



ASR GROUP 2018  
SUSTAINABILITY REPORT





# EXECUTIVE SUMMARY

## ACCOMPLISHMENTS

At ASR Group, we support the communities and environment we depend upon every day for the success of our business. We aim to create tangible value for our stakeholders and our business through our companywide platform for identifying new opportunities, reducing and managing risks, and lowering our costs.

Fiscal Year 2018 (FY18) has been a year of significant development for our work on Corporate Social Responsibility and Operational Sustainability. This year, we undertook our first materiality assessment, allowing us to better understand our stakeholders' interests and help focus our reporting and strategy on the issues that matter most to our stakeholders and our business.

## AMBITIONS

Going forward, we know there is still more to do. In this report, we've expanded the scope of our reporting to look at natural resource management and the packaging of our sugar. As our activities in these important areas develop, we expect to increase our reporting on our progress in subsequent reports.

We also know that we need to underpin our ambition with targets. Having set our Operational Sustainability targets in last year's report, we're pleased to build on these ambitions as you can see on the chart at right.

### Some of our highlights from the past year include:

**58.1%** of sugar that arrived in our refineries globally was assessed against one of our CSR verification tools.

**77%** of sugar suppliers completed the SEDEX self-assessment tool, helping us better understand their social and environmental performance.

In **Belize**, working with partners Hershey's and Fairtrade, our livelihoods projects have helped more than 5,000 cane farmers and their local communities.

Our Belize sugar mill **gained** ProTerra certification.

We paid more than **\$3.7 million** (USD) in Fairtrade Premiums to Fairtrade certified Small Producer Organizations.

We've seen a 15% **decrease** in potable water consumed and a 22% decrease in net Scope 1 & 2 carbon emissions since FY12.

**39%** of our net energy production was derived from renewable energy sources.

### We're pleased to build on these ambitions by committing to:

**100%** of suppliers are participating in SEDEX by the end of FY25.

**70%** of our sugar from mills certified or verified to a recognized sustainability standard over a three-year period by the end of FY25.

**Resolving** 30% of a preceding year's audited non-compliances within our supply chain.

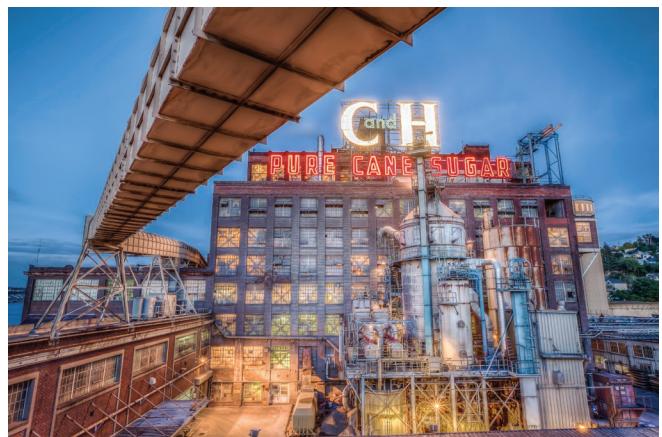
**Increasing** source transparency by providing information to the mill level for our supply chain.

**Creating** in FY20 a cross-functional team to comprehensively map our supply chain with a view to quantifying our Scope 3 influence the following year.

Reviewing and **enhancing** our sugar-sourcing standards, developing additional programs to support livelihoods in Belize, Mexico, and the Philippines, and increasing our purchasing and involvement with Fairtrade efforts.

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# LETTER FROM OUR CO-PRESIDENTS

Everything we do, from our farms to the products we sell, is crafted with respect for our planet, our employees, our communities and our customers.

At ASR Group, we understand and embrace the responsibility that comes with our market position.

As a global leader in the supply of cane sugar products and sweetener solutions, we have a significant opportunity to help drive sustainable improvements not only within our own global operations but also within our customers' supply chains. Our customers are increasingly turning to suppliers such as us to help them reach their goals.

We own the responsibility to drive change.

With that in mind, we expanded our sustainability programming to proactively seek feedback from external stakeholders, including our customers, to find out how we can do better.

Transparency is at the heart of a resilient sustainability program, and that starts with an open dialogue.

Our ambitions are set on being at the forefront of our industry – actively leading – a company that recognizes there are issues we need to solve and are trying to do something positive about them.

We will be part of the solution.

We also recognize ambitions are not enough. We have set goals for each discipline, and are measuring and tracking success against those targets. As we get better, we are also examining our previous goals to set the bar higher to continually strengthen our performance.

Our mandate as leaders of this company is to be top of the totem pole on CSR and sustainability.



Luis Fernandez  
Co-President



Antonio L. Contreras  
Co-President

**"Our ambitions are set on being at the forefront of our industry – actively leading – a company that recognizes there are issues we need to solve and are trying to do something positive about them."**

# ABOUT ASR GROUP

## CORPORATE OVERVIEW AND BRANDS

ASR Group is jointly owned by Florida Crystals Corporation and Sugar Cane Growers Cooperative of Florida, two Florida-based agricultural companies that collectively farm sugarcane on 285,000 acres of land in South Florida and produce raw and refined sugar.

ASR Group is the world's largest cane sugar refining company. Though owned by Florida Crystals and Sugar Cane Growers Cooperative, ASR Group is maintained as a separate legal entity, and this report is restricted to the business of ASR Group.

The company's brand portfolio includes:

- Florida Crystals®
- Domino®
- C&H®
- Redpath®
- Tate & Lyle®
- Lyle's®
- Sidul®
- Notadolce®



## OUR HISTORY AT A GLANCE

**1998**, Florida Crystals and Sugar Cane Growers Cooperative partnered to acquire Refined Sugars, Inc., with a cane sugar refinery in Yonkers, NY.

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**2005**, the company expanded to the West Coast with the acquisition of C&H Sugar Co. The strategic move enhanced the company's competitiveness coast to coast. The purchase of C&H added another sugar refinery and the leading sugar brand on the West coast.

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**2010**, we acquired Tate & Lyle PLC's European cane sugar operations, the leading cane sugar refiner in the EU. The acquisition of its refineries in London, England, and Lisbon, Portugal, increased the company's total refining capacity to 6.5 million tons per year. The acquisition also included the right to use of the distinguished Tate & Lyle® brand in connection with the sale of sugar, the Lyle's Golden Syrup factory in Plaistow, England, and the Lyle's® brand.

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**2013**, the company expanded into the Italian market by acquiring 50 percent ownership of SRB S.p.A. with a cane sugar refinery in southern Italy.

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**2001**, Domino Sugar was acquired with three cane sugar refineries and the nation's leading sugar brand, Domino®. The company became American Sugar Refining, Inc.

**2006**, the company added Chr. Hansen's specialty division. Hansen added to our offering of specialty sweetener products, including molasses, malt, rice syrup, oat extract, honey, and invert and fondant sugars, with production facilities in Louisiana and Illinois.

**2007**, to solidify our strategy to become the premier sugar producer and supplier in North America, we expanded our operations to Canada and Mexico. First came the acquisition of Redpath Sugar in Toronto, Canada, then the company acquired Ingenio San Nicolas in Veracruz, Mexico.

**2012**, the company announced its entrance into Central America with the acquisition of a majority of the shares of Belize Sugar Industries, Ltd., a supplier of Fairtrade cane sugar.

Following more than a decade of growth, in 2013, we introduced our new corporate brand name – ASR Group - under which our leading brands and affiliated companies would collectively present one face to employees, customers, business partners and others around the world.

# OUR VALUE CHAIN

1

## Farming

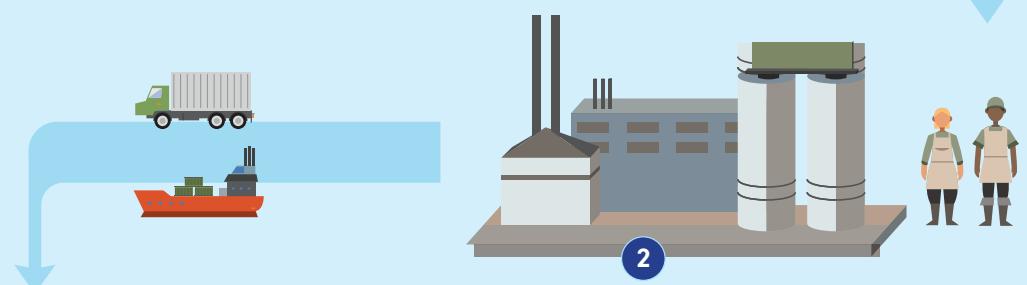
Sugar starts with farmers who grow sugarcane, which they deliver to a local mill for processing. Sugarcane is a tall grass, which grows in tropical and sub-tropical climates. It takes 12 months for it to mature to harvest and is grown by small-holders, conglomerate farming groups or large estate farms. Operations may be managed by independent farms or may be owned by the mills that process the cane.



2

## Milling

The first stage of processing is the mill. Mills are located close to the cane farms to process the cane while it is fresh. Mills process sugarcane into raw sugar for refining. If properly equipped, a mill may further process the raw, non-food grade material into varied types of direct consumption sugars.



3

## Refining

Our refineries in the USA, Canada, the UK, Portugal and Italy receive raw sugar from our own mills as well as third-party mills. In the refining process, large quantities of raw sugar are processed to remove impurities and color to produce a range of refined sugars.



4

## Packaging

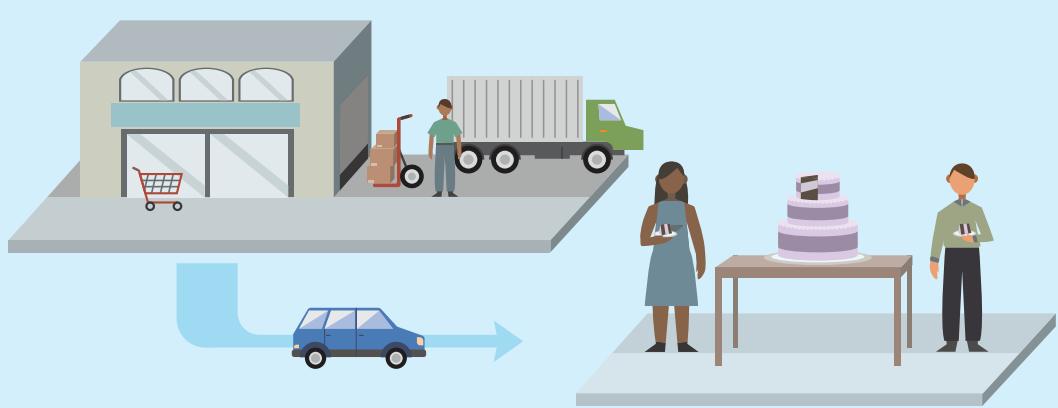
Products are packaged and shipped to both industrial and retail customers.



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## Transportation and Logistics

A range of vehicles, including trucks, railcars, barges, and ships, transport our sugar between operations.



# OUR CORPORATE SOCIAL RESPONSIBILITY APPROACH



FIGURE 2: "ASR Group values and principles drive our daily actions"

## OUR VALUES

At ASR Group, Corporate Social Responsibility (CSR) and Operational Sustainability are key business platforms that contribute to our global growth and help us manage our actions in a lawful and ethical manner.

We pledge to comply with and enforce our Code of Ethics and Business Conduct, as well as our Ethical Sourcing Policy (ESP) and Supplier Code of Conduct. These documents can be found on our website: <https://www.asr-group.com/documentdownload>, and are developed from a strong integration of our Core Values.

ASR Group is committed to understanding the health, safety, environmental, labor, and human rights issues associated with our supply chains. We strive to uphold our core values and ethical principles wherever we operate. We also expect all stakeholders in our supply chain to respect fundamental human rights and the environment where they operate.

As the leading global cane sugar refiner, we take our social responsibilities very seriously. Sustainability of our products and supply chain is one of our core values. This belief drives our efforts to continually strengthen our global CSR work to support the thousands of associates around the world in our supply chain and contribute to our success.

Our Values and Principles are more than just words; they are the basis for how we conduct business. Our Values shape our culture and how we work with our associates, customers, suppliers and the community, and our Principles guide our daily actions and are how we demonstrate our Values. Corporate Social Responsibility is one of the four core Values and Principles of our strategy, which apply to both our own operations and third-party suppliers – working together is an essential part of this.



**We must impress our values not only on those business units we own and control, but also on those we source from.**

To expand upon the Social Responsibility Value, our approach, which is discussed in detail in the subsequent sections, is achieved in different ways. We must impress our values not only on those business units we own and control, but also on those we source from. We seek to ensure our supply chain adheres to the highest standards of environmental, social and governance standards.

To succeed in this goal, we instituted levels of self-assurance auditing, as well as supplier-engagement auditing. Audits help us monitor progress in these areas, identify where non-conformity exists and work with our stakeholders to rectify them. If an issue exists within our owned-business units, the nonconformity is to be addressed through policy revision, training, and continuous improvement. Our policies are clear; ASR Group is responsible for doing business ethically. This is an expectation we hold of all our associates, which is monitored and reported to the company's Executive Committee and Board of Directors.



# GOVERNANCE & STAKEHOLDER ENGAGEMENT

## GOVERNANCE

ASR Group is a privately owned organization. The company is led by two co-Presidents, who seek counsel from an Executive Committee and answer to a Board of Directors. The Executive Committee is composed of all key departmental and regional business leaders within the company.

## GOVERNANCE INCLUDING OVERSIGHT AND ACCOUNTABILITY

CSR and Sustainability fall under the responsibility of the Legal and Operations departments, respectively. The Vice President & General Counsel oversees the CSR department, and the Senior Vice President Operations does the same for the Sustainability department before the Executive Committee and Board of Directors. Matters related to CSR and Sustainability are discussed at the Executive Committee and Board of Directors meetings when necessary, but at least an annual briefing is held.

The co-Presidents, with the aid of their senior leadership team, execute strategic planning and decision-making in line with the corporation's established mission and values and in keeping with the vision instituted by the Board of Directors.

## ASR Group Board of Directors



Antonio L. Contreras



Luis Fernandez



Jose Alvarez



Pepe Fanjul, Jr.



Robert Underbrink



Armando Tabernilla

Rick Blomqvist

## BUSINESS ETHICS

ASR Group has always been dedicated to conducting business in a lawful and ethical manner in all of our operations. For this reason, we maintain a Code of Ethics and Business Conduct. This can be viewed on our website - <https://www.asr-group.com/documentdownload>. The Code applies to employees, officers and directors of ASR Group, as well as our contract personnel, persons that we hire as our agents and our suppliers.

By working for ASR Group, we each agree to carefully follow the Code and its principles in all our business dealings. In so doing, we uphold the commitments we have made to our key stakeholders – our customers, suppliers, fellow employees and neighbors as well as applicable government agencies, our lenders and our stockholders.

## Stakeholder Engagement

ASR Group interacts with a wide range of stakeholder groups – from employees to customers and NGOs, to local and international community groups. We define stakeholders as those who affect and/or are affected by our business operations. Our stakeholders hold us accountable, help us understand and overcome barriers to progress, identify opportunities for improvement and create and share CSR and sustainability best practices.

TABLE 1: External Stakeholder Engagement

External Stakeholder Groups	ASR Group Engagement
Customers	Ongoing relationships, partnership projects and other CSR related activities
Social Certification Standard organizations	Interaction and participation in regular meetings, provide feedback and attendance at standards' annual conferences
NGOs	Certification schemes, partnership remediation programs, and other consulting and training related activities
International Financial Institutions (IFIs)	Partnerships in socio-economic development programs, including Climate Smart Agriculture
Communities	Partnerships in socio-economic development programs, including Climate Smart Agriculture Annual activities, including school funding, projects to prevent impact on the environment, food banks and other community activities. Remediation programs – prevention/eradication of child/forced labor, alternative livelihoods to working in the sugarcane industry and best agricultural management practices: soil management, pesticides, cane varieties, and others

We use input from our stakeholders to inform our approach. In 2018, we conducted a GRI-based materiality assessment. During this process, employees, business partners, suppliers, community groups and major NGOs were interviewed to determine our priority issues. We are using the findings of the materiality assessment to prioritize our CSR and Sustainability programs. We will repeat the materiality exercise with some frequency (likely every five years) to ensure we continue to focus on the most pressing issues for our business and our stakeholders.



# MATERIALITY

We design our sustainability strategy and reporting to focus on the areas that are most significant to our business and to our stakeholders. During 2018, we conducted a materiality assessment with the support of SustainAbility Limited, an independent consultancy that specializes in corporate sustainability. With their help, we brought together internal and external stakeholders -- including millers, farmers and NGOs from three selected key sourcing regions, and customers -- to develop risk profiles, challenge our assumptions and share best practices to develop our goals.

To conduct the materiality assessment, SustainAbility created a comprehensive list of issues for evaluation based upon internal documents, internal and external stakeholder interviews, peer reviews and desk research. These issues were then assessed by SustainAbility and ASR Group for their importance to stakeholders and their business impact through further study, stakeholder engagement and working sessions to finalize the ranking of issues. The scope did not include the impact of our products on end users.

The image below illustrates the output from this consultation. The position of each issue on the chart reflects stakeholder interest and potential business impact for ASR Group.

## Materiality Matrix

This matrix plots business impact scores against stakeholder interest scores for each material issue.

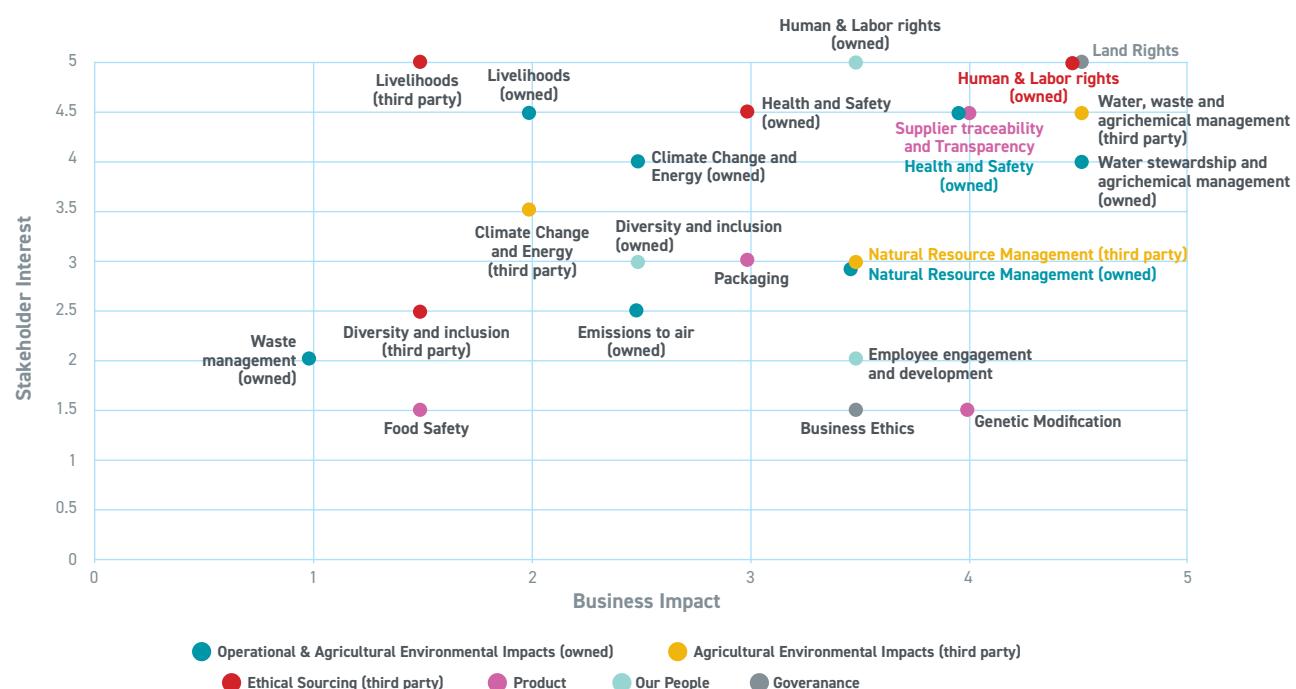


FIGURE 3: Materiality Matrix



FIGURE 4: Materiality Assesment - Priority Themes

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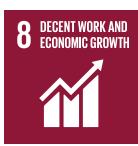
When ASR Group adopted its CSR and Sustainability programs, we knew that we were doing more than just putting words on paper; we were integrating our social responsibilities as a core value of the organization. ASR Group is committed to a set of standards that impact every aspect of our business – our own operations; our suppliers, including our raw sugar supply chain; every product we produce; every location where we conduct business around the globe; and every stakeholder.

The level of control and influence we have differs between our own operations and third-party suppliers. We support the United Nations' Guiding Principles on Business and Human Rights, which sets out the expectation that companies like ours have a responsibility to use our influence and best endeavors to ensure human rights are respected throughout our supply chain. We work to ensure that the sugar we buy is produced and delivered under conditions that uphold fundamental human rights, minimize negative impacts on the environment and improve the well-being of farmers, including smallholders and women.

Our programs contribute to several principles of the [United Nations Sustainable Development Goals \(UN SDGs\)](#). The applicable goals and the associated target are:

TABLE 2: UN SDG Contributions

	2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.	2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
	5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels	
	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.	
	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	



8.7 Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms

8.8 Protect Labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment



10.4 Adopt policies, especially fiscal, wage, and social protection policies, and progressively achieve greater equality.



12.2 By 2030, achieve the sustainable management and efficient use of natural resources.

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.



15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements.

To ensure we are properly addressing each, the Operations department, through the Corporate Sustainability Director, has oversight of the company-owned production facilities. The Corporate Social Responsibility department, via the Vice President of Corporate Social Responsibility, addresses the ethical sourcing of all material within the raw sugar supply chain.

In 2018, our CSR and Sustainability departments persisted with its strategy based on circular economics, continuous improvement and pursuit of excellence. Additionally, we embraced new challenges to raise the bar, continue to address our customers' requirements and improve the living conditions of communities where we operate.

At ASR Group, we possess the ability to create new value and make a positive impact by changing our business and the cane sugar industry itself. Because our company is part of a circular economy, we can create a sustainable future and ensure the cane sugar industry realizes its full potential as a force for positive change. Our businesses are built on a foundation of sugarcane – one of the most efficient plants at converting sunlight to food and energy. That means the sugarcane we grind in our sugar 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.

## THE CIRCULAR ECONOMY

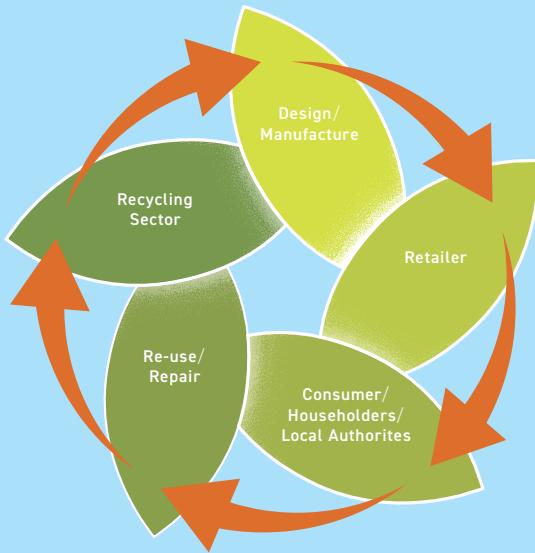


FIGURE 5: Circular Economy Diagram

We support the United Nations' Guiding Principles on Business and Human Rights and the expectation that companies like ours have a responsibility to use our leverage to ensure human rights are respected throughout our supply chain. This principle is reflected in legislation, such as the UK Modern Slavery Act and the U.S. Tariff Act to which different parts of our operations are subject.

A copy of our UK business unit's annual Modern Slavery Act Transparency progress statement ("MSATS") can be found at <https://www.tateandlylesugars.com/modern-slavery-act>

For any company that operates internationally, CSR and Sustainability are journeys that begin with a question: "What kind of global organization do we want to be?" At ASR Group, the answer starts with the kind of company we already are. CSR is a fundamental business platform, an essential part of our core values. It is an area where we want to continue to take a leadership role within the sugarcane industry by applying innovative, socially responsible best practices and delivering forward-looking sustainable products and solutions.

For us, CSR and Sustainability come down to a promise – to create tangible value by providing a company-wide platform for identifying new opportunities, reducing and managing risks and lowering our costs. In that context, we view an ethical supply chain both as a competitive advantage and as a chance to enhance the sugarcane industry's sustainable business model.

Of course, we understand that what matters on this front isn't what we say; it's really what we do. On our own and in collaboration with others, we're focusing on doing what matters most and addressing things we can control and influence to produce our products in a socially responsible and sustainable manner, as well as focusing on employee and community engagement.



# ETHICAL SOURCING

## Our Approach

Sourcing raw cane sugar for refining is at the heart of our business. We purchase raw sugar from suppliers around the world; from countries with tropical and subtropical climates with high levels of rainfall. Many of the sugar-producing countries from which we buy are developing countries. Such countries tend to have some challenges in common, such as widespread poverty, low education levels and little or no social support for vulnerable people. The sugar industry in the countries that supply us are often the backbone of the local communities and play a significant role in the local economies. We recognize that buying from sugar-producing companies in developing countries brings specific risks and responsibilities.

## CSR Performance

As indicated in the chart below, we are working toward our targets and have seen progress in suppliers participating in SEDEX, third-party assurance auditing (including ProTerra audits), resolution of identified non-conformities and transparency in our supply chain. In addition, during FY18, ASR Group piloted training sessions focused on prevention and eradication of child and forced labor for the workforce of three of our entities -- Tate & Lyle Sugars, Belize Sugar Industries and Ingenio San Nicolas -- as well as for industry stakeholders. The training was completed by members of the ILO and other expert independent third-party organizations with high levels of expertise in those issues. Key results from our CSR program during FY18 include:

- + **100% of suppliers signed our Ethical Sourcing Policy (ESP)**
- + **A total of 29 third-party social audits of mills, estates and outgrowers were completed**
- + **58.1% of sugar that arrived in our refineries globally was assessed against one of our CSR verification tools (physical audits and/or SEDEX – Self-Assessment Questionnaire (SAQ))**
- + **77% of sugar suppliers completed the SEDEX self-assessment tool. To improve our understanding of the environmental and social risks and opportunities in our supply chain, we are aiming for 100% of our sugar suppliers to participate in SEDEX.**
- + **One of our own operations achieved a social certification: Belize Sugar Industries was certified by ProTerra**
- + **Our livelihood projects in Belize helped more than 5,000 cane farmers and their local communities.**
- + **ASR Group paid more than US\$3.7 million in Fairtrade Premiums to Fairtrade-certified Small Producer Organizations (SPOs). We describe some of the projects funded with this money later in the report.**

In addition to providing us with assurance that our supply chain is conducting business in a legal, ethical and humane manner, our social-auditing program also generates insight into the highest impact and risk within our raw sugar supply chain. This allows us to define and focus our remediation efforts accordingly.

## Sourcing Geographies – Transparency and Traceability

ASR Group sources raw cane sugar from more than 40 countries around the world. U.S. raw sugar supply is regulated by the U.S. Department of Agriculture (USDA) under a tariff-rate quota (TRQ) program, and European Union (EU) raw sugar supply is regulated by the Common Agricultural Policy. These rules effectively determine what countries we are able to source from for our U.S. and EU operations.

A list of supplying countries in FY18 is included [Table \[3\]](#), with a graphic depiction of their locations in [Figure \[6\]](#).

As part of ASR Group's overall CSR/Sustainability commitment, we report our efforts via select web-based platforms, including EcoVadis, The Sustainability Consortium's Survey tools and the Carbon Disclosure Project (CDP). Such web-based collaborative platforms allow us to assess the environmental and social performance of our operations and those of our global suppliers.

The complexity of the supply chain currently restricts our reporting down to the country of origin and mill level. However, we are committed to developing a consistent approach to transparency and traceability across ASR Group through engaging customers and the supply chain. This will enable us to provide more in-depth information on the traceability of our raw sugar supply chain each year and help meet evolving stakeholder demands



FIGURE 6: Raw Sugar Sourcing Origins in FY2018



TABLE 3: FY2018 Sugar Sourcing Origins

ORIGIN	DESTINATION	ORIGIN	DESTINATION	ORIGIN	DESTINATION	ORIGIN	DESTINATION
Australia	U.S.	Fiji	EU	Malawi	U.S.	Philippines	U.S.
Belize	U.S./EU	Guatemala	U.S./EU	Mauritius	EU	Reunion	EU
Brazil	U.S./EU/CAN	Guadeloupe	EU	Mexico	U.S.	South Africa	U.S./EU
Costa Rica	U.S./EU	Guyana	EU	Mozambique	U.S./EU	Swaziland	U.S./EU
Colombia	EU	Honduras	U.S./EU	Nicaragua	U.S./EU	Thailand	U.S.
Dominican Republic	U.S.	India	U.S.	Paraguay	U.S./EU	Zimbabwe	U.S./EU
El Salvador	U.S./EU	Jamaica	U.S./EU	Peru	U.S.		

Key: United States (U.S.); Canada (CAN); and European Union (EU)

## Our Ethical Sourcing Process

**Objective:** 70% of our raw sugar will be sourced from mills certified or verified to a recognized sustainability standard over a three-year period by the end of FY25.

**Achievement:**

- + 77% of mill participation in SEDEX
- + 35% of sugar supply is audited on 3-year rolling basis

ASR Group adopted its ethical sourcing program, focused primarily on our sugar supply chain, five years ago. Adherence to our Ethical Sourcing Policy (ESP), Supplier Code of Conduct and Code of Ethics and Business Conduct within our raw sugar supply chain is monitored through a four-step approach:

1. All suppliers are required to agree to adhere to our Ethical Sourcing Policy. The ESP is based on the International Labor Organizations' (ILO) conventions as well as other internationally recognized standards and covers issues such as the prohibition of child and slave labor, land use, and environment impacts; The policy can be seen here: ASR Group Ethical Sourcing policy – (<https://www.asr-group.com/documentdownload>);
2. Suppliers are asked to complete a self-assessment questionnaire of their compliance with our Ethical Sourcing Policy on the SEDEX platform. This forms the first stage of our risk assessment. SEDEX is a not-for-profit membership organization that offers an electronic system for collecting and analyzing information on ethical and responsible business practices in supply chains (<http://www.sedexglobal.com>);
3. On a rolling basis, suppliers participate in an independent sustainability third-party audit against an internationally recognized social and environmental standard, ProTerra. The ProTerra standard addresses the main challenges linked to the production of agricultural products in the developing world, such as the rights and needs of small land holders and local communities, protection of workers' health and freedoms, and the protection of the environment (<http://proterrafoundation.org/>). ASR Group also accepts other comparable social and environmental certification standards in lieu of ProTerra, such as Bonsucro. Over the next three years, our intention is that mills accounting for 100% of our raw sugar supply are audited.
4. Suppliers found to be non-compliant with verification audit criteria submit a Corrective Action Plan with a timeline for remediation.

## Remediation and support

**Objective:** 30% of a preceding year's audited non-compliances within our supply chain resolved.

- ⊕ A social-verification audit on its own does not improve working conditions. An audit is a snapshot of working conditions at that moment in time. At the end of each audit, we inform the raw sugar supplier of any opportunities for improvement and ask the supplier's management to examine the root cause, develop a preventative action plan and assign a team responsible for implementing each area of improvement within a specified timeframe.
- ⊕ Our program is based on continuous improvement with ongoing feedback and follow-up communication with suppliers to ensure remediation is active and implemented in a timely manner. Where there are challenges, we work with our suppliers to find solutions using in-house and third-party expertise such as the Inter-American Development Bank, Fairtrade Foundation and Fundacion Solidaridad. We have engaged in different CSR partnership programs with customers with the common objective of achieving an outstanding sustainable supply chain.
- ⊕ As part of our efforts to improve conditions and build resilience in our supply chain, we will be rolling out programs in Belize, the Philippines and Mexico over the next three years. The programs intend to promote agricultural best management practices, prevent and eradicate forced and child labor, foster the usage of adequate personal protective equipment, and provide training on health and safety, affordable finance and alternative livelihood support.
- ⊕ We continue to work with The Hershey Company in Belize through the Cane Quality Program (see story to the right in the orange inset box). The project is aimed at improving the cane quality, sugar yields and farmer well-being in northern Belize by modernizing reaping groups' harvesting plans. This will be accomplished by using technical criteria and funding modern technology.
- ⊕ Furthermore, we will start a new partnership in the Philippines with Nestle and Proforest aimed at improving working conditions of smallholders in the sugarcane industry. The program includes prevention of child labor, importance of wearing adequate personal protective equipment, agricultural best management practices, affordable finance and alternative livelihood support. We expect it will have an impact on more than 2,500 smallholders. As these programs establish themselves, we will publish more information on the impacts they have achieved.
- ⊕ In addition, our long-established commitment to Fairtrade certification helps ensure better livelihoods for the sugarcane farmers and their dependents in several origins in our supply chain.

## NEW PRE-HARVEST FIELD CANE QUALITY

Launched as a three-year project in late 2017, this project offers technical assistance and training to a sample test group of harvesting group leaders. The program is focused on how to select the sweetest and most mature sugarcane for harvesting through cane sampling and analysis. With these more technically advanced tools, farmers can make better harvesting plans, which will help improve sugar yields for the entire sugar industry. During the launch, six test groups from all three farmers associations in Belize signed up for participation for the first round of pre-harvest cane quality testing during the 2017-2018 crop season. ASR Group again collaborated with The Hershey Company, which subsequently awarded US\$300,000 to the project for the three years. Our Belize Sugar Industries' (BSI) counterpart contribution is geared toward technical expertise and cane analysis at its Spectracane Laboratory and the Belize Sugar Cane Production Committee (SCPC) is contributing field and lab personnel as well as the use of the newly established Near Infrared Laboratory (NIR).



## Advocacy

The sustainability of the cane sugar industry can only be ensured if the systems and institutions that help manage the industry are also committed to the same goal. To that end, we have been working with Trade Houses that purchase and sell sugar to incorporate sustainability requirements into their purchasing decisions. Also, our work with and commitment to international financial institutions, such as the Inter-American Development Bank and others, have continued. New projects related to Climate Smart Agriculture and renewable energy are ongoing targets to provide low-income rural communities in developing countries with an opportunity to participate and be impacted through a sustainable livelihood.

## Certification

We describe our ethical sourcing process as a verification system, because we use independent auditors to assess suppliers' operations against a recognized standard. In addition to the verification process, we also participate in the following certification programs.

**Bonsucro:** Bonsucro is a global multi-stakeholder, non-for-profit initiative dedicated to reducing the environmental and social impacts of sugarcane production while recognizing the need for economic viability. Bonsucro's mission is to achieve a sugarcane sector that is continuously improving and verified as sustainable by acting collaboratively within the industry and working to continually improve the three pillars of sustainability: economic, social and environmental viability.

**ProTerra:** The ProTerra Standard for Social Responsibility and Environmental Sustainability is based on the Basel Criteria on Responsible Agriculture, published in 2005. The ProTerra Standard aims to foster ethical social standards, agricultural best practices, the protection of high conservation value areas, the environment and biodiversity in general, and rural workers as well as communities by linking production and demand of non-GMO commodities in full traceability.

**Fairtrade:** Fairtrade is a certification system that allows us to sell Fairtrade-certified sugar and generate value for the cane farmers who participate in the program. We know that ensuring our sugar is Fairtrade certified not only meets evolving consumer demands, but also helps to ensure better livelihoods for the sugarcane farmers and their dependents in our supply chain.

All the cane farmers in Belize and many cane farmers in Jamaica, Swaziland and Paraguay are members of Fairtrade-certified Small Producer Organizations (SPOs). To benefit from Fairtrade, the SPOs and their members must comply with the Fairtrade Standard, which ensures that they run their SPOs and their farms sustainably, ethically, transparently and democratically. Fairtrade certified organizations are audited every year to verify compliance. Certified producer groups are eligible to receive Fairtrade premium on sales of their sugar on Fairtrade terms. They then vote at the General Assembly how best to invest these funds in sustainable farming and projects to benefit producers, workers, their families and communities.

## Environmental impacts

We recognize that our Scope 3 influence includes the greenhouse gas emission from third-party activities, as well as secondary and tertiary impacts caused by water use and discharge, waste generation, land management practices, biodiversity and on-farm chemical use. Our third-party independent supplier audits currently focus on compliance with regulations and international standards. The scope does not include enough detail to provide the intensity of emission rates, water usage, or other factors, which would be needed to assess the lifecycle impact of our products. In FY20, a cross-functional team will be created to comprehensively map the company supply chain, with the goal of quantifying our Scope 3 influence the following year.

## Land Rights

ASR Group's policy is to respect the land rights of all local and indigenous people and communities and the process of free, prior and informed consent for any agricultural development on land such individuals or communities legally own or possess. ASR Group believes that land rights disputes should be resolved through a balanced and transparent dispute-resolution process. ASR Group requires that its suppliers also abide by the land-rights policy in their respective supply chain.

During the FY18 audit program, auditors identified no land disputes nor cases where land use interfered with the agricultural production systems of neighbors.

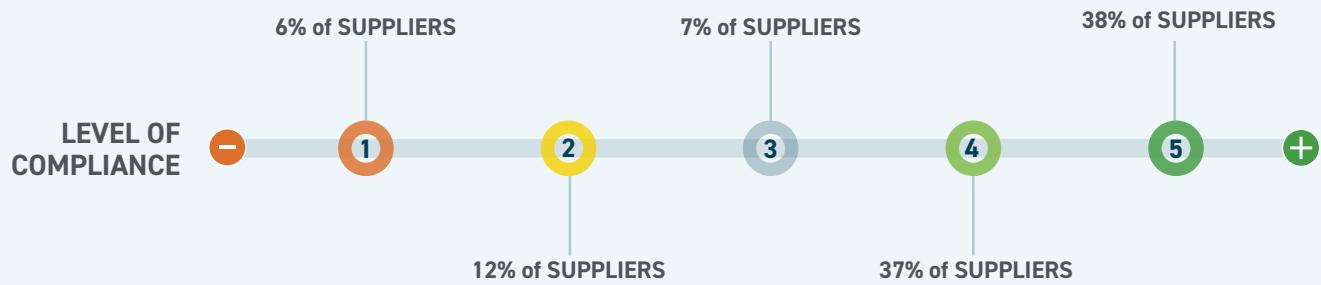
## Our CSR Commitments and Future Priorities

We are committed to continuous improvement in our supply chain CSR performance. As such, for the first time since ASR Group began publishing a Sustainability Report, we are announcing the following targets, which we will update annually. We may amend and/or introduce new targets as our program develops.

TABLE 4: CSR Objectives

Commitment	Plans for the next financial year
100% of suppliers to participate in SEDEX	We will be communicating with our suppliers the need to participate in SEDEX
70% of our sugar from mills certified or verified to a recognized sustainability standard over a three-year period by end of FY25	We are expanding our audit program to ensure we reach this target.
30% of a preceding year's audited non-compliances within our supply chain resolved	We are improving the robustness of our audit follow-up measures to ensure non-compliance incidents are rectified
Increase source transparency; provide information to the mill for our supply chain by end FY 25.	We will continue to explore enhancement of traceability of our supply chain

## RAW SUGAR SUPPLIERS SCALE



\* % indicates total number of suppliers that fall under each of the different levels of compliance.

\*\* 1–5 scale represents overall degree of compliance concerning critical risk factors.

FIGURE 7: Raw Sugar Suppliers Scale

## Future Priorities

For FY19, the CSR program includes the Bonsucro certification of one of our own mills, Ingenio San Nicolas, in Mexico. By setting the example with our owned assets, we expect our audits of supplier mills will be better received. Once obtained, this certification will be maintained by Operations programming going forward. Additionally, we will also seek to review and enhance our sugar-sourcing standards, develop additional programs to support livelihoods in Belize, Mexico and the Philippines, and we will continue our commitment to Fairtrade.





“We have to be realistic. What we need right now are activities and projects which will save us and help us have more money in our pockets. Under this project, I had money left and I was able to pay the college fees for my son.”

— Remijio Sanchez  
- small-sized farmer

#### INTRODUCING MECHANIZED HARVESTING TO SMALLHOLDER FARMS IN BELIZE

Belize Sugar Industries Ltd (BSI), a member of ASR Group, is implementing several projects to help improve the sustainability of the industry. For the 2016-2017 Crop Season, BSI launched a project to introduce 49 sugarcane farmers from the north, south, east and west of the sugar belt to mechanical harvesting. More than 17,000 tons of cane were mechanically harvested with an average cost saving of BZ\$6 per ton of cane for farmers.

Traditionally, the sugar industry of Belize has relied almost exclusively on manual harvesting of sugarcane. This has been a reliable system over the years, creating employment and ensuring cane delivery to the mill. However, there are a number of challenges moving forward. The labor force available for manual harvesting is decreasing and fluctuates during the crop season. In addition, the lifting of the constraints on beet sugar produc-

“One of the benefits was that I was able to harvest my fields quickly. The costs were lower when compared to other reaping groups and this helped me a lot as I was able to purchase fertilizer for my cane fields with the additional money saved under the project.”



— Francisca Mendez

- medium-sized farmer

tion in the European Union (EU) and the consequent projected drop in sugar prices requires greater efficiency and reduced production costs if farmers are to remain sustainable.

Over the years, the increase in cane cutting and delivery costs have also reduced the net income of farmers. This mechanical harvesting project allowed these farmers to respond to the shortage of manual labor, harvest their fields in large contiguous blocks, eliminate unnecessary tasks and activities and consequently reduce their harvesting and delivery costs by an average of BZ\$6 per ton of cane.

Through this model behavior change project of mechanical harvesting, BSI has been able to demonstrate the benefits of reducing harvesting and production costs through block harvesting as well as strengthen the communication bridge with farmers through engagement and direct contact with them.

# OUR OWN OPERATIONS

## Environmental Sustainability; Our Approach

We continue to work towards the 2030 objectives, which were approved last year by our Executive Committee. These are to:

- Reduce water consumption by 55%, normalized to production.
- Reduce our net Scope 1 & 2 GHG Emissions by 50%.
- Reduce our solid waste stream total, normalized to production<sup>1</sup> back to the 2012 baseline; while still pursuing and maintaining our zero waste to landfill accomplishments.

These objectives are aligned with numerous customer initiatives, as well as the "Science-Based Targets" campaign chaired by the UN Global Compact, Carbon Disclosure Project (CDP) and World Wide Fund (WWF), as well as the standards against which we verify and certify our operations (ProTerra, Bonsucro, SEDEX SMETA 4 Pillars and Fairtrade).

Each environmental media (Air, Water, and Solid Waste) will be discussed further in the subsequent sections and highlight stories will showcase individual efforts. However, the following Figure is a visual depiction of our progress from our 2012 baseline to the end of FY18.

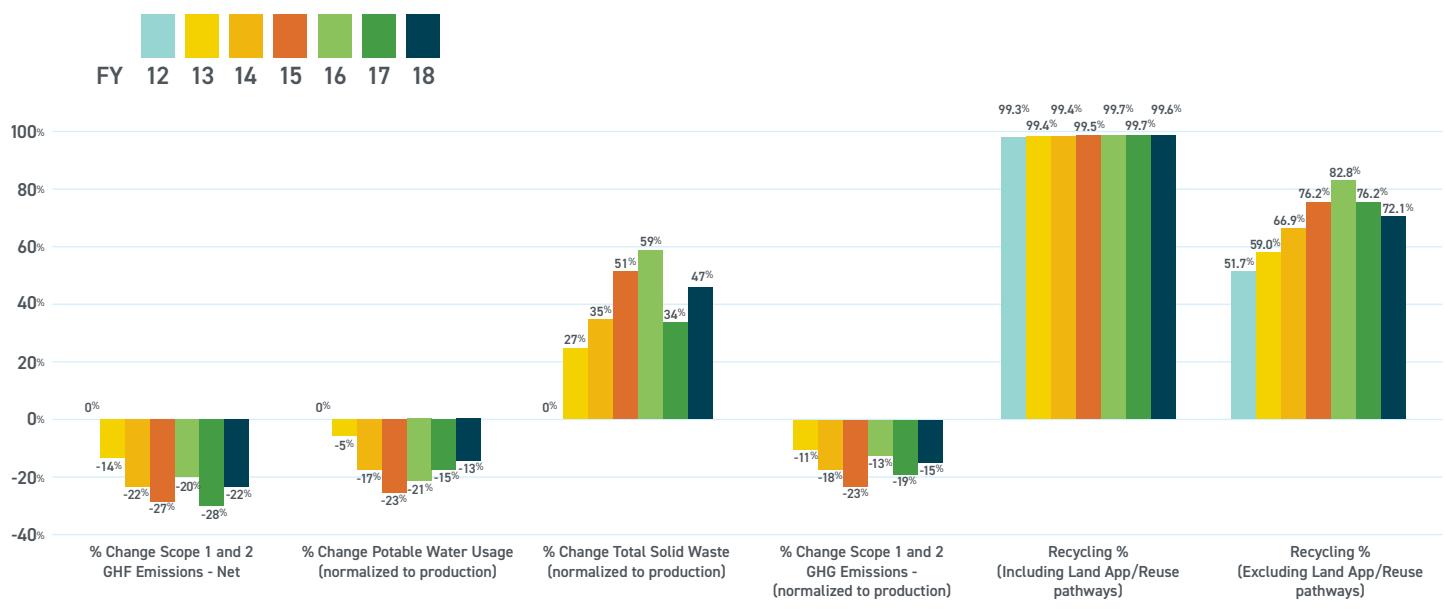


FIGURE 8: Operational Sustainability Dashboard (percentages are relative to the company 2012 baseline, with the exception of recycling numbers, which are percentages of the total)

In addition to resource-conservation efforts, and given that we own and operate a portion of our own supply, we hold ourselves to the same standard that we require from our third-party suppliers.

Engagement on the applicable audit is written into site-level Sustainability Plans. Audit results for individual locations may be requested from the Vice President of CSR.

<sup>1</sup>Excluding Land applied/beneficial reuse muds and ash



## **Operational Performance**

Throughout the year, many of our key facilities experienced significant production interruptions caused by infrastructure or maintenance issues. Production reliability was below standard at a number of our refineries, which ultimately increased parasitic energy and water consumption. In addition to production shortfalls, several infrastructure issues resulted in underground water leaks, turbine issues, compressor failures, boiler economizer issues and weather-driven pipe ruptures.

As a result, the Corporate Engineering Department has made a number of personnel and program changes and remodeled the company's capital investment programming to ensure infrastructure improvements are made. Additionally, we are reaffirming site-level maintenance plans are in place and adequately prioritized to ensure continuity of production while maintaining health and safety and minimizing our environmental impact.

The following sections will cover each of our main environmental impacts, our successes, challenges and plans going forward.

## **Water Stewardship Programming**

### **Water - Potable Water Usage**

**Objective:** By FY30, reduce potable water consumption by 55%, normalized to production.

For potable water conservation, we assess our usage against our production yield to obtain a full understanding of our accomplishments. (Refer to Figures 11 & 12 in the Annex)

#### **Achievement:**

- + At the close of FY18, ASR Group recorded a 15% decrease in potable water consumed in comparison to FY12 and project an 18% reduction through FY20.

This places us behind our desired rate of mitigation by the end of the first "three-year quarter" (FY18 – FY20) relative to our FY30 objective. However, operational sustainability programming is gaining momentum and is expected to see more activity as business units become more accustomed to publishing their management system priorities. A few of the projects currently planned for execution in FY19/20 affecting this metric include:

- + Chalmette Refinery plans to refurbish three pans and 17 centrifuge machines.
- + Crockett Refinery plans to install a vapor condensate recovery loop on their Swenson.
- + Lisbon Refinery plans to implement a sucrose loss recovery project, complete a massecuite fluidization project and place a system to permit wash water recovery and reuse.
- + Yonkers Refinery plans to install a pan liquor preheater, wash station, and brake water recovery system.

## **INVESTING TO REDUCE OUR WATER DEMAND**

Significant water-savings capital investments were completed at the Crockett and Baltimore Refineries to bring us toward our objective.

The Crockett Refinery has installed a closed-loop cooling tower for its Powerhouse to allow the refinery to switch from using once-through, or one-pass, city water to a recirculating in-house, closed-loop cooling system to cool its turbines, compressors and other machinery. The closed-loop cooling tower, which was completed in 2018, has saved the Crockett Refinery 365,000 gallons of water on non-production days. The cooling tower is the precursor to a five-phase vapor condensate recovery project that will ultimately save the refinery up to 150 million gallons of water per year. Significant water-savings capital investments were completed at the Crockett and Baltimore Refineries to bring us toward our objective.

The Baltimore Refinery has commissioned a closed-loop cooling system on the existing NASH compressors, which compress flue gas from the boilers for use in the carbonatation process. The NASH compressors were previously cooled with water from Baltimore City, which passed through the compressors and was then discharged into a surge tank, with excess city water being sent to the sewer. Rather than using once-through city water, the new system uses a tank, a non-contact cooling bay water line, and a heat exchanger. The project is saving more than 150,000 gallons of potable water per day.



## Effluent Wastewater Discharge

As a contributing metric of interest, ASR Group seeks to minimize our effluent wastewater streams. This will be a more vital metric in future reports, as we seek to quantify our Scope 3 influence. However, in the short term, monitoring this metric also gives us an idea on areas of opportunity for water-reuse effectiveness. (Refer to Figure 13 in the Annex)

### Achievement:

- + At the close of FY18, effluent water discharges reflected a reduction of 14% when compared to baseline and normalized to production.

## Climate Change, Energy and Emission to Air

### Scope 1 & 2 Greenhouse Gases

Objective: By FY30, reduce our net Scope 1 & 2 GHG emissions by 50%.

### Achievement:

- + At the close of FY18, ASR Group recorded a 22% decrease in net Scope 1 & 2 emissions in comparison to FY12. We anticipate a potential 30% reduction by the end of FY20. This places us slightly behind our intended rate of improvement by the end of the first "three-year quarter" and is contingent upon a smooth operational return to FY17's success. (Refer to Figures 14 & 15 in the Annex)

A few of the projects currently planned for execution in FY19 and FY20 affecting this metric include:

- + All U.S. and Canadian refineries, the Cleveland NRO site and the Belleville NRO site plan to upgraded to LED lighting systems.
- + Chalmette Refinery plans to refurbish three pans and 17 centrifuge machines.
- + Lisbon Refinery plans to implement a massecuite fluidization project.
- + Yonkers Refinery plans to install a pan liquor preheater, a wash station, brake water recovery system and a remelt dedicated steam line for waste heat recovery.

## Renewable Energy Programming

As a contributing metric of interest, our Mexico and Belize mills use bagasse, the pulp of the sugarcane, as a renewable energy source for combustion, while our Brindisi Refinery uses ethically sourced renewable certified palm oil for energy. Thus, in FY18, 39% of our net energy production was derived from renewable energy sources. (Refer to Figure 16 in the Annex)

Also, our facilities do not utilize all the energy produced and that we provide power to surrounding electrical grids at many of our locations.

## ADDRESSING SCOPE 2 IN CROCKETT

Though the Crockett Refinery produces most of its own energy through a relationship with the neighboring cogeneration facility, our purchased energy is worth attention in our company's efforts to reduce our net GHG emissions. Since April 2018, an exciting new partnership has been helping us do just that.

Changes in the energy regulations in California have allowed for inclusion in a local Community Choice Aggregation (CCA). A CCA is an alternative to the investor-owned utility energy supply system in which local entities aggregate the buying power of individual customers in order to secure alternative energy supply contracts. Through our participation in the CCA, we are now being provided purchased electricity from MCE Clean Energy (MCE) via Pacific Gas and Electric's supply infrastructure. Joining the CCA has helped us by reducing the Crockett Refinery's GHG emissions by 464 metric tons from April to September 2018. We anticipate continued reductions of approximately 1,000 MT of carbon dioxide equivalent (CO<sub>2</sub>e) per year going forward.

The Crockett Refinery currently participates in MCE's Light Green retail electricity program, which was determined to be composed of 87.10% carbon-free fuel sources within MCE's supply portfolio. These sources include landfill gas, geothermal, small hydroelectric, solar, wind and hydroelectric generators.

During FY18, ASR Group provided slightly more than 348,000 megawatts of electricity to surrounding community utility systems, of which more than 312,500 megawatts were from renewable sources and the remainder was from clean-burning natural gas. According to the Energy Information Administration average use estimates, that is enough energy to power roughly 29,000 U.S. homes for a year from the renewable sources alone.

## BALTIMORE REFINERY IS GROWING OYSTERS



Employees at the Baltimore Refinery are growing oysters through a partnership with the Chesapeake Bay Foundation to help clean the waters of the Patapsco River. When oysters cycle water through their gills to feed, they trap suspended sediments and chemical contaminants in the water, helping to improve water quality.

Overharvesting, disease and habitat loss over the last two centuries has reduced the Bay's oyster population. Oyster gardening is, therefore, a very effective way to help restore the health of our local waters.

In 2018, dozens of employees filled 50 wire mesh cages with an estimated 43,000 baby oysters provided by the Chesapeake Bay Foundation. The oysters spent seven months growing off one of the refinery's piers. Every few weeks, volunteers pulled the cages out of the harbor to scrub off any sediment and algae that accumulated,

ensuring that the oysters received plenty of oxygen and access to nutritious phytoplankton.

In May 2019, the oysters will be relocated to a protected oyster reef at Fort Carroll, located in the Patapsco River, where they will continue growing and filter water. Adult oysters can filter 50 gallons of water a day, which means that once our oysters are fully-grown, they will be able to filter millions of gallons of water each year. The Chesapeake Bay Foundation monitors the water quality at Fort Carroll and will be able to measure the oysters' impact.

### What's in Scope

We have only included Scope 1 and 2 emissions within this report and followed the guidelines set out in the revised edition of the "Greenhouse Gas Protocol" published by the World Business Council for Sustainable Development and the World Resources Institute (Corporate Standard Protocol). Scope 1 covers direct Greenhouse Gas (GHG) emissions from company-owned vehicles and facilities. Scope 2 includes net indirect emissions from energy imports and exports from local utility grids. Scope 3 covers the remaining indirect GHG emissions such as employee business travel by public transport, product transport by third parties, outsourcing of core activities and off-site waste disposal/management activities, and embodied emissions in raw sugar, packaging and chemicals used in processing. We are currently researching Scope 3 emission to include metrics in the near future.

### Waste Management

#### Solid Waste – Wasted Resource Minimization

**Objective:** Reduce our total process solid waste stream, normalized to production<sup>2</sup>, back to the FY12 baseline, while still pursuing and maintaining our zero-waste-to-landfill accomplishments.

#### Achievement:

+ At the close of FY18, we produced approximately 47% more total waste than we would have produced in FY12 to make the same amount of sugar. This is a 12% decrease from the highest disposal numbers experience in FY16 but remains an area of significant challenge for us. (Refer to Figures 17 & 18 in the Annex)

<sup>2</sup> Excluding land applied/ beneficial reuse muds and ash.

## Companywide Recycling & Waste

Beyond minimization, ASR Group continues its focus on zero-waste to-landfill efforts. At the close of FY18, we are reporting an all-inclusive recycling rate of 99.6%. When considering just process-related waste but excluding beneficial reuse materials for land application, we attained a 72.1% recycling rate. (Refer to Figures 19 & 20 in the Annex)

## ASR GROUP DONATES 25 ACRES OF LAND TO BELIZEAN GOVERNMENT FOR ADVANCED WASTE DISPOSAL FACILITY



A ceremony was held at our mill in Orange Walk, Belize, to recognize the donation of 25 acres of land to the Government of Belize. The land will be used for the construction of a state-of-the-art waste disposal facility that will service several local municipalities, taking in waste from those communities. The ceremony was open to the public and

was also attended by Kevin Bernard, Mayor of Orange Walk, Dr. Percival Cho, CEO of The Ministry of Environment, and Rafael Millan, Operating Officer for The Inter-American Development Bank, who all made remarks and were presented with a ceremonial land title by Cindy Castillo, Treasury & Payroll Manager.

The transfer station is part of a US\$10M project funded by the Inter-American Development Bank to strengthen the country's infrastructure and provide a safe location for the disposal of solid waste.

"This is a very important event and marks a very proud moment in Belize's history where public

and private entities have come together to collaborate for better waste management and protection of our environment and human health," according to Dr. Cho. "This gracious act on the part of ASR Group-BSI in our view goes beyond and above what we term corporate social responsibility."

"For me, it was a mutually beneficial way for us to address an environmental need and, at the same time, take an opportunity to do something for the greater good," said Sean Lichy, ASR Group's Senior Director, EHS. "The staff at BSI worked very hard to turn this idea into a reality, resulting in a very positive impact on their community and country."

## Natural Resource Management

Natural resource management is a new addition to ASR Group's sustainability report. Correlations may be drawn between this section and activities related to preserving biodiversity. Programming will be developed more fully in the coming years to identify our company vision in this regard. However, a number of individual facility efforts are already in place.

The most notable formal programming can be found in our agricultural operations in Belize. High Conservation Value plots were identified and preserved and some lower-yield plots have been (or are being) converted to forest-lands. Within BSI's program, a total of more than 2,300 hectares is dedicated to cane farming and approximately 355 hectares are dedicated to biodiversity. Within the areas dedicated to preservation, around 65 hectares are lands that have been or are being reforested. The remaining 290 hectares are protected as conservation catchment areas for wildlife and fauna along field borders and stream boundaries.

The most notable informal programming can be found in the Baltimore Refinery. Within the site, stormwater runoff much of the impervious surface area of the facility is being captured and remediated to minimize the impact on the Chesapeake Bay's aquaculture. Remediation is being handled through the installation and maintenance of bioswales, artificial wetlands, green space and trees. In addition, the facility has also begun to participate in an oyster-farming program off the existing piers located on property. For more details see the side story on page 37.

In the coming years, this section of the sustainability report will be further developed, as we institute company-wide programs and commitments around natural resource management.



Former sugarcane land reforested with cedar, neem and mahogany saplings

### Agriculture Section Development in Our Own Operations

Our farmers recognize that caring for the land is vital to ensure consistent crop yield while protecting surrounding communities. We seek to review and formalize our sustainable agriculture standards for agriculture operations in the coming year, through tools made available by certifications like Bonsucro and ProTerra. Further, we will seek to establish new objectives, where program improvements may be beneficial.

### Environmental Compliance Report

ASR Group is dedicated to identifying and meeting all environmental compliance requirements to which our facilities are subject. These requirements specifically include those established by regulations issued by federal, state, provincial and local governments, as well as municipal authorities or regional boards that govern our operational locations. Each mill and refinery has dedicated personnel responsible for environmental compliance.

In FY14, specific Key Performance Indicators (KPIs) were established for environmental compliance, which are tracked and monitored by senior management. Additionally, in FY18, we began the process of implementing an Environmental Management System that conforms to the ISO 14001 Standard. By the end of FY18, risk assessments, identifying significant environmental aspects, had been completed at more than 75% of ASR Group's operational locations. Risk assessments for all sites are anticipated to be completed by the end of the 2019 calendar year. These will be used proactively to drive compliance objectives and targets for each location.

Despite these efforts, our operations incur instances where they do falter, primarily due to a system failure. In the event of a noncompliance, all required self-reporting criteria are strictly adhered to and incident investigations, as defined in the ASR Group Continuous Improvement Process, are performed. The investigations identify the root cause and action items to help prevent a repeat of the incident. In FY18, ASR Group received 12 notices of violations globally, across all 20 business units, from governmental agencies as a result of such deviations. However, proactive corrective actions and open communication with the governing regulatory agency resulted in quick resolutions and associated monetary fines below US\$5,000.



## Sidul Refinery



The Lisbon Refinery had a 10% reduction in energy demand, a 14% reduction in water consumption and continued improvement in their waste minimization and recycling efforts.

### Lisbon Refinery Setting the Example in FY18

In addition to the projects highlighted, we are also proud to showcase a noteworthy collective accomplishment for one of our facilities this year. The Sidul Refinery in Lisbon, Portugal has risen to the top of the pack. Through the course of publishing and implementing their site Sustainability Plan, Lisbon completed several critical efforts. These actions ultimately led to a 10% reduction in energy demand and a 14% reduction in water consumption in FY18. They also continued to improve in their waste minimization and recycling efforts.

Sidul attributes its success to a number of optimizations made throughout the year, including improvements in system vaporization timing; completion of a brix or concentration controls project in dust collections systems; enhancements to the facility evaporator; conversion of portions of the facility to LED lighting; working to find and convert multiple heating points that relied on vapor or live steam; optimizing processes to preserve or reduce heat in the product streams where possible; and replacing three of their outdated fork trucks that ran on petroleum-based fuels (LNG) to high-efficiency, battery-powered units. The facility also converted to reusable silverware and plates in the cafeteria, instituted a food-waste awareness and minimization campaign and reinvigorated their efforts in recycling and diversion from landfill through training.



# OUR PRODUCTS

ASR Group formally launched a program designed to minimize the environmental impacts of the packaging materials we use. Packaging traditionally served four primary functions: Contain, Protect/Preserve, Identify/Inform, and Utility in single-use applications. It ultimately contributes to the waste stream.

The program has three areas of focus:

1. **Use Responsibly Sourced Materials:** Continue to introduce packaging made from renewable and/or recyclable materials
2. **Material Reduction:** Maximize performance with thinner, lighter and stronger materials to limit/reduce packaging use and waste.
3. **Minimize Carbon Footprint:** Optimize the inbound supply chain and leverage innovative packaging production processes where applicable to reduce CO<sub>2</sub> emissions and energy consumption.

**Objective:** Developing sustainable packaging will help us meet stakeholder demands and reduce the lifecycle impacts of our products.

## TARGETS:

### FY19

1. Material Reduction: Introduce high-performance paper targeting 600,000 lb (25%) reduction in paper consumption.
2. Introduce how2recycle® (US) and "On-Pack Recycling Label" (ORPL: UK) labeling schemes. Each labelling scheme delivers simple, consistent messaging and guidance on what components of our packing can be recycled to our consumers.

### FY20

1. Packaging Sustainability Reporting: Establish measures and metrics for responsibly sourced materials consumption by weight.
2. Material Reduction: Introduce new technologies resulting in a targeted 27% reduction in corrugate use. This target equates to an overall corrugate reduction of more than 2 million lbs for this product range.

# OUR PEOPLE

## Our Approach

ASR Group has more than 5,000 talented people working with us to grow our business and nurture our brands. We want our people to thrive and are committed to their professional and personal development and to simply ensuring that ASR Group is a great place to work.

We have a diverse workforce where the different contributions made by all employees, through the variety of their personalities, experiences and perspectives, creates a stimulating and rewarding working environment.

The Global Human Resources team coordinates employee development across all functions and all locations around the globe to ensure that our values of Integrity, Teamwork, Delighting the Customer and Social Responsibility are central to the corporate culture.

## HR Performance

We have a strong focus on developing our employees. Key initiatives included an employee development program in our Mexico and Belize operations aimed at improving skill sets and enhancing promotion opportunities. We also offer leadership training throughout the global enterprise for New Supervisors, Supervisors, Managers and Directors.

During FY18, we committed to achieving 100% participation in enhanced training on the ASR Group Code of Ethics and Business Conduct and Our Culture of Respect. These annual training requirements are an adjunct to the required monthly Environmental, Quality and Safety training for all operations employees.

We have taken steps to educate relevant personnel on the risks of modern slavery and forced labor. Modern slavery training provided by UK NGO Stronger Together has been added to our regular training program for associates in our UK and Portugal operations. During the year, 45 staff members were trained at our Thames Refinery. We have also developed a protection protocol that sets out how to protect potential victims, the evidence and other colleagues in the event that there is suspicion of this crime within our business and its supply chains.

In addition to the training held in London, we were extremely pleased to be able to secure two expert trainers from the International Labour Organisation (ILO) to lead two 2-day training workshops on defining modern slavery in Belize and Mexico. The final training rosters showed a total of 127 industry leaders were in attendance. Participants who attended the training included representatives from the farming community, the sugar mill and local governments. Further projects are underway to ensure that this crime does not play any part in our supply chain.

## Health and Safety

Ensuring the health and safety of our employees is a core value and one of the fundamental pillars on which we operate.

**Objective:** We aim to reach a Total Recordable Incident Rate (TRIR) of under 1.75 by FY20 and under 1.25 by FY21. (see Figure 9)

**+ Achievement:** Through FY18, the company saw a record low global TRIR incident rate of 2.10, down from 2.67 the year prior.

This improvement is primarily the result of our implementation of an integrated Health and Safety Management system. Throughout the fiscal year, the company completed Risk Assessments at more than 75% of our facilities to establish an overall risk register and identify Significant Health and Safety Aspect and Impacts. With the risk register, we developed an Objective Setting Process, which prioritizes and addresses these risks. We will continue to expand this management system approach in the upcoming years.

## RECORDABLE RATE 5-YEAR GOAL

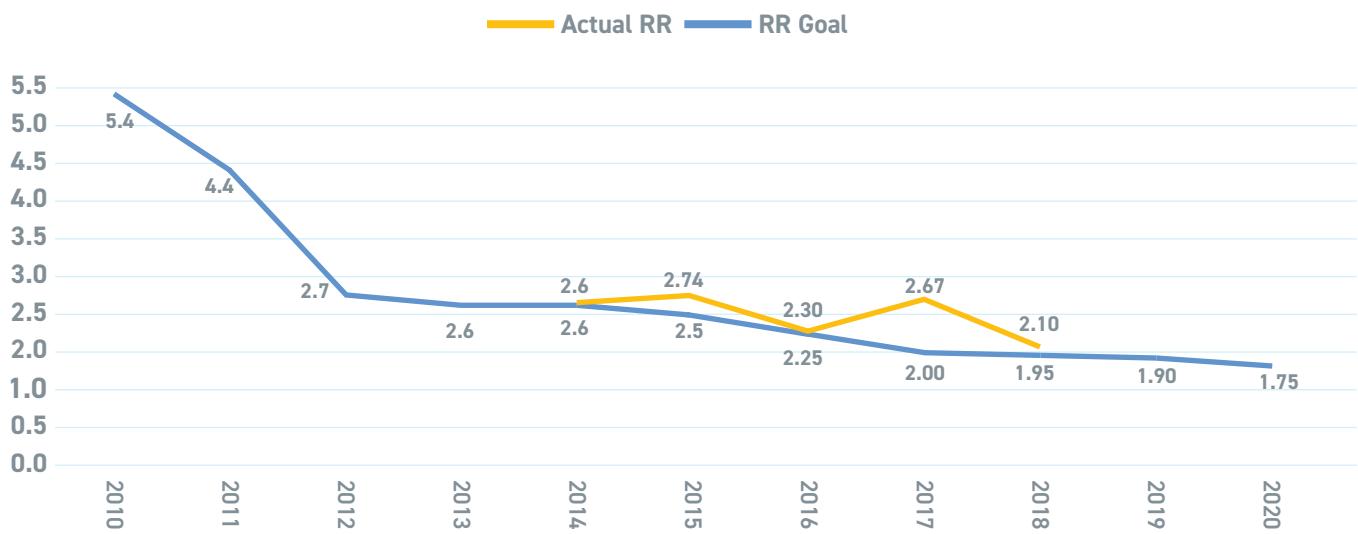


FIGURE 9: Recordable Rate 5-Year Goal

We also saw sustained success in the utilization of the safety contact process and improvement in the completion and efficacy of Health and Safety Training. The transition to computer-based training administered through a Learning Management System has provided a platform to track training as well as reach a broader audience outside of operations.



During FY18, all sites held safety celebrations and/or family days. These events brought together employees and their families and reinforced why these programs are essential. Additionally, as a significant highlight for the year, the Annual ASR Group Health and Safety Award was presented to the Thames Refinery for the Refinery Operations category and to the Cleveland NRO for the Non-Refinery Operations category. These awards reflected each location's success in meeting their health and safety goals for the year, with regard to both incident rate performance as well as their commitment to supporting initiatives.

## Diversity and Inclusion

At ASR Group, we value all people, regardless of gender, race, ethnicity, nationality, age, sexual orientation, religious beliefs, physical ability, thinking/leadership style or any other visible or invisible diversity. It is these differences, as well as our unique backgrounds and experiences, that provide the diversity of thought, great ideas and innovation needed to grow our business. We strive to create an inclusive culture that celebrates and values our diversity, and the difference it can make to our employees, our consumers and our communities.

ASR Group participates in voluntary Affirmative Action Programs (AAP) for all U.S. locations. We establish annual goals within those programs at all locations and across all employment categories. Although the specific Affirmative Action goals vary by location, the company is committed to making every reasonable effort to meet them.

We remain committed to attracting and retaining the best talent and ensuring that any protected class is never a factor in decisions. Regarding gender, specifically, we have in place a strong "total rewards" policy that guarantees that compensation is fair across the company depending on the role employees perform, regardless of gender. We have programs and policies in place to facilitate a work-life balance and family focus.

Our people processes related to recruiting, talent management and compensation and benefits have all been designed to ensure that they support equality of men and women at all levels and throughout their career development. Some of these efforts included:

- + Implementation of a company-wide grading structure designed to ensure gender-neutral benchmarking based on roles and responsibilities.
- + Application of detailed market analysis and performance-based pay principles during salary reviews.
- + Execution of annual equal pay audits to highlight and prevent any imbalance (UK only at this time).

In addition, we held a series of events with our female colleagues during International Women's Day celebrations. The effort was focused on obtaining their perspectives on what is required to ensure female talent is retained within our organization. We are committed to ensuring our talent-attraction methodologies are unbiased, and our hiring managers are equipped to assess talent fairly.

## Collaboration and Assurances

All ASR Group production sites undergo annual Sedex SMETA 4 Pillars audits. SMETA is one of the most widely used social audit procedures in the world. We use it to assess and share with our customers our approach to labor rights, health and safety, the environment and business ethics.

We are active in the Ethical Trading Initiative, which is an alliance of companies, trade unions and NGOs that promotes respect for workers' rights.

In the UK, we submitted public statements consistent with legislative requirements. Our second Gender Equity Compensation report for employees in the UK highlighted the impact of employee demographics on our gender pay report and focused our attention on how to improve participation of women in the STEM\* labor market. Read more at <https://www.tateandleysugars.com/careers>. Our third Modern Slavery Act Transparency Statement outlines our activities to combat this crime which can be found at <https://www.tateandleysugars.com/modern-slavery-act>.

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# CLOSING THOUGHTS

ASR Group believes that our programs have matured continuously over the years, and we are delighted to share our results. We have not only advanced our program objectives, but we have adapted as stakeholders identify new hotspots. Many of these are not easy problems to solve. As such, we seek to partner with other likeminded companies in the effort. If you are a stakeholder, and this report does not resolve a need within your programming, we invite you to contact us. We look forward to an open dialogue.

If there are further questions that we can answer, please feel free to communicate directly with the following primary points of contact:



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# ANNEX

## Scope and Time Horizon of this Report

This report details ASR Group's efforts in key target areas relating to corporate social responsibility and operational sustainability during FY18, which covered October 1, 2017 to September 30, 2018. FY12 serves as our baseline year.

Scope and scale of operations included:

### Sugar Refineries and Sugar Mills

Baltimore, Maryland – USA  
Chalmette, Louisiana – USA  
Crockett, California – USA  
Yonkers, New York – USA  
Lisbon, Portugal – EU  
London, England – EU  
Toronto, Ontario – Canada  
Veracruz – Mexico  
Orange Walk – Belize  
Brindisi - Italy

### Non-Refinery Operations

Calumet, Illinois – USA  
Chicago, Illinois – USA  
Nashville, Tennessee – USA  
Cleveland, Ohio – USA  
Plaistow, England – EU  
Weissenfels, Germany – EU  
Belleville, Ontario – Canada  
Fortin – Mexico

Data from administrative office locations in Florida, Veracruz, Oslo, Brussels, Sao Paulo, London and Mexico City was limited and is not included in the boundary of this report. Water, energy, waste and GHG emissions for these facilities are de minimis in the scope of our operations. Fuel use and electricity purchase in agriculture operations in Belize and Mexico were included with the mill reports. Non-mechanical agricultural GHG influences are still being assessed.

## Glossary of Abbreviations

- + **BTU:** The amount of energy needed to cool or heat one pound of water by one degree Fahrenheit
- + **Cogeneration:** The simultaneous production of electricity and heat in which both energy streams are used
- + **CWT:** 100 pounds of product
- + **kW:** Kilowatt – a unit of energy equaling 1,000 watts
- + **kWh:** A unit of energy equivalent to one kilowatt of power expended for one hour
- + **MBTU:** 1,000 BTUs
- + **MMBTU:** 1,000,000 BTUs
- + **MT:** Metric Ton
- + **mWh:** Megawatt hour – A unit of energy equal to 1,000-kilowatt hours

## How to use our numbers.

A Performance Actuals Chart is made available in this Annex to answer customer demands for survey information, but are normalized to production across the organization.

If a customer is relatively advanced in its efforts and has well-developed Corporate Social Responsibility and Sustainability programs, it may attempt to quantify the lifecycle impact of its product. Views differ on the difference between lifecycle analysis (LCA) and Scope 3 GHG determination, and some companies are beginning to account for the portion of ASR Group's "Scope 1 and 2" emissions as a contributor to their Scope 3 determinations. Though we believe that allows for errors in "double counting," we do recognize that such information may be useful for determining the LCA of a particular product that makes its way to market.

In such cases, if a customer knows its total purchased sugar quantity for the Fiscal Year, in this case for 2018, the total footprint relative to that customer can be calculated utilizing the "Performance Actuals Chart" in the Annex section of this document.

For example, for FY18, if we assume a customer purchased 200,000 "hundred weight" (CWT) (or 20,000,000 US pounds of sugar), their contributing GHG footprint would be:

$$(200,000 \text{ CWT}) * (100 \text{ lbs/ CWT}) * (4.5372 \times 10^{-4} \text{ MTs/lbs}) * (125 \text{ Kg CO}_2\text{e/MT of production}) = 1,134,300 \text{ Kg or } 1,134 \text{ MT of CO}_2\text{e}$$

For those who are working toward a GHG reduction goal from their Supply Chain, if ASR Group had produced the same amount of product for this example customer in 2012 it would have yielded the following calculation:

$$(200,000 \text{ CWT}) * (100 \text{ lbs/ CWT}) * (4.5372 \times 10^{-4} \text{ MTs/lbs}) * (147 \text{ Kg CO}_2\text{e/MT of production}) = 1,333,937 \text{ Kg or } 1,334 \text{ MT of CO}_2\text{e}$$

Thus, ASR Group's Sustainability Program would have reduced roughly 200 MT of emission from our example customer's supply chain. Water and waste can be handled similarly.

## Owned Business Units Environmental Charts and Graphs

### Performance Actuals Chart

As with preceding annual reports, the following abbreviated chart presents a record of activities across all media since ASR Group's established baseline (with revisions annotated).

TABLE 5: Performance Actuals

	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Scope 1 & 2 - CO2e normalized Kg/pMT produced	147	131	121	113	128	119	125
Net Energy - Normalized MBTU/pCWT	208	221	214	208	217	218	219
% Renewable Energy Produced	30%	37%	38%	38%	36%	40%	39%
Potable Water Use Normalized lbs/pCWT	231	219	191	177	183	197	201
Wastewater Treated Normalized lbs/pCWT	99	95	86	78	82	82	85
Total Solid Waste Normalized (Excluding Beneficial Reuse) lbs/pCWT	0.23	0.29	0.31	0.35	0.37	0.31	0.34
% Recycled Including Beneficial Reuse	99.3%	99.4%	99.4%	99.5%	99.7%	99.7%	99.6%
% Recycled Excluding Beneficial Reuse	51.7%	59.0%	66.9%	76.2%	82.8%	76.2%	72.1%

### Corrections to Benchmark Data for FY18

During FY18, an error was identified and corrected specific to the Crockett refinery's activities. Previously, water and energy returned to the neighboring Co-Gen Facility was not being credited to the location's metric, resulting in over-reporting.

## Water Stewardship Graphs

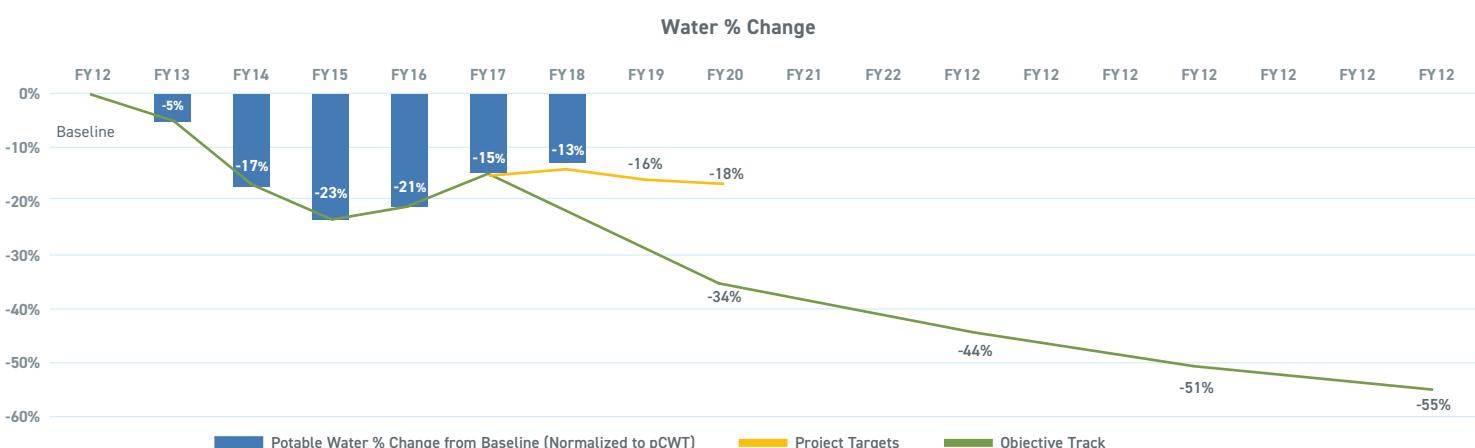


FIGURE 10: Potable Water Percent Change from Baseline (normalized to production)

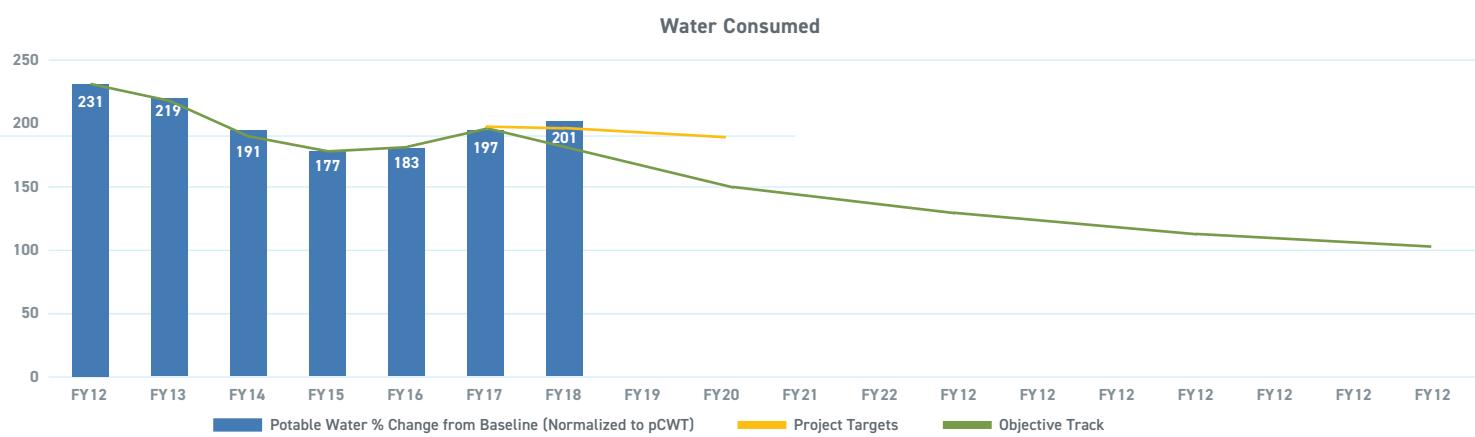


FIGURE 11: Potable Water Consumption (normalized to production)

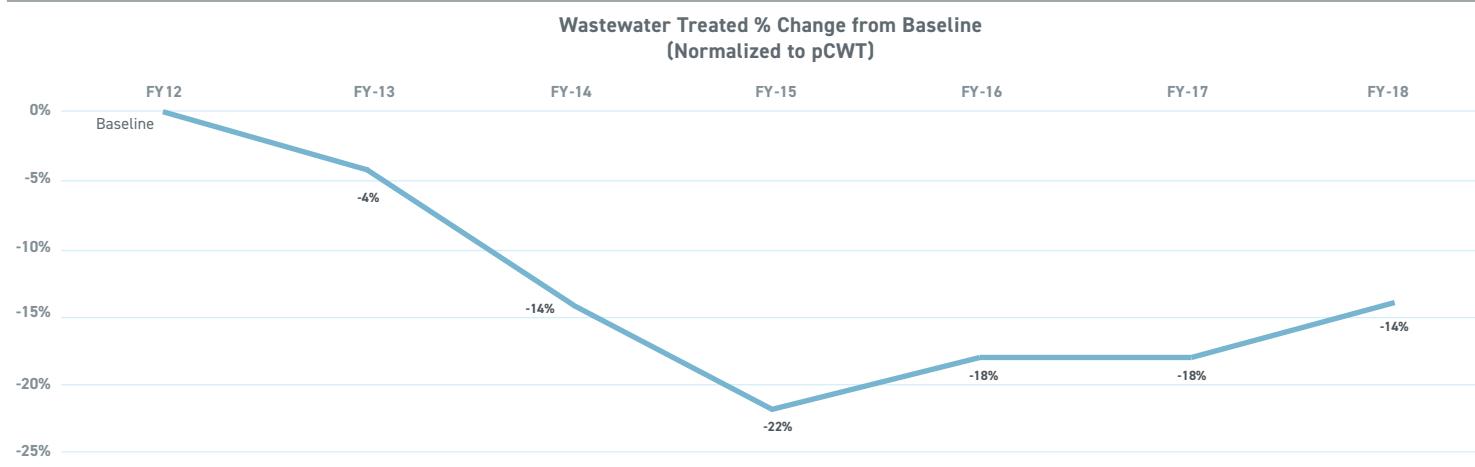


FIGURE 12: Wastewater Discharge Percent Change from Baseline (normalized to production)

## Climate Change, Energy, and Emission to Air Graphs

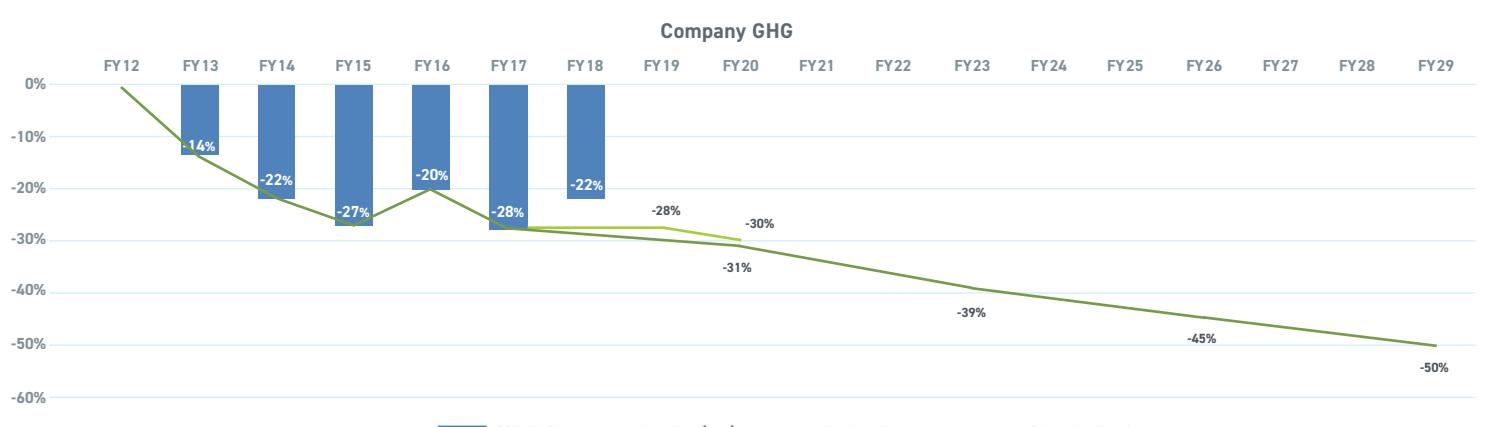


FIGURE 13: Company Percent Change in Net GHG Emissions from Baseline

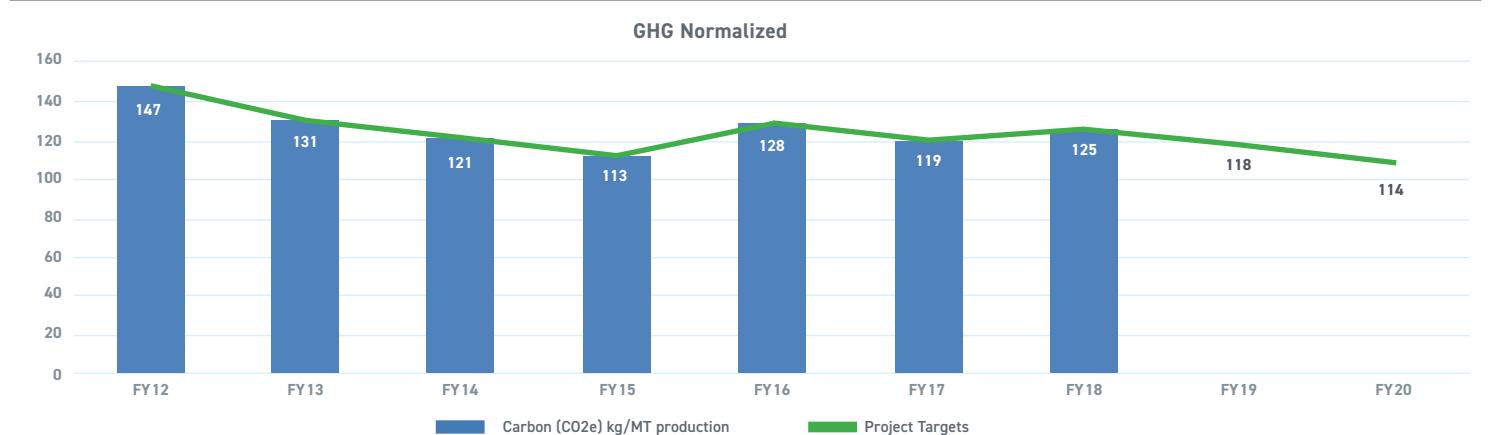


FIGURE 14: CO2E Emission Normalized to Production (KG CO2E/MT of Production)

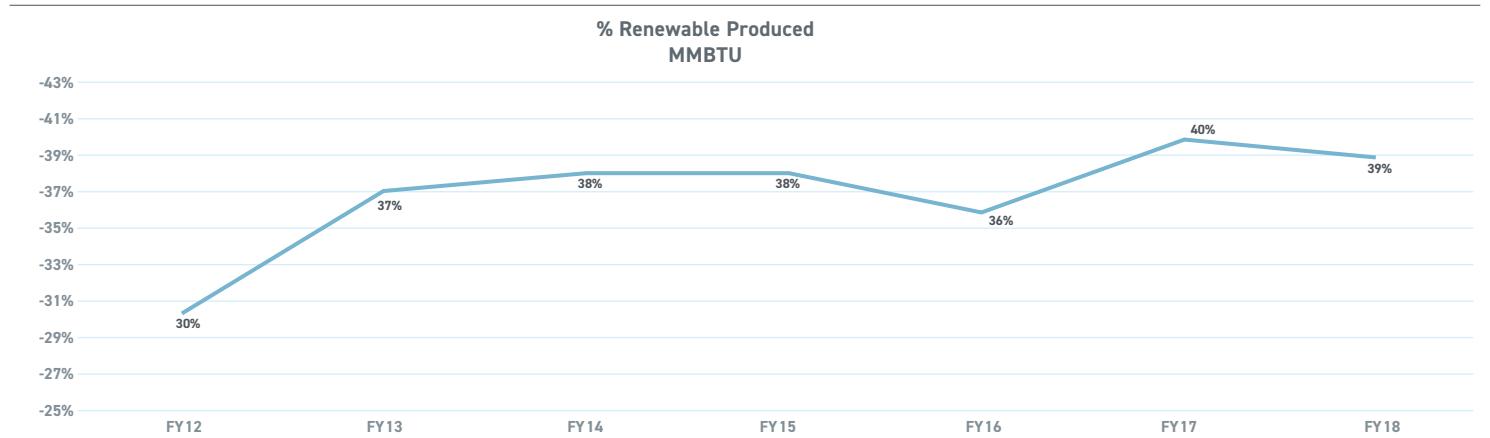


FIGURE 15: Company Percent of Total MMBTU Generated Derived from Renewable Sources

## Waste Management Graphs

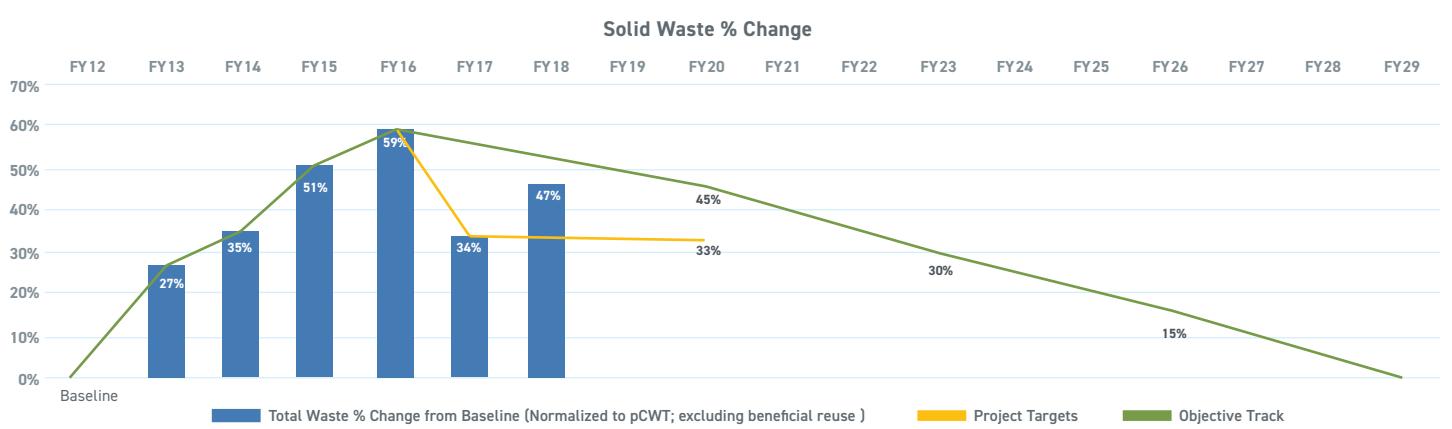


FIGURE 16 : Total Solid Waste Percent Change from Baseline ((normalized to production); excluding beneficial reuse).

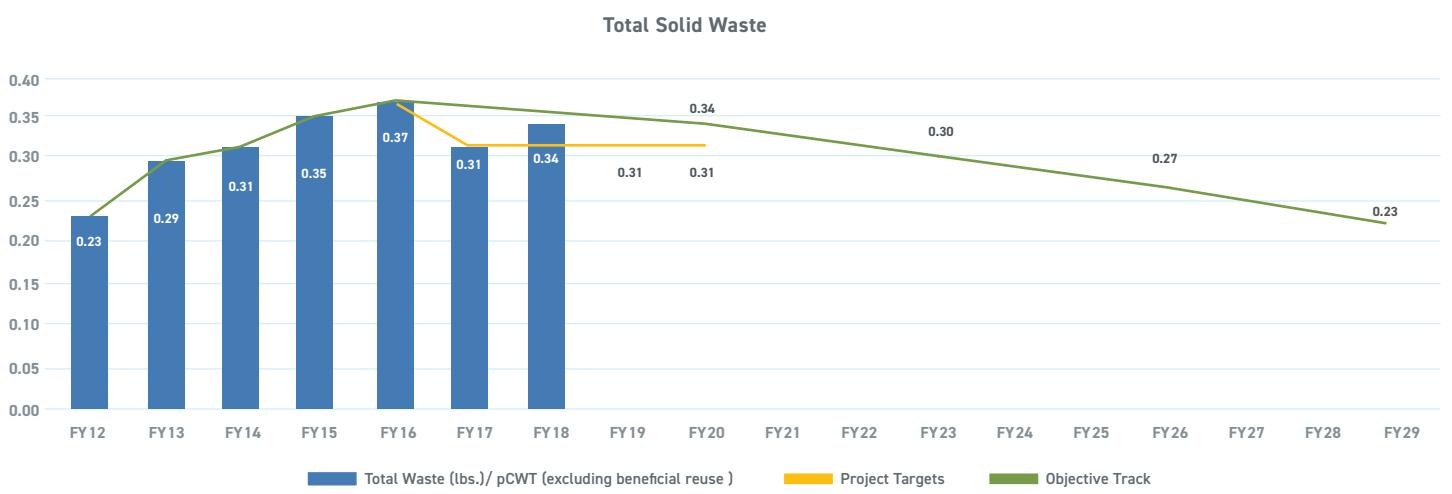


FIGURE 17: Total Solid Waste ((normalized to production); excluding beneficial reuse)

## Solid Waste Management

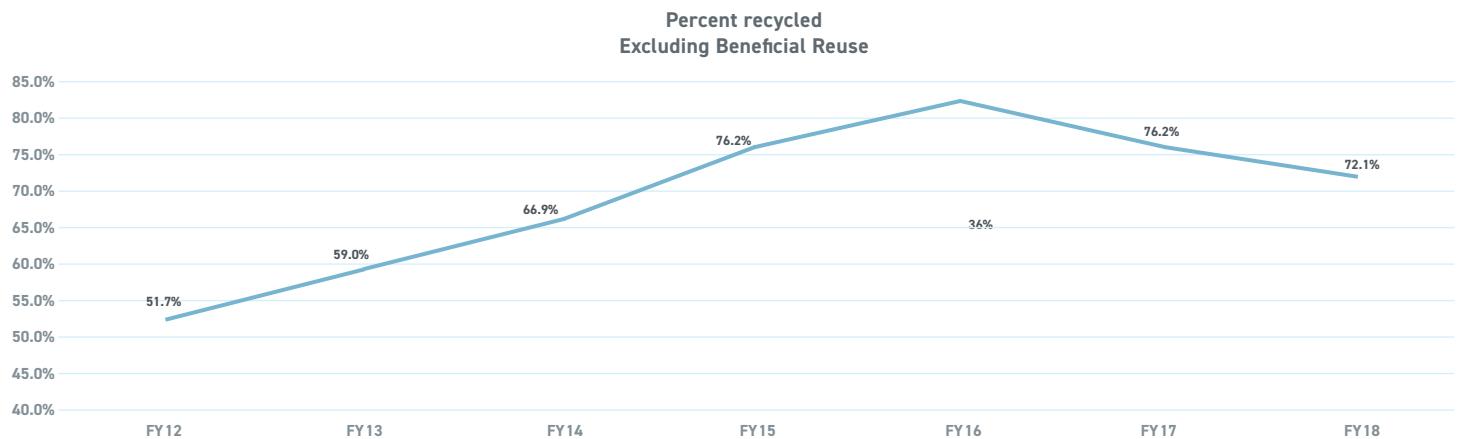


FIGURE 18: Percent Recycled Excluding Beneficial Reuse

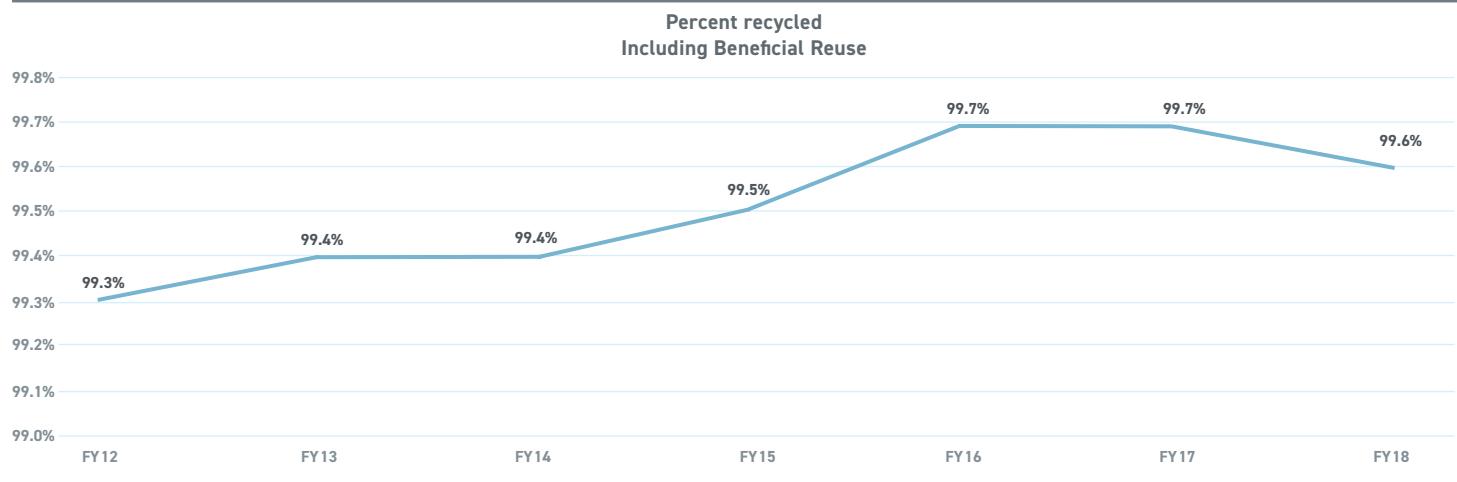


FIGURE 19: Percent Recycled Including Beneficial Reuse

**ASR GROUP 2018**  
**SUSTAINABILITY REPORT**

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