

WORLDWIDE

ASR GROUP CLIMATE ACTION ROADMAP 2022



FOREWORD

Climate change is the greatest challenge our planet, people and our business face. It also presents a unique and inspiring opportunity to make the world a cleaner, greener place.

ASR Group is in a unique position to help in this mission; sugarcane is one of the most efficient plants at converting sunlight to food and energy, and the sugarcane we grind in our mills not only provides the food we make but also supplies the water for the milling process and the fiber we use as a renewable fuel to cleanly power the milling operation.

We have a duty to protect both our natural assets, and the diverse communities that farm, mill and refine cane sugar all over the world. We have committed to only purchase 100% sustainably sourced raw sugar for our Sidul and Redpath refineries; a commitment we will expand upon in the coming years, and in this document we explain how we will transform our business to a net zero operation by 2050, if not sooner.

Our transition will be led by our Chief Sustainability Officer under the direction of the Executive Team and Board of Directors, and will be science-based and transparent. We want to achieve our ambition as fast as possible, and so we will work with external partners to accelerate the pace and scale of decarbonization.

Our value chain and sustainability journey is complex. While we own and are directly responsible for much of our emissions, an important percentage of our emissions lies within the direct influence of third-party suppliers. Suppliers who are often also the most vulnerable in our supply chain to the effects of climate change. We will work together to help them transition and adapt as well.

We have already reduced our own scope 1 & 2 emissions by 20%, vs a 2012 baseline, by improving operational efficiency and transitioning more of our energy mix to renewables. We are confident we will be able to achieve a 50% reduction by 2030 by continuing

our current work and through the application of known technologies.

As we work toward net zero, we expect to transition fully to emerging non-emitting technologies and fuels.

As with any global business, different parts of our organization will lead and follow based on the economic, legislative and regulatory environment of their respective geographies, but the overall ambition for the company remains the same: to go as far and as fast as we can to achieve our goal.

Leading this work is both a great honor and great responsibility: it will be the legacy of our company for generations to come, and it will change the way people and planet benefit from our industry forever.

Yours sincerely,



Luis Fernandez
Co-President

Antonio Contreras
Co-President

**“...WE WILL
TRANSFORM OUR
BUSINESS TO A NET
ZERO OPERATION BY
2050...”**

OUR SUSTAINABILITY PLAN

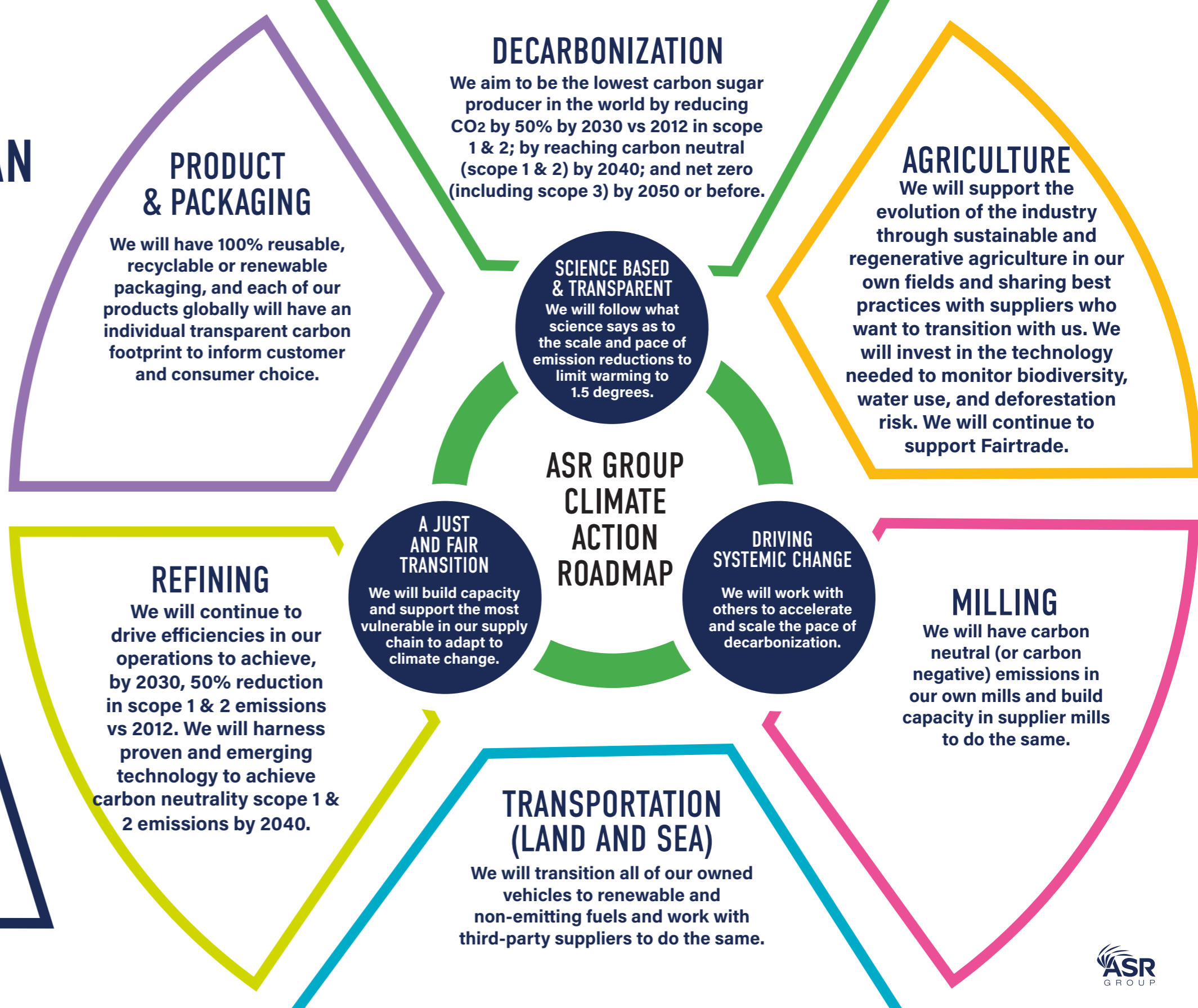
We are the largest cane sugar refiner in the world. We want our people, the planet, and our business to thrive for generations to come, which means we will strive to become the most sustainable sugar company.

We believe that, when sustainably farmed, milled and refined, sugarcane has the power to improve the environment, prosper diverse communities, play an important role in supplying renewable energy and bring joy to food and drink for all.

This is our plan to transform our business into the world's most ethical and sustainable cane sugar company.

WHERE IS THE CARBON IN OUR VALUE CHAIN ?

- Agriculture & milling (Scope 1, 2, 3) = c.52%
- Refineries (Scope 1 & 2) = c.32%
- Transportation (Scope 1, 2, 3) = c.16%
- Product use & packaging (Scope 3) = under assessment



DECARBONIZATION



DECARBONIZATION

To play our part in limiting global warming to 1.5°C or below, we must reach net zero global emissions by 2050 at the latest.

We believe we are in a strong position to do this by 2040 in our scope 1 & 2 emissions (earlier in some sites), and are committed to building capacity and supporting our suppliers to reduce scope 3 emissions by 2050.

We aim to be the lowest carbon sugar company in the world.



ASR Group will reduce scope 1 & 2 emissions by 50% by 2030 vs 2012. ASR Group will be carbon neutral scope 1 & 2 emissions by 2040.



OUR OWNED, DIRECT OPERATIONS (SCOPE 1 & 2)

ASR Group owns and operates facilities across the sugar value chain from farms to mills and refineries. Our carbon reduction program is most mature in our owned operations where we have the most influence and control. We have been measuring and reducing our impact since 2012 with significant carbon savings already made, but we are now moving into an accelerated phase with three priority workstreams.

1. Optimize best practice across ASR Group globally
2. Implement known best practice technologies where not yet in use
3. Investigate novel and scale carbon reuse, control and decarbonization technologies

THIRD PARTY OPERATIONS (SCOPE 3)

Our partners across the value chain have significant emissions: the most substantial of which are our raw sugar suppliers and freight operators.

While we do not directly control these impacts we understand we have a role to play working with our suppliers to create a wholly sustainable value chain.

It is in our work with our raw sugar suppliers that our commitment to a just and fair transition plays the biggest role. This is why collaboration and capacity building are the main focus of our approach in this area.

Many farmers in our supply chain are already experiencing negative impacts from climate change so we will also work with suppliers on mitigation strategies.

We will collaborate and build capacity to support our suppliers

- to assess emissions,
- to decarbonize,
- to mitigate the impact of climate change.

AGRICULTURE



AGRICULTURE

SUGARCANE IS INHERENTLY SUSTAINABLE

Sugarcane is a tall grass that grows in tropical countries where high levels of rainfall and abundant sunshine combine with the specific photosynthetic properties of sugarcane to provide important sustainability advantages compared to most other crops.

Sugarcane is a perennial grass belonging to the exclusive club of C4 plants that naturally absorb much higher levels of atmospheric CO2 during the growing cycle than the more common C3 plants.

The most productive C4 plants have yields and maximum growth rates 40–50% higher than the most productive C3 species.

WE ARE FARMERS

We buy raw sugar from mills all over the world that source their own cane from different types of farms; and we also farm our own sugarcane to supply our mills in Belize and Mexico.

As farmers across the world have known for generations, taking care of the land and reducing environmental impact protects resources and reduces costs long term.

On our own farms, we already go beyond standard industry best practice but we still have more to do. We are currently focusing on three key areas that will likely evolve as our understanding and practice develops.

- 1. Regenerative agriculture:**
Minimizing topsoil disturbance, keeping soils covered, maximising biodiversity, reusing crop by-products and reducing synthetic chemicals.
- 2. Optimizing raw material utilization:**
Reducing inputs or substituting with more environmentally friendly alternatives.
- 3. Energy management:**
Reducing energy usage, maximizing efficiency and recovery, deploying renewable energy sources where possible.

OUR COMMITMENTS

- We will continue to decarbonize our own agriculture operations by applying evolving best practice measures in line with international GHG protocols and NGO guidance for agricultural activities.
- We will continue to support Fairtrade and pass those benefits to smallholder cane farmers in our supply chain.
- We will continue to encourage our suppliers to build capacity and to certify their agricultural operations against internationally recognized sustainability standards.
- We will invest in the technology needed to monitor biodiversity, water use, and deforestation risk in our supply chain.

WE USE OUR LEVERAGE TO PROMOTE GOOD PRACTICE

By necessity our approach differs where we have no direct control over farming practices.

Capacity building:

The milling companies who supply us and the farmers who supply them are independent businesses that need to build their own sustainability understanding and expertise. We work with pro-active suppliers to build their capacity to transition.

Fairness in transition:

Many of our suppliers are facing the worst effects of climate change and are least able to adapt. If they are to continue to thrive we must work together to help them make the transition we are collectively responsible for. We support smallholder farmers in particular through the Fairtrade community, which requires us to make certain sourcing and financial commitments all of which go to support farmers and their communities adapt and become more resilient.

AGRICULTURE: CASE STUDIES

BUILDING THE ADAPTIVE CAPACITY OF SMALLHOLDER SUGARCANE FARMERS

A team from BSI, our mill in Belize, is helping to run a five-year initiative funded by the Green Climate Fund, accredited by the Caribbean Community Climate Change Centre. This project will focus on reducing the vulnerability of Belize's agriculture sector to climate change. The aim is to expand the capacity of the sugarcane variety development program to produce varieties resistant to droughts, floods and climate-induced pests and diseases.

In Mexico, a partnership with The Hershey Company is training smallholders in improved harvesting techniques that result in improved mill efficiency and better returns to farmers.



FLORIDA CRYSTALS' PRECISION AGRICULTURE PROGRAM

Florida Crystals Corporation (FCC) is a major supplier to Domino Sugar in the United States. Precision Agriculture programs, choreographed from their Agricultural Center of Excellence, have dramatically increased the efficiency of their agricultural operations by utilizing technology coupled with extensive data analysis to increase output, reduce use of resources and lower their carbon footprint. Satellite mapping, enhanced field preparation, GPS guidance and correlation of production data with the field data and cane varieties have increased efficiency in the way FCC farms.

MILLING



MILLING NET NEUTRAL

In most sugar mills, including our own, the cane fiber (bagasse) is used as a biofuel, providing all the energy needed for the milling process. Many mills also export excess green energy to the local grid. Most cane mills are already net neutral; some are even carbon negative.

This circular model means that the milling process has a very low carbon impact.

Sugar mills are located close to cane farms to crush the cane grass when it is freshly cut to maximize the nutrient extraction from the plant. This proximity helps to reduce the impact of transportation.



OUR COMMITMENTS

- We encourage all our suppliers to certify their agricultural operations against internationally recognized sustainability standards.
- We will invest in the technology needed to monitor biodiversity, water use, and deforestation risk in our supply chain.
- We will continue to embed evolving environmental impact into our raw sugar purchasing decisions.

OUR THIRD PARTY MILLERS ARE KEY TO OUR SUCCESS

In our supply chain, the miller is usually the convener for cane supply and thus our millers have an important role in driving change in agriculture as well as the mill.

We, therefore, focus on promoting to these important stakeholders the importance of continuous improvement to assure positive environmental, social and economic impacts, in addition to improving the circular capacity of those mills.

Certification:
We encourage and support all of our suppliers to become certified under one of our recognized standards organizations: Bonsucro, Proterra, SAI-FSA and Fairtrade.

Each of these organizations prohibit deforestation, protect biodiversity, and set internationally recognized standards in climate smart agriculture: this provides us with third-party measurement, validation and accountability in our supply chain.

Data:
We are collecting more data on the impact of different models of cane farming. In particular, we are looking at changes in land use to help us understand its true impact and improve practices.

CONTINUOUS IMPROVEMENT

Our own milling operations are included in the ASR Group commitment to achieve net zero emissions by 2050.

Although the carbon impact of our mills is already very low, we continue to seek ways to reduce carbon use. Our Belize and Mexico mills supply green electricity to the national grid, and we are focused on optimizing mill performance to deliver even more green energy into the regional energy mix.

MILLING: CASE STUDY CIRCULAR ECONOMY

Florida Crystals Corporation (FCC) is a major supplier to Domino Sugar in the United States. FCC's mill, refinery and other operations are largely powered by energy from sugarcane fiber (called bagasse). This is the traditional way of providing power to sugarcane mills, but not all bagasse power plants are on this scale.

FCC owns and operates one of the largest biomass cogeneration power plants in North America. It has the capacity to produce more than 1 million pounds of steam per hour and more than 100MW of electricity. The plant provides the steam and electricity needed to run FCC's Okeelanta mill, refinery and distribution center operations. It is also capable of exporting significant amounts of power to the Florida grid. The close integration between power plant and mill enables efficiency rates of 65-70% during the crop (the range of a typical power plant is 35-45%).



REFINING



REFINING

LONG-STANDING COMMITMENT

During the refining process, raw sugar is filtered through a high energy process to remove impurities before it is made into the wide variety of sugars and syrups we sell to the market.

While we have measured and reduced carbon emissions since 2012, we will now do so at an accelerated pace.

To become the lowest carbon sugar refiner in the world, we have committed to reduce our emissions to carbon neutral by 2040 at the latest. Different parts of organization will deliver this ambitious goal more quickly than others based on the local context but our intention is fixed - to go as far and as fast as possible.



OUR COMMITMENTS

- We will reduce scope 1 & 2 CO₂ emissions by 50% by 2030 by improving the energy efficiency of our processes and changing our energy mix.
- We will reach carbon neutrality in our scope 1 & 2 emissions by 2040 by transitioning to renewable power and embracing emerging decarbonization technologies.
- We will continue to map our carbon footprint up and downstream within our supply chain to accurately measure and benchmark our scope 3 impact and determine our products' full life cycle.

FAR-REACHING AMBITION

We are currently investing in ambitious operational efficiency and renewable energy programs to reach our goals. These efforts are broadly split in to three workstreams.

1. Continuous improvement and relentless efficiency: we are optimizing and upgrading our refining technology and processes to maximize efficiency today while making sure we are ready for the emerging technologies of tomorrow.

2. Proven technology: we are currently identifying the technical pathway to decarbonize each of our refineries to achieve our 2030, 2040 and 2050 goals. We have significantly increased our ability

to use renewable energy within our facilities, and we are investing in large capital programs to implement known technology as we research and investigate emerging technologies.

3. Emerging Technology: we are developing and testing emerging technology at our plants to understand how we will apply them in the future. Solutions might include electrification of manufacturing processes; carbon capture and utilization; industrial ecology (finding opportunities to put waste heat from our operations to productive use); and hydrogen as a fuel.

REFINING: CASE STUDY

PARTNERSHIPS IN YONKERS AND LONDON ARE MOVING THE DIAL ON OUR CARBON FOOTPRINT

All of the Yonkers Refinery's electricity is produced through cogeneration, which means our purchased electricity is very small for the size of the refinery; but, we rely on natural gas to power our refineries, and the demand for gas in northeastern US cities like Yonkers has become so high, especially during winter months, that it has outpaced the capacity of the utility's infrastructure.

ASR Group partnered with Con Edison, which supplies natural gas to our Yonkers Refinery, to become part of New York's \$2 billion energy efficiency plan to reduce the use of natural gas statewide over the next five years.

As a large facility, we can really move the needle in the reduction program. This was demonstrated in a pilot project to eliminate direct steam used in one step of the refinery's white sugar production. The project was a success, and its savings of 250,000 therms of natural gas per year, or 2% of the refinery's energy use, was verified by Con Edison. This innovation will eliminate greenhouse gases (GHG) equivalent to removing 286 cars from the road each year.

Building on this success and acknowledging the future savings that could be achieved by the refinery, Con Edison invited us to join their Strategic Energy Partnership to serve

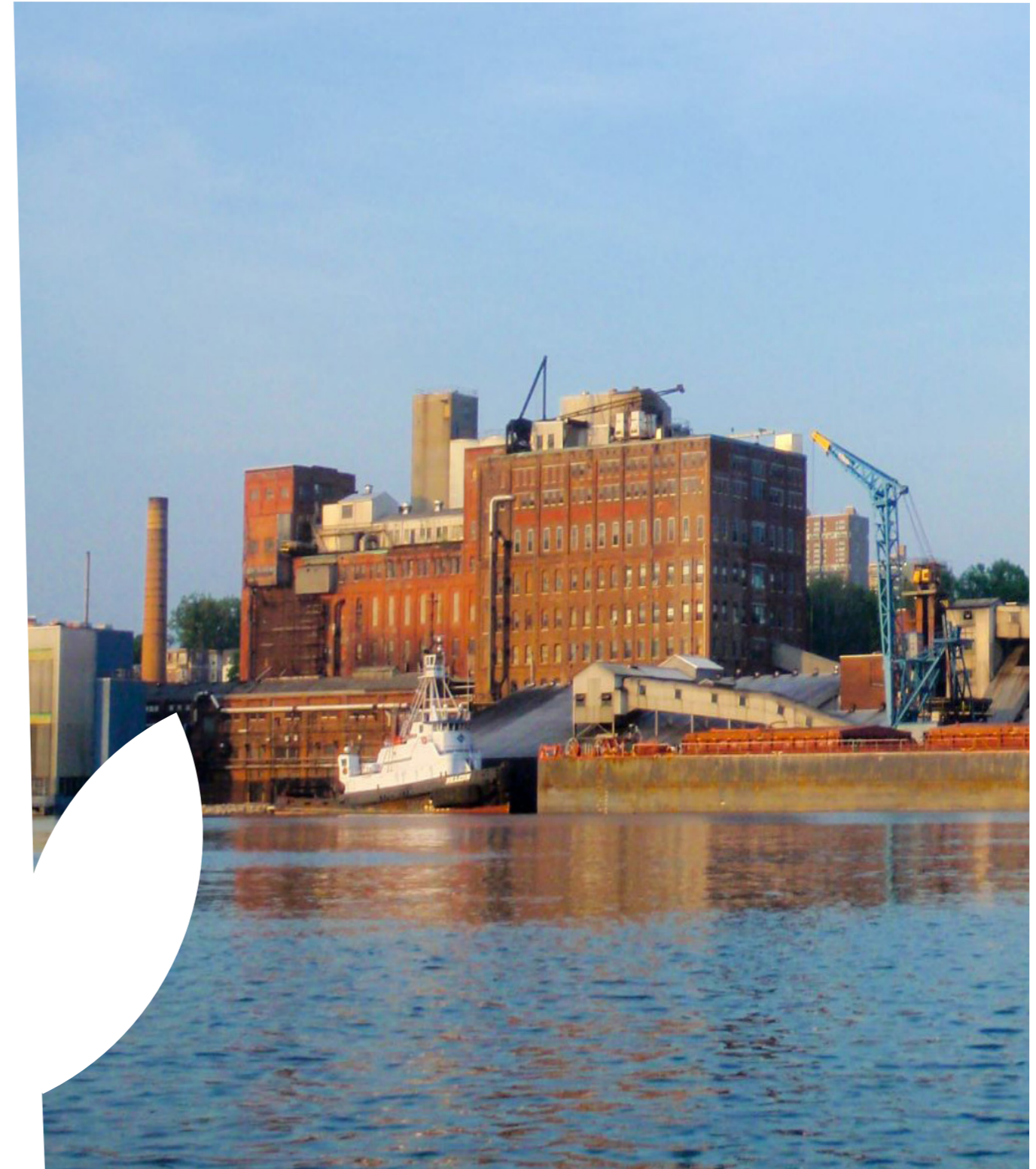
as a road map for a series of future energy efficiency projects.

Our next project aims to utilize modern heat exchangers and condensers to achieve an additional 9% energy reduction, or 1.3 million therms. That's the equivalent of carbon sequestered by 9,000 acres of forests in one year.

Several future projects are already taking shape as part of the new energy reduction partnership.

Tate & Lyle Sugars in London partnered with several innovative companies developing best in class technologies suited to smaller applications like our UK factories and hundreds of others like them here in the UK. We were pleased to receive several grants from the UK Government's Industrial Energy Transformation Fund and are working closely with the UK Department for Business, Energy & Industrial Strategy.

The project will also consider the potential application of the technology to international shipping through retrofitting to bulk carriers.



TRANSPORTATION



TRANSPORTATION

AN IMPORTANT PRIORITY

Most commonly sugarcane is transported the short distance from the cane farms to mills in trucks; and raw sugar is then transported from the mills to our refineries globally in bulk ocean going ships. Finally, we deliver our finished products to customers in trucks and tankers. The majority of our transportation emissions are scope 3.



OUR COMMITMENTS

- We will reduce emissions from road logistics by 10% by 2025 vs 2012, while quantifying network net CO2e emissions in coordination with service providers to set future objectives.
- We will develop a plan to quantify our third party logistics network CO2e emissions by end 2022 & reduce CO2e emissions from third party providers by 5% from baseline by 2025.
- We will choose the most environmentally friendly ships and where possible increase the cargo size of the vessels we charter.

ACCELERATING THE JOURNEY TO DECARBONIZE OUR TRANSPORT

We are working to quantify and benchmark the GHG emissions from all modes of transport in our supply chain to reduce miles travelled and choose the lowest carbon methods of transportation. This includes action taken not only in the pathways leading to our operations, but the path our finish goods take to their end-user.

Routing efficiency: continuously optimizing routing and logistics operations to improve efficiency and reduce miles. Activities include reducing secondary moves of product, optimizing ordering processes and maximizing direct shipping from our manufacturing

operations.

Low carbon vehicles: we will support our logistics providers to transition to low carbon, including electric and hydrogen powered fleets.

Marine decarbonization: we are measuring CO2 impact of each marine cargo in order to optimize our shipping to reduce shipping distances.

We target use of the most efficient vessels and will seek opportunities to support action by our partners to further decarbonize marine logistics through deployment of novel fuels and technology.

TRANSPORTATION: CASE STUDY

DRIVE FOR DATA

In 2021, we joined SmartWay, an initiative run by the US Environmental Protection Agency that helps companies advance supply chain sustainability by measuring, benchmarking, and improving road freight transportation efficiency.

Shipping is an important part of our supply chain. We support the ambitions of the international shipping community and the International Maritime Organisation to cut annual greenhouse gas emissions from international shipping by at least half by 2050, compared with 2008, with a shorter term goal to reduce the carbon intensity of international shipping by at least 40% by 2030.

In June 2021, IMO adopted key short-term measures to further support the strategy and goals. These measures combine technical and operational approaches to improve the energy efficiency of ships.



PRODUCT & PACKAGING



PRODUCT & PACKAGING

RETAIL PACKAGING ALREADY 90% RECYCLABLE OR RENEWABLE

Packaging keeps our products safe for transportation and consumption while helping us reduce food waste: Currently, 90% of our retail packaging is in widely recyclable or renewable materials, and we are working hard to reach 100% recycled or renewable retail packaging by 2025.

In terms of our product: different types of sugar have different carbon footprints due to the varied refining processes we are able to use. We are actively encouraging manufacturing customers to switch to our lower carbon sugars and syrups where technically possible to help them lower their product-by-product footprint today.



OUR COMMITMENTS

- 100% of our retail packaging will be will be recyclable or renewable by 2025.
- We will continuously reduce packaging material use where feasible.
- We will work with customers to provide data on the carbon intensity of different sugar specifications
- We will continue to develop our lower carbon product range

MEASURING AND SHARING OUR CARBON FOOTPRINT

We are in the process of developing a system to measure, validate and disclose our full farm-to-gate footprint for each product from each refinery. We intend to disclose that detail in full when it is available and validated.

We have three current priorities:

1. Optimizing product specification
We are helping customers choose lower carbon ingredients for manufacturing and have implemented a web-based data acquisition and reporting system to ensure our work complies with international standards that can be third-party validated.

2. Circular sustainable packaging
We working to eliminate all non-recyclable packaging.

We use sustainable paper packaging for the majority of our packaging and are working to eliminate all non-recyclable packaging from our supply chain. We are also working to maximize the use of recycled materials in our recyclable packaging while understanding how best to help consumers recycle their packaging at end-of-life.

3. Customer climate engagement
We are working with our customers to help them understand the carbon footprint of our products and our journey to net zero.



PRODUCT & PACKAGING: CASE STUDY

93% of the packaging for ASR Group is already recyclable and we continue to seek the right solutions for the remainder. A recent success was the switch from a plastic sleeve label to a paper label on a Lyle's Golden Syrup bottle for the retail sales channel. The previous label wasn't recyclable and was applied by using heat to shrink the label in place. The new paper label requires less energy to apply and means the bottle is now fully recyclable by household curbside collection.

The plastic film used for retail brown sugar bags is a more difficult challenge; while most white sugars are sold in paper, the moisture content of brown sugars means plastic is the most practical packaging solution. In looking for more environmentally friendly alternatives, regulations governing materials in contact with food can restrict options. Also while some materials are technically recyclable, there are few curbside schemes that actually achieve this in practice. The company is working hard with suppliers to make the right decision for the environment and its consumers.



100% SUSTAINABLE SUGAR* AT OUR SIDUL REFINERY ACHIEVED 2020

100% SUSTAINABLE SUGAR* AT OUR REDPATH REFINERY ACHIEVED 2021.

WE AIM TO ACHIEVE THIS GOAL AT TATE & LYLE SUGARS BY 2025 AND ACROSS OUR US REFINERIES AS SOON AS WE CAN.

APPENDIX



CORPORATE

OUR APPROACH

Oversight for our climate agenda is led by our chief sustainability officer under the direction of the Executive Team and Board of Directors. Our governance mechanisms ensure regular monitoring and reporting of our progress to net zero.

OUR FUTURE PLANS

We will ensure that decarbonization is integrated into decision making, investment, compensation and company culture.

INTERNAL CARBON PRICING

We use an internal carbon price to ensure that our decisions adequately account for carbon impact. This is considered in conjunction with any legislative costs under carbon taxation or cap & trade systems.

TRANSPARENT REPORTING

We are committed to transparent reporting of our progress. We report to the CDP (formally Carbon Disclosure Project), and submit to corporate level EcoVadis evaluations.

SUPPORTING SYSTEM CHANGE

We engage widely to support decarbonization of the food system.

Our engagement includes:

- Working with standard setters
- Collaborative programs with suppliers to measure carbon emissions
- Supporting the Fairtrade movement
- Engaging on carbon accounting standards
- Research and development to identify new solutions and approaches to decarbonizing

GLOSSARY OF TERMS

GREENHOUSE GAS (GHG)

Greenhouse gases (GHGs) is a term which refers to gases that trap heat in the atmosphere and contribute to the warming of the planet. They are often expressed as CO₂e (carbon dioxide equivalent) in terms of their GHG impact levels over time using CO₂ as a reference.

SCOPE 1,2,3

The Greenhouse Gas Protocol standard is commonly used to categorize an organization's GHG emissions into 3 groups or "scopes": scope 1 - Direct Emissions; scope 2 - Indirect Emissions (electricity, heating/cooling and steam); scope 3 - Indirect Emissions (all other).

CARBON NEUTRAL

Emissions from activities are balanced globally by removals. Typically refers to only to Scope 1 and Scope 2; allows for use of offsets.

NET ZERO

Similar meaning to carbon neutral but includes Scope 3; generally allows for use of offsets only to address residual emissions.

SCIENCE-BASED TARGETS INITIATIVE (SBTI)

The Science-Based Target initiative, provides a common framework and tools for companies to set science-based net zero targets and limit global temperature rise above pre-industrial levels to 1.5 °C.

*ASR GROUP 100% SUSTAINABLE SUGAR COMMITMENT

Where we make this claim, we mean that our raw sugar suppliers are either

- certified against an internationally recognized sustainability standard such as Bonsucro, Proterra, SAI-FSA or Fairtrade, or
- the raw sugar is produced at a mill which has been verified in accordance with the ASR Group due diligence process. This means the mill and a sample of the supplying farms have been subject to a third party audit within three years.

Where we buy verified sugar for a refinery making the 100% sustainable sugar claim, we will match the verified sugar with an equivalent volume of Bonsucro credits. Our purchase of Bonsucro credits supports improvement of sugarcane production through impact programs.

To find out more about the standards we use please see the following websites:

- www.bonsucro.com
- www.proterrafoundation.org
- www.saiplatform.org/fsa/
- www.fairtrade.net



THANK YOU

Visit: www.asr-group.com

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