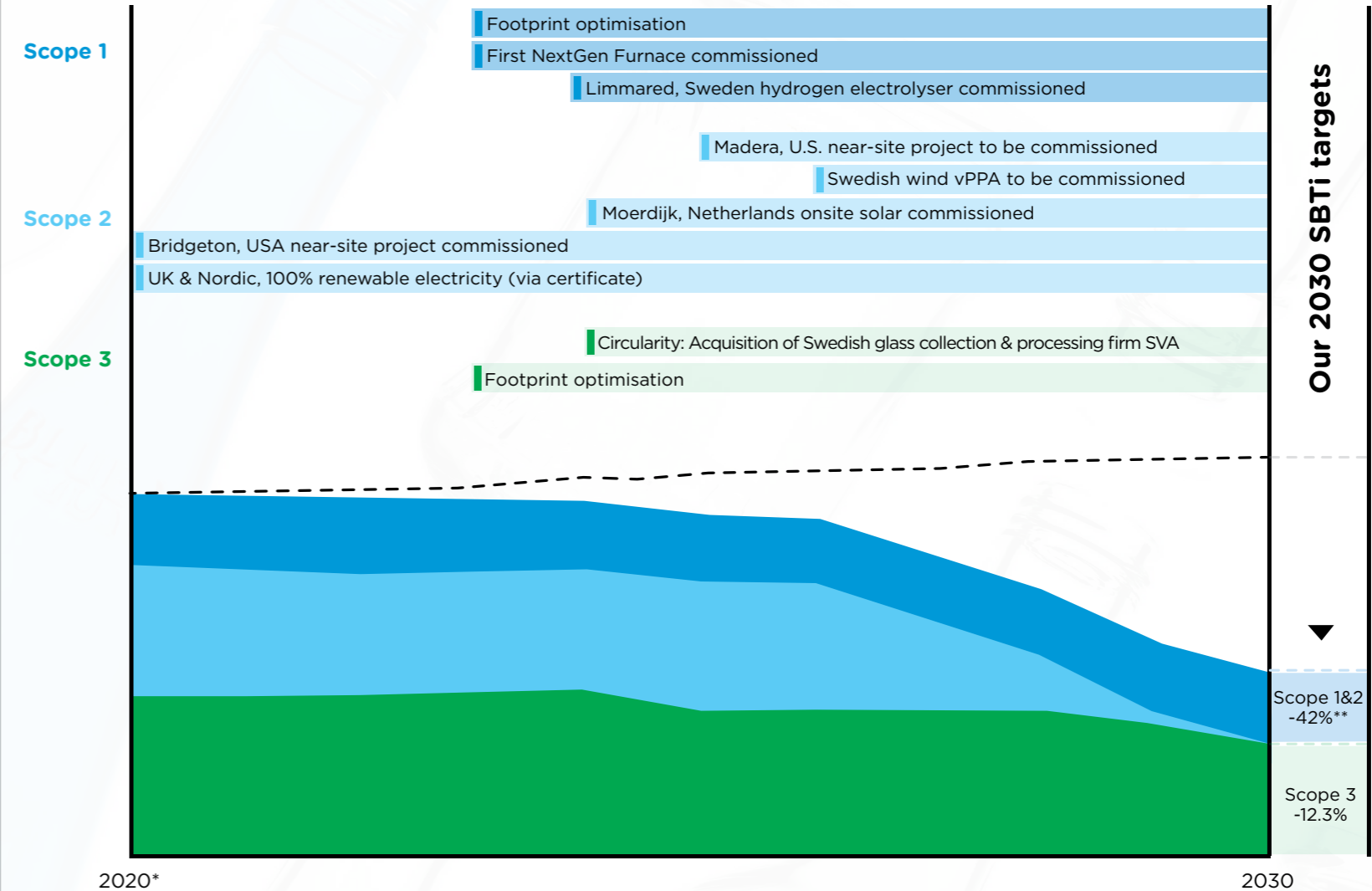


¹ NOx emission intensity excludes AGP-Africa for this reporting period to allow for an in-depth review of the indicator's baseline number and its impact on the overall NOx reduction target.
² Based on current best available data and calculation methodology. We continuously assess and review our methodologies and the strength of our data sets.
³ The Research Institute of Sweden (RISE) provided limited assurance of the acquisition, processing and aggregation of the quantitative data necessary to calculate the principal 2023 environmental and health & safety KPIs reported.

AGP roadmap towards our Science Based Targets

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 **Scope 2: 100% renewable electricity by 2030
 - - - - - Business as usual



Our 2030 SBTi targets

Our significant investments, and the progress we've achieved, highlight AGP's unwavering commitment to sustainability. System-wide decarbonisation demands collective, holistic efforts that extend beyond the capabilities of any single bottle maker. We call for collaboration across industries, governments, and society to accelerate an equitable path toward decarbonisation through, but not limited to, the following actions:

- Increased grid capacity to enable low carbon technologies based on renewable electricity.
- Increased recycling rates to increase cullet availability and cullet use in our facilities.
- Renewable electricity at competitive pricing.



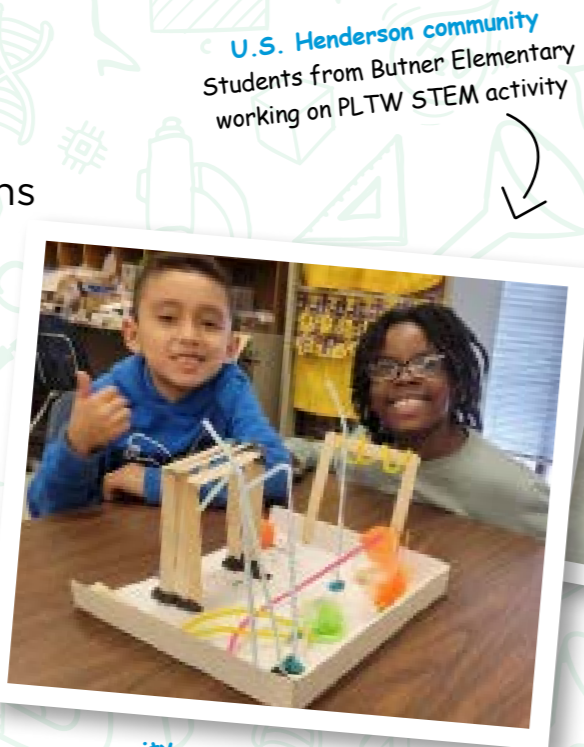
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Ardagh for Education

We are inspiring future generations

The mission of Ardagh for Education is to give back to the communities we operate in through high-quality Science, Technology, Engineering, and Maths (STEM) education. We aim to upskill teachers and provide students with hands-on, engaging STEM learning experiences to enhance their technical abilities and equip students with in-demand, 21st century skills. Students are exposed to a variety of exciting STEM activities, such as robotics, coding and IT, engineering design, climate change, recycling, advanced manufacturing, and many others.

Additionally, our local employees are engaging with these schools, building relationships with teachers and students, volunteering time in classrooms, and highlighting career opportunities in STEM and with Ardagh. Some of these students have also joined Ardagh's internship and apprenticeship programmes, and this will continue to be an important priority to invest in the next generation of talent in our local communities. This initiative is creating a more diverse STEM pipeline, reaching often overlooked populations, and creating an inclusive environment in STEM education and careers.



U.S. Henderson community
Students from Butner Elementary working on PLTW STEM activity



Brazil, Jacarei community
Students from Aristeu Turci school touring manufacturing facility

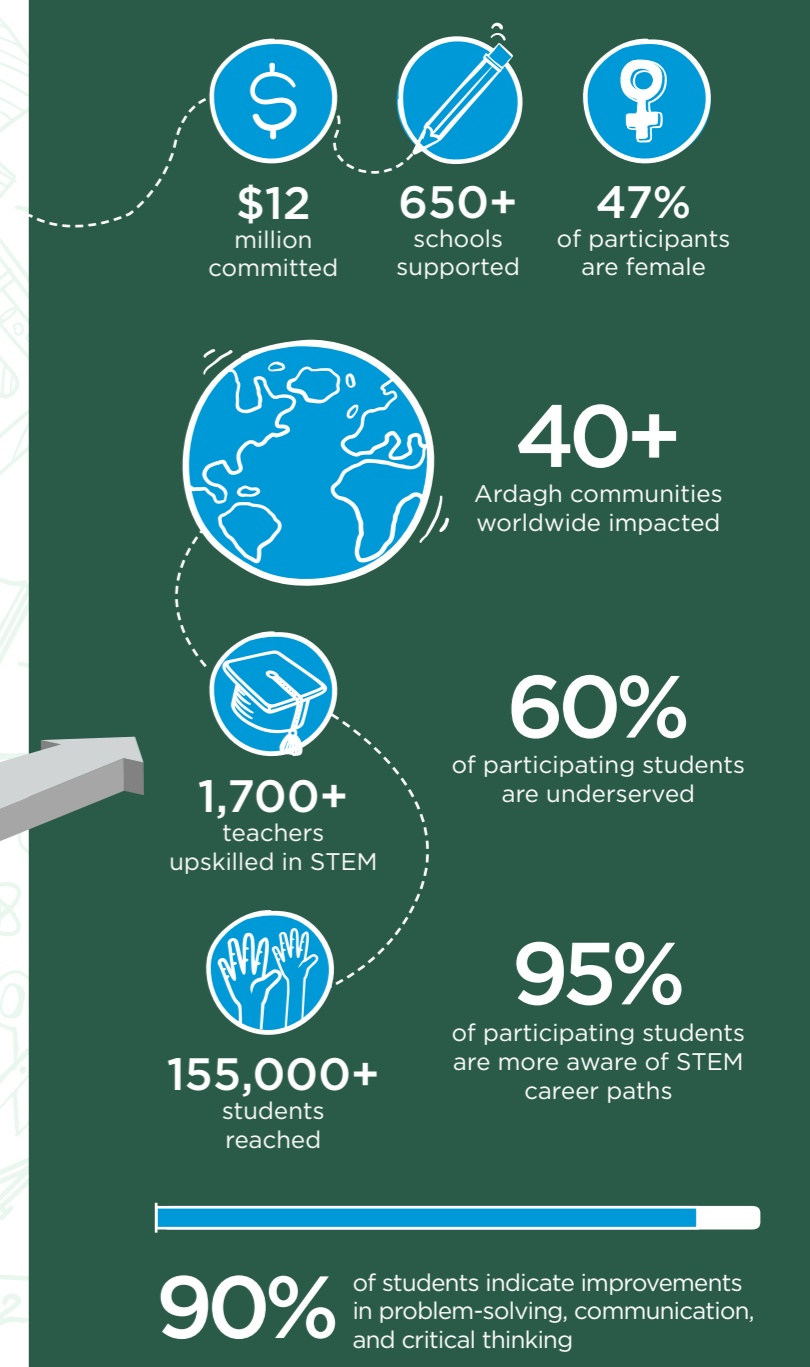
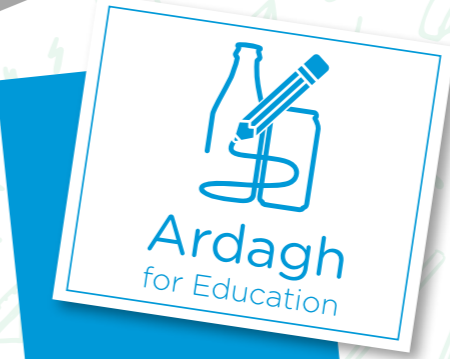


Germany, Bad Munder community
Future Day 2024, manufacturing facility tour with students



Germany, Neuenhagen community
Apprentice training using Wissensfabrik KiTec activity as team building

[For more on Ardagh for Education click here](#)



*Based on data and reporting provided by Ardagh for Education partners

Results & Impact to date

