NextGen Furnace sees AGP paving the way to low carbon glass manufacturing

Ardagh Glass Packaging (AGP) recently unveiled its groundbreaking NextGen Furnace in Obernkirchen, Germany - showcasing the furnace's inaugural production of amber bottles using innovative low-carbon technology at a momentous event that welcomed customers, suppliers, policy makers, media and key industry partners.

As a global supplier of infinitely recyclable metal and glass packaging for brand owners around the world, Ardagh Group operates 63 metal and glass production facilities in 16 countries, employing more than 20,000 people with sales last year reaching over USD 9 billion. Part of the Group, AGP is a global supplier of recyclable glass packaging for brand owners in the beverage, food, pharmaceutical and chemical sectors. It operates 39 production facilities in North America, Europe and Africa and employs approximately 14,000 people.

SITUATED SUSTAINABLY

Obernkirchen was selected as the NextGen Furnace location due to its electricity grid connection capacity and its oxygen generation capacity for oxy-gas fired hybrid furnace technology. It is among eight AGP glass packaging manufacturing facilities in Germany (the others being Lünen, Germersheim, Drebkau, Neuenhagen, Wahlstedt, Nienburg and Bad Münder). The furnace's operational mode started conventionally, fuelled by 20% renewable electricity and 80% gas. Now, embarking on a meticulously-planned startup sequence, it's set to transition over the months ahead to an ambitious 80 percent renewable electricity target and 20 percent gas - a deliberate progression that aims to achieve both unparalleled energy efficiency and substantial decarbonisation.

FEDERAL BACKING

The NextGen Furnace is funded via the 'Decarbonisation of Industry' programme of the German Federal Ministry for Economic Affairs and Climate Action (BMWK) - a funding programme managed by the Competence Centre on Climate Change Mitigation in Energy-Intensive Industries (KEI). BMWK supports energy-intensive industries in Germany in their efforts to reduce process-related greenhouse gas emissions. The project is also supported by the European Union's 'NextGenerationEU' fund.

LIFE CYCLE ANALYSIS

Operations Director at AGP-Germany Jens Schaefer expressed his satisfaction with the performance of the furnace during its initial startup phase, was proud to see the amber-coloured bottles produced - an achievement that underscores AGP's dedication to pushing the boundaries of glass manufacturing technology. An independently verified life cycle analysis was conducted which revealed that once the NextGen Furnace operates at its targeted 80 percent renewable electricity and 20 percent gas mix, there will be an astounding 69 percent reduction in CO2 emissions for a typical 330 ml glass bottle produced in the NextGen Furnace.

FIRING AHEAD AS A TEAM

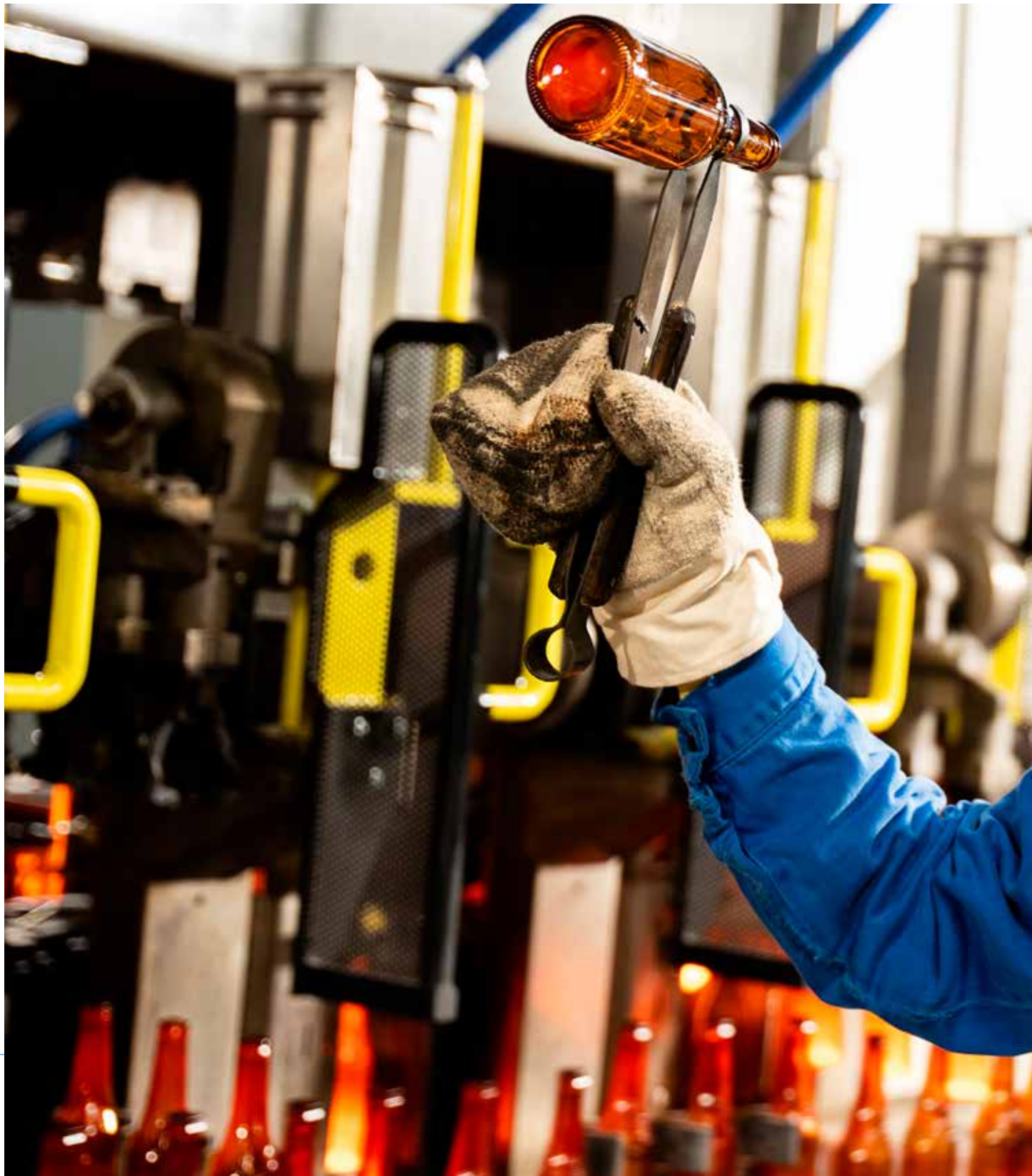
AGP-Europe CEO Martin Petersson hailed the breakthrough as a great achievement for the glass industry - emphasising the transformative potential of achieving a 69 percent reduction in CO2 emissions. Petersson further acknowledged the collaborative efforts with SORG, AGP's chosen furnace supplier, by crediting its expertise in reaching such a pivotal milestone. He also expressed

ABOUT AGP-OBERNKIRCHEN

- Founded in 1799 as Heye Glass
- Acquired by Ardagh Glass in 2003
- Plant Director: Andreas Kehne
- Employees: Circa 280 (FTE)
- Portfolio: Beer, special beer, wine, sparkling wine, spirits - approximately 700 million bottles per year
- Site area: 489,000 m3

LIFE CYCLE ANALYSIS

The 2023 Life Cycle Analysis demonstrates the carbon savings per glass bottle to be produced in the NextGen Furnace as compared to a bottle from a conventional AGP furnace. A typical 330ml glass bottle produced in the conventional AGP furnace at Obernkirchen produces 140.1g of CO2 in comparison with one that will be produced in the NextGen Furnace once fully operational at 80 percent renewable electricity and 20 percent gas - which will instead produce 43g of CO2. That amounts to a 69 percent reduction across Scope 1, 2 and 3 emissions. Depending on the production mix, the NextGen Furnace could save up to 45,000 tonnes of carbon every year compared to a conventional furnace.



the AGP's commitment to ongoing collaboration with SORG throughout subsequent operational stages. Depending on the production mix the NextGen Furnace could save up to 45,000 tonnes of carbon every year compared to a conventional furnace, making it a beacon of sustainability in glass manufacturing.