Carbon Neutral by 2030

CN30 is a wide-reaching program by the GFG Alliance that will transform industrial manufacturing for a truly sustainable future.

www.gfgalliance.com

CN30

A GFG INITIATIVE

Working to build sustainable industries for future generations

GFG Alliance is an alliance of global businesses, independent of each other yet united through family ownership and a commitment to build a new sustainable industrial ecosystem for the 21st century and beyond.

Our purpose is to become the most sustainable industrial group in our sectors by 2030 - measured through a range of economic, social and environmental initiatives.

Our strategy is driven by four key trends – increasing demand for steel and aluminium, the urgent need to de-carbonise, the decline of industry in developed economies and the need to be globally competitive in a changing world. This strategy enables us to identify opportunity and drive positive change.

This means modernising industrial sites that have been left behind using new technologies and new operating models to create competitive businesses that can better serve customers and the communities within which they operate. Our unique strategy applies renewable power and new breakthrough technologies to metal manufacturing to create environmentally and socially sustainable businesses that generate long term profits and provide secure industrial employment.

CN30 is an all-encompassing initiative that will drive our group's and our industry's transformation in the next decade. We look forward to sharing our plans and our journey with you as they develop and bear fruit.

Sanjeev

Sanjeev Gupta
Executive Chairman

GFG Alliance in numbers

c.35,000 employees worldwide

Global presence in 30+ countries

EUROPE'S LARGEST Aluminium Smelter

Financial Services and 2 UK BANKS

270 global industrial sites

$20BN USD global turnover

8TH largest steel manufacturer - excluding China

Trading with 60+ countries

What is CN30

Materials produced by the GFG Alliance form the building blocks of modern life. Tough, durable and functional, steel and aluminium are used to create things we view as necessities of everyday living – buildings, bridges, cars, railways, aircraft, razors and drinks cans. It's no exaggeration to say they are fundamental facets of modern civilisation as we know it.

It's time, though, to get serious about the environmental impact of producing them. Manufacturing these two key industrial metals accounts for over 10% of all the world's direct emissions from use of fossil fuels; as an industry, we need to step up to the challenge and mitigate this impact.

GFG'S CN30 INITIATIVE BUILDS ON ITS EXISTING GREENSTEEL AND GREENALUMINIUM STRATEGIES TO BECOME THE FIRST CARBON NEUTRAL INDUSTRIAL GROUP IN THE WORLD BY 2030.

For some years, we've talked about the need for the industrialised world to put a much greater emphasis on recycling scrap, rather than churning out ever more primary steel and aluminium. We can do this using renewable energy, with an eye for power-saving efficiencies.

But the reality is that as developing nations industrialise and the middle classes expand, the need for foundation materials will continue to grow rapidly and GREENSTEEL and GREENALUMINIUM will not be enough. The need for metals tends to track GDP and by 2050, demand is expected to be double the level of 2012 globally. That same year, the Paris Agreement on Climate Change requires nations to reach net zero emissions. Clearly this is a conflict and fundamental change is needed.

We know we need to do more. That means making major investments in alternative energy - for example, GFG's Cultana solar farm in Australia will offset 492,000 tonnes of carbon dioxide annually; the use of Lochaber hydro plant in Scotland makes our nearby aluminium smelter one of the greenest in the world.

We cannot stop there. We need a breakthrough to make new steel and aluminium without carbon. A future vision of hydrogen-powered steel-making has been viewed in the past as too technically and economically challenging. But the technology has moved on by leaps and bounds and it is now possible to envisage a medium-term future in which steel can be produced using the most abundant chemical substance in the universe.

Rather than the traditional use of natural gas or coal, it is now proven that hydrogen can be used to reduce iron ore to iron which is then melted in electric arc furnaces on its own or combined with steel scrap to make primary steel. The by-product from reducing iron ore with hydrogen is H_2O rather than CO_2.

With all this in mind, the GFG Alliance recently announced our ambition to become carbon neutral by 2030. This does not mean that we will have no emissions, or indeed that we will abandon traditional practices overnight. Experience has taught us that only a mixed model can work – transitioning blast furnaces which we will replace with electric arc furnaces over time, investing in new electric arc furnaces, and piloting new clean technologies. The GFG sites around the world are already working to reduce transport emissions, cut electricity use, minimise waste, replace fresh water with grey water usage and invest in sustainable energy generation.

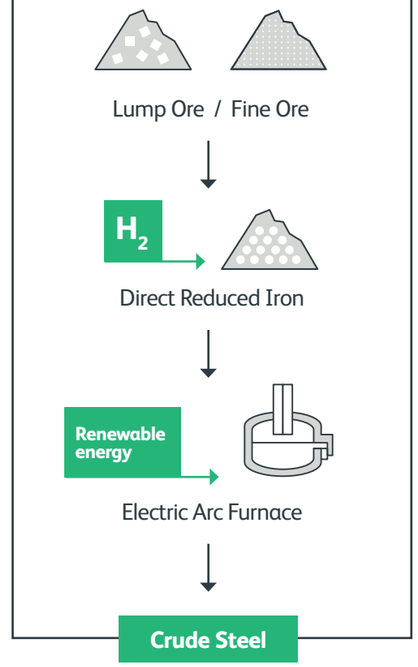
It will, though, mean strategic long-term thinking. And it presents an opportunity for a change in mindset.

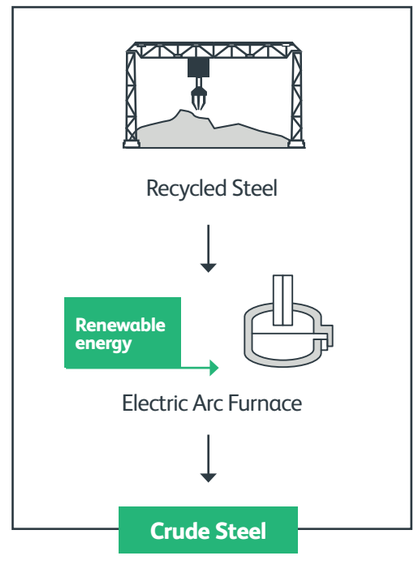
Over the last half a century, western nations have shown a willingness to give up on what they view as "dirty" manufacturing far too easily – adopting a shoulder-shrugging, laissez faire approach which consigns people and communities to the scrapheap at the first sign of a cyclical downturn. Across Europe, industry is a sad shadow of its former self, in need of new ideas and inspiration for a revival. It's time to view de-carbonisation not as a problem but as an opportunity to rethink, re-tool and get ahead of the game globally.

Our industry offers relatively high wages for skilled jobs and has a high multiplier effect – each job supports six or seven more in the wider economy. It is vital to growth in regions of countries – often remote from national capitals – that will otherwise struggle. And producing a critical mass of base material is essential to the security and self-sufficiency of any country.

A sound industrial strategy must take in de-carbonisation. In partnership with Government, customers and suppliers, the GFG Alliance intends to lead the charge to a newer, cleaner way of producing steel and aluminium.

Carbon Neutral alternatives of steel production from raw materials and recycled steel





**Simplified steel making representation for, illustration only*

LIBERTY Steel Group

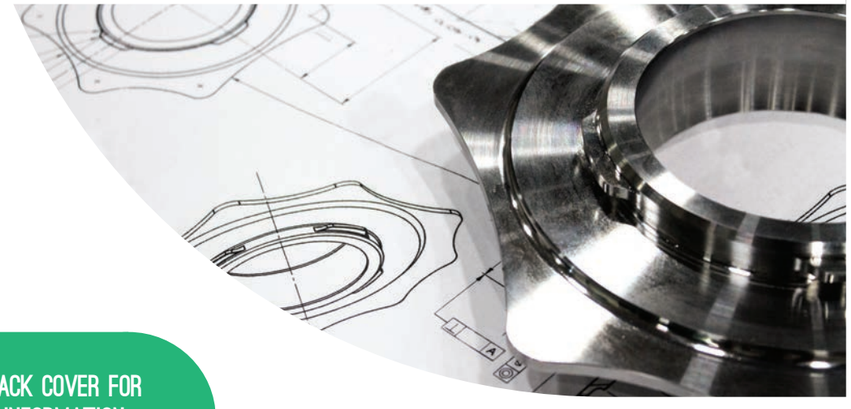
LIBERTY Steel Group, the largest component of the GFG Alliance, is an international steel business with an integrated offering, ranging from the production of liquid steel made from raw and recycled materials through to the manufacturing of high value engineered steels and associated services.

With a total rolling capacity in excess of 18 million tonnes, it is the 8th largest global steel producer outside of China. It operates from 200+ manufacturing locations across 10 countries and employs 30,000 people. Its furnaces, mills, service centres and distribution sites serve sectors such as infrastructure & construction, oil & gas, renewable energy, aerospace & automotive, and yellow & white goods.

The LIBERTY Steel Group carbon neutral 2030 strategy will encompass a balanced model, rather than a one-size-fits-all approach. We will transition our blast furnaces to electric arc furnaces (EAFs) over time, invest in new EAFs and explore the use of hydrogen for primary steel making. It will aim to tackle emissions at its sites by exploring current and new technologies such as Direct Reduced Iron using hydrogen, carbon capture and storage, and various forms of renewable energy. These initiatives will build on LIBERTY Steel Group's existing GREENSTEEL strategy of using electric arc furnaces powered by renewable energy to recycle scrap metal.

As a responsible business, the legacy LIBERTY passes on to future generations is every bit as important as the bottom line. The group aims not just to produce top-quality steel but to be an agent of change in the industry. It believes in playing an active part in reducing global CO_2 emissions, and that small individual actions can lead to big results across the businesses.

LIBERTY Steel Group is structured as four global divisions – LIBERTY Primary Steel, LIBERTY Mining, LIBERTY GREENSTEEL, and LIBERTY Steel Products & Distribution. As well as a division, GREENSTEEL encompasses our vision and our approach for sustainable steel production, reflected in our ambition to achieve carbon neutrality by 2030.



SEE BACK COVER FOR MORE INFORMATION ABOUT GREENSTEEL

Major manufacturing operations in

10

countries

c.30,000

employees worldwide

200

global production locations

18M

tonnes steel product capacity

ALVANCE

ALVANCE Aluminium Group

ALVANCE Aluminium Group is the newly formed aluminium enterprise, part of the GFG Alliance, which brings together assets across the aluminium supply chain – from raw materials through to finished components.

Taking advantage of the exponential growth in the use of aluminium in a host of consumer goods and industries – from packaging all the way to vehicles and transportation and other Engineered products – the Alliance is seeking to further integrate its ownership through the supply chain in the next few years to drive synergies and profitability.

With a total current capacity of 332,000 tonnes of primary aluminium produced per annum, ALVANCE owns and operates Europe's largest Aluminium smelter situated in Dunkerque, France, as well as the only smelter in the United Kingdom – ALVANCE British Aluminium. Powered entirely by sustainable hydro energy, ALVANCE British Aluminium is also one of the greenest sites for primary production internationally.

ALVANCE's downstream portfolio includes France's only manufacturer of aluminium wheels – ALVANCE Wheels Chateauroux; and engine cast component producers ALVANCE Aluminium Technologies (Poitou) and ALVANCE Cast Products (Poitou).

As one of the most recyclable metals in use today, aluminium is increasingly being produced through the use of renewable energy and the introduction of new technologies and recycling methods. It was therefore a natural step for GFG Alliance's Chairman Sanjeev Gupta to announce recently the extension of the CN30 initiative to the ALVANCE brand and aluminium production. The business sees this as a key opportunity to grow its interests but also expand profitability in a sustainable and environmentally conscious manner.

Over
100 YEARS
of aluminium expertise

c.1,700+
employees worldwide

Owns
EUROPE'S LARGEST SMELTER
and the UK's only smelter

332,000
tonnes of primary aluminium smelted
(2019)

SIMEC

SIMEC Energy

SIMEC Energy is an emerging global leader in renewable energy. It plays a critical role as an enabler of GFG's vision for the creation of sustainable industrial ecosystems through its growing portfolio of renewable energy assets.

By means of acquisitions and new developments, SIMEC is steadily building up its renewable energy portfolio in the UK and has set a target to become the country's largest green power generator by 2021 with 1-Gigawatt of capacity. Existing and pending developments include hydro, wind, biodiesel, marine, waste-to-energy and other energy technologies. Some of the business' most recent renewable energy projects include: the under-construction £158 million Glenshero wind farm in the Scottish Highlands, which will generate up to 168 megawatts of energy when complete; the significant upgrade of SIMEC's hydropower generation capabilities which will see the business' contribution to the local grid rise to 27.5 MW; a recent investment in SIMEC Atlantis Energy, an AIM listed entity with innovative technologies developed for generating tidal power of up to of 1000MW; the ground-breaking conversion of coal-fueled Uskmouth Power Station to end-of-waste pellets which is set to contribute up to 290MW to National Grid in 2021; and many others.

In Australia, the company has now also embarked on an extensive A$1.45 billion programme of renewable energy capacity and investment to create a 1-Gigawatt portfolio of generation, initially in South Australia, where power is at a premium and then expand across the country. GFG's A$170 Pumped Hydro Project, for example, will be developed at the Iron Duchess North Pit and will have an installed capacity of 90MW with energy storage of 390MWh. At the same time, SIMEC Energy has also committed A$707 to a 280MW photovoltaic (PV) solar project being constructed near Whyalla in South Australia. When completed, the scheme will produce 1Gigawatt of renewable energy, which will offset 492,000 tons of carbon dioxide from the atmosphere.

KEY PROJECTS INCLUDE

Cultana Solar Farm

- Largest solar farm in Australia
- 1 Gigawatt capacity
- 1,100 hectares in size
- 780,000 solar panels

Glenshero Windfarm

- Largest subsidy free windfarm in the UK
- 168MW capacity
- 3,700 hectares in size
- 39 turbines

Uskmouth Power Station

- First coal powered station converted to energy-from-waste
- Up to 290MW capacity
- 900,000 tonnes of waste-derived fuel
- 1,500 gigawatt-hours of energy pa

GREENSTEEL Strategy

A sustainable future for steel

GREENSTEEL aims to recycle and upcycle the growing amount of scrap steel globally, using electric arc furnaces powered by renewable energy. Raw materials and resources are secured locally to make world-class products that serve local markets. High grade engineered steel and alloys from the process feed engineering operations that make advanced components for demanding sectors such as aerospace, automotive, marine, off-road and defence.

GREENSTEEL provides a more flexible and customer focused solution while also reducing the carbon footprint, shortening the supply chain, retaining and upgrading skills, stimulating new technologies and engendering a sustainable and globally competitive steel manufacturing sector.

For further information visit
www.gfgalliance.com

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Planting trees to catch carbon

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