**2021 ESG Report** AS OF 5.16.2022



Inspiring change, drop by drop.

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# Note Regarding Forward-Looking Statements

This report contains certain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. The words "believe," "may," "will," "estimate," "continue," "anticipate," "design," "intend," "expect" and similar expressions are intended to identify forward-looking statements. Forward-looking statements include, but are not limited to, statements regarding the environmental impact of our products, our strategic initiatives, industry trends, and outlook regarding our operations, the production and procurement of our products and inputs, our growth, our management team, and our overall performance. Factors that could cause actual results to differ materially include risks and uncertainties and include but are not limited to the failure of REG to achieve their strategic growth plans, customer desire for clean fuel options, changing sustainability targets, failure of legislative efforts to promote renewable fuels, increased competition from other low carbon fuel suppliers, changing standards applicable to renewable fuels which may require different manufacturing processes and regualification of our fuels, the availability and promotion of electric vehicles and other risks described in REG's annual report on Form 10-K for the year ended December 31, 2021, subsequently filed Form 10-Q and other periodic filings with the Securities and Exchange Commission. All forward-looking statements are made as of the date of this report, and REG does not undertake to update any forward-looking statements based on new developments or changes in its expectations, except as required by law.

At Renewable Energy Group, we believe there has never been a more important time to work in the fuels space. The U.S. economy-and, really, the global economy-have reached a tipping point. Policymakers and consumers are demanding both adequate and reliable fuel supplies in these uncertain times; and decarbonization of those fuels as we all realize that we MUST make the transition to a more sustainable world. But many touted solutions-especially for most diesel applications—are decades from true scale and cannot offer the type of progress we need now. It is important to stop and ask: what is the cost of waiting for solutions that aren't yet available? To your businesses? To our economy? To our planet? These are the questions that drive us to innovate at REG and across the global supply chain-whether that be through developing new technology and products, advocating for strategic policymaking, streamlining distribution through a cutting-edge supply chain, or providing personalized and reliable customer service.

2021 was an exceptional year of performance, execution, and growth at Renewable Energy Group. We delivered a record \$3.2 billion in revenue and \$285 million of Adjusted EBITDA, significantly outpacing 2020 despite an environment of continued uncertainty and volatility. We also made clear progress toward long-term goals, raising a combined \$935 million in gross proceeds from our equity sale and green bond offering, advancing to the construction phase of our Geismar improvement and expansion project and accelerating growth downstream both organically and through acquisition.

We achieved these results by remaining committed to our values of operating safely, acting with integrity, caring for one another and driving results. At the forefront is our value of safety and our outstanding safety performance of 0.23 OSHA incident rate (industry leading performance) was led by a groundswell of employee support and commitment to safe work practices. Employees also advanced Inclusion & Diversity and sustainability initiatives that make a positive impact on the workplace and strong partnerships within our communities where we live and work.

Our Board of Directors also strengthened our governance structures by implementing director term policy limits and establishing a goal of 40% diverse director representation. We made progress towards this objective in November by adding two new directors with deep and distinct expertise and experiences. We firmly believe the inclusion of these fresh and diverse perspectives will better guide the evolution and growth of our business.

This report serves as a useful summary of the year's performance and our activities. At the core of what we do is our shared purpose to create a cleaner world with a focus on enabling greenhouse gas emissions reductions and improving our own footprint, for now and for the future. This motivation continues to drive our sustainable operations and deliver the clean performance fuels that our customers demand and our planet deserves.



**CYNTHIA J. WARNER** PRESIDENT & CEO





DEBORA FRODL DIRECTOR, CHAIR NOMINATING & ESG COMMITTEE



#### OUR BUSINESS

## The Year Ahead

In February 2022, Chevron Corporation (NYSE: CVX) and Renewable Energy Group, Inc. (NASDAQ: REGI) ("REG") announced a definitive agreement under which Chevron will acquire the outstanding shares of REG in an all-cash transaction valued at \$3.15 billion, or \$61.50 per share.

Over the past 25+ year history of REG, we have been accelerating production capabilities, expanding globally, and becoming a fully integrated renewable business, delivering clean, low carbon, high-quality products directly to our customers.

The acquisition seeks to combine REG's growing renewable fuels production, leading feedstock capabilities and organizational expertise in the renewable fuels industry with Chevron's manufacturing, distribution and commercial marketing position.

After closing of the acquisition, Chevron's renewable fuels business, Renewable Fuels-REG, will be headquartered in Ames, lowa. In addition, Cynthia 'CJ' Warner is expected to join Chevron's Board of Directors.

Further detail on the proposed deal is available in REG's Schedule 14A Proxy Statement, filed with the Securities and Exchange Commission. The deal is subject to REG shareholder approval, scheduled for vote at our annual shareholder meeting, and other customary closing conditions.



# Sector Chevron

### **Business Overview**

Renewable Energy Group, Inc. ("REG") (NASDAQ: REGI) is leading the energy and transportation industries' transition to sustainability by converting renewable resources into high-quality, sustainable fuels. REG is an international producer of sustainable fuels that significantly lower greenhouse gas emissions (GHG) and immediately reduce carbon impact. REG utilizes a global integrated procurement, distribution, and logistics network to operate 11 biorefineries in the U.S. and Europe. REG is meeting the growing global demand for lower-carbon fuels and leading the way to a more sustainable future.

#### **COMPANY FACTS**



We take waste and residual stream fats and oils from other industries and convert them into alternative fuels for petroleum diesel with up to 88% lower carbon intensity\*\*. Our bio-based products work in existing diesel equipment and are readily available, enabling customers to immediately reduce their carbon footprints without incurring additional costs or having to wait for changes to infrastructure.

\*Million gallons per year \*\*Represents pathway for REG used cooking oil biodiesel from REG Albert Lea per CA-GREET 3.0 model as of 12/31/21 **OUR BUSINESS** 

THE NUMBERS (AS OF DECEMBER 31, 2021)

#### $\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet$

MILLION GALLONS OF **RENEWABLE FUELS PRODUCED** 

STATES CANADIAN SERVED PROVINCES **OTHER** 

**BILLION REVENUE** 

integration and expect future reporting to be inclusive of this portion of our business.



\*Inclusive of Amber Resources 12/30/21 acquisition figures. All other reporting elements in this report do not include Amber Resources performance unless noted. We are in the process of

# 2021 Market Conditions

While market demand for fuels was significantly impacted by COVID-19 in 2020, we witnessed significant signs of recovery in 2021. The loosening of restrictions, as infection rates and serious cases fall off, has served to remobilize society and spur increased demand for our bio-based diesel products.

The principal factors affecting our results of operations and financial conditions are the market prices for bio-based diesel and the feedstocks used in production, as well as governmental programs designed to create incentives for the production and use of cleaner renewable fuels.

Bio-based diesel is a cleaner, lower carbon, renewable alternative to petroleum-based diesel fuel and has historically been heavily influenced by petroleum-based diesel fuel prices. Accordingly, bio-based diesel prices have generally been impacted by the same factors that affect petroleum prices, such as crude oil supply and demand balance, worldwide economic and geopolitical conditions, changes in refining capacity and natural disasters. Changes to these factors served to increase oil prices throughout 2021.

Regulatory and legislative factors also influence the price of bio-based diesel. Many jurisdictions have regulations and programs designed to reduce GHG emissions associated with transportation fuels. REG's pricing and operating results are impacted by several of these which are further detailed in the Regulatory & Sustainability and Advocacy sections of this report.

Feedstock purchases account for a significant portion of our direct production costs. The cost of feedstocks, such as distillers corn oil (DCO), used cooking oil (UCO), choice white grease (CWG), inedible animal fat, canola oil and soybean oil, is influenced by a variety of factors including bio-based diesel demand, feed demand, oleochemical demand, crop production, weather conditions, cooking and eating habits, and collection patterns. In 2021, we saw an increase in the price of all of our



feedstocks, which led to feedstock purchases accounting for 87% of our direct production costs.

Our results of operations generally will benefit when the spread between bio-based diesel prices (including associated renewable identification number or RIN credit prices) and feedstock prices widens and will be harmed when this spread narrows. The heating oil-bean oil (HOBO) spread + 1.5 RINs acts as a proxy for this relationship. Since the Biodiesel Mixture Excise Tax Credit (BTC) was reinstated in late 2019, this spread has remained relatively stable, rising slightly in late 2021. REG's sourcing strategy and flexible feedstock system enabled us to advantageously secure lower cost feedstock throughout the year and capture upside versus this spread. Our optimization of sales into the highest value markets, leading to increased value capture and RIN monetization, and our ability to serve market leading customers who value the sustainability of our fuels resulted in higher value for our lower carbon fuels. In coordination, we were able to capture more of the HOBO spread + 1.5 RINs, leading to strong financial results in 2021.

#### **OUR BUSINESS**

# Industry Outlook

Our global transportation infrastructure relies on liquid Many have identified feedstock supply as a risk for the fuels and this relationship is projected to continue well industry, as the increased conversion capacity may serve into the future. According to the U.S. Energy Information to strain existing sourcing for bio-based diesel producers. Administration (EIA), liquid fuels are projected to account for We anticipate these strains on feedstock supply and pricing over 92% of the transportation sector's fuel consumption in will be short-term as feedstock suppliers ramp capacity and 2050\*. Escalating climate consciousness across the globe yield, and entirely new sources are brought to market to is expected to create heightened demand for biofuels, with meet growing demand for bio-based diesel. bio-based diesel becoming a higher percentage of the Additionally, REG is well positioned to mitigate the impact transportation sector's liquid fuel consumption as customers of feedstock risks given the company's superior ability seek to more rapidly reduce global GHG emissions. to process a variety of feedstocks, many of which our Additionally, geopolitical risks are driving calls for energy independence, and bio-based diesel is a natural avenue is challenging in the open market as there is no established toward achieving this goal.

REG and the refining industry are increasing capacity to meet growing customer demands. A number of renewable diesel projects are underway or have been announced to meet projected consumption requirements. REG's expansion project to increase capacity at our Geismar, Louisiana facility is a prime example of our preparation (see page 48 for more information). We also see new entrants, including many petroleum refiners initiating conversions of their facilities from crude oil to renewables.

# A brighter future for our planet means a bright future for biofuels.

competitors struggle to leverage. Managing feedstock supply futures market for the low carbon feedstocks that we utilize. Our commodity risk management policy and practices aim to minimize feedstock volatility and our focus remains on our long-standing supplier relationships, striking multi-year contracts and in developing additional feedstock sources to create further protection against feedstock strain.

The world needs bio-based diesel now more than ever and REG is prepared to deliver through increased capacity and a secure feedstock supply borne from our efforts to create a sustainable company in every sense of the word.

<sup>3</sup> Choice white grease prices are based on the monthly average of the daily low price of Missouri River choice white grease as reported by The Jacobsen CBOT (based on 8.0 pounds per gallon). <sup>4</sup> Distiller corn oil prices are based on the monthly average of the daily low price of Illinois distillers corn oil as reported by The Jacobsen CBOT (based on 8.2 pounds per gallon)

<sup>\*</sup> https://www.eia.gov/outlooks/ieo/

<sup>&</sup>lt;sup>1</sup> Biodiesel prices are based on the monthly average of the midpoint of the high and low prices of B<sup>100</sup> (Chicago SME) as reported by OPIS. <sup>2</sup> Soybean oil (crude) prices are based on the monthly average of the daily closing sale price of the nearby soybean oil contract as reported by CBOT (based on 7.5 pounds per gallon).

<sup>&</sup>lt;sup>5</sup> Spread between biodiesel price and the choice white grease price.

<sup>&</sup>lt;sup>6</sup> Spread between biodiesel price and the sovbean oil (crude) price. <sup>7</sup> Spread between biodiesel price and the distillers corn oil price.

# Our Sustainability Milestones

Since we began our business, we have focused on providing economic and environmental value and maintaining social responsibility. Our Company History book and previous ESG reports document many of our past accomplishments and exemplify our path of continuous improvement and innovation. This history has set the foundation from which we are building to lead the way for the renewable energy market.



metric tons of greenhouse gas avoidance

2015 VisionZERO safety program launched

### 2018

market-leading performance and among the lowest emission diesel fuels on the market

#### Increased Board diversity

with new Board appointees bringing impressive backgrounds and experience to REG's areas of growth

Enhanced sustainability reporting to increase alignment to the Sustainability Accounting Standards Board (SASB) standard for the Biofuels industry

SASB-aligned

# 2017

Philanthropy Committee formed, designating funds for community and non-profit purposes

### Safety Award

Received Canadian National Railway Safe Handling Award for meeting strict standards for the safe handling and shipment of regulated products

Launched a global partnership with

### Manchester United

working together to raise awareness of REG's biofuel products and encourage positive environmental change across MUFC global fanbase and beyond

# The Board of Directors





JEFFREY STROBURG RANDOLPH HOWARD CHAIRPERSON OF VICE CHAIRPERSON THE BOARD 6

DIRECTOR 6



WALTER BERGER

DIRECTOR



**JAMES BOREL** DIRECTOR 





**DYLAN GLENN** 

\* Per Nasdaq listing rules.

DIRECTOR

**NS** 



PETER HARDING

DIRECTOR



36

RAMDEV DIRECTOR **R S** 



### NEARLY 100% ATTENDANCE

#### **OUR BUSINESS**

# Strong Leadership

Delivering on the promise of sustainable biofuels begins with strong leadership to guide and oversee the business. Our Board of Directors and Senior Leadership Team work together to set the tone for our business, demonstrate our values and drive positive, lasting change. We routinely reflect on the effectiveness of our governance structure and the tools we use, to ensure that strong oversight today drives us successfully to a stronger tomorrow. Additional information regarding shareholder rights, board structure and responsibilities, and compensation are available on the investor section on our website.

# The Board of Directors

The Board of Directors is responsible for setting high standards for the company's employees, officers and directors. Sound corporate governance is at the core of this responsibility. The Board recognizes its duty to serve as a prudent fiduciary for shareholders and to oversee the management of the company's business.

#### **Notable Practices:**

- + Leadership structure includes Chair, Vice Chair, Lead Independent Director and Independent Committee Chairs
- + Corporate Governance Guidelines, Code of Business Conduct and Ethics
- + Board term limit policy to refresh Chair of the Board, independent directors, and committee membership
- + Overall objective to have directors with diverse skills, backgrounds and experiences and an explicit goal of at least 40% diverse director representation (i.e., female, underrepresented minority or LGBTQ+)
- + Annual board self-evaluations
- + Required stock ownership guidelines for all directors and executive officers
- + Comprehensive Trading by Insiders policy that covers directors and officers, which prohibits short-term trading, hedging and pledging of Common Stock



**CYNTHIA 'CJ' WARNER** PRESIDENT AND CEO



DELBERT CHRISTENSEN DIRECTOR 



DEBORA FRODL DIRECTOR 



NIHARIKA TASKAR



CHRISTOPHER SORRELS LEAD INDEPENDENT DIRECTOR 







Our Board values experienced and dedicated individuals with diverse backgrounds, perspectives and skills. The following

Areas of Leadership Experience	
Leadership	 11 of 11
Financial Expertise	7 of 11
Growth Opportunities	10 of 11
Industry Experience	10 of 11
Operational Experience	9 of 11
Marketing Experience	7 of 11
Strategic Planning	 11 of 11
International Experience	10 of 11
Governmental, Legal & Regulatory	6 of 11
Human Capital & Compensation	8 of 11
Corporate Governance & Investor Relations	6 of 11
Environmental, Health, Safety & Sustainability	7 of 11
Technology/Cyber Security	2 of 11



#### OUR BUSINESS

# **Board** Committees

The committees of our Board of Directors allow for more focused oversight of key areas of our business. Each standing committee operates under a committee charter which clearly defines its specific responsibilities and practices to enable oversight of management activities in applicable areas.

#### A

#### Audit Committee

- + Oversee the establishment and review with management the Company's major risk exposures and the steps management has taken to monitor and control such exposures
- + Oversee the integrity of the Company's financial statements and discuss the adequacy and effectiveness of the Company's internal controls
- + Oversee the Company's compliance with legal and regulatory requirements
- + Oversee the qualification, independence, and performance of the independent auditors; and the performance of the Company's internal audit functions

#### **Compensation Committee**

- + Evaluate the performance of and approve compensation levels for the CEO and all other executive officers
- + Review CEO succession plans and management development plans
- + Administer the stock and other equity-based compensation plans of the Company
- + Provide general oversight of the Company's employee benefit plans
- + Periodically review the Company's incentive compensation and other equity-based plans and practices
- + Periodically evaluate whether there are risks arising from the Company's compensation policies and practices for employees

### R

N

#### **Risk Management Committee**

- + Oversee the Company's management of agricultural and energy commodity price risk
- + Oversee environmental, health and safety risk
- + Review and approve, as applicable, policies, procedures and systems to address such risks

#### Nominating and ESG Committee

- + Identify, evaluate, recruit and recommend potential new Board members and monitor the process to assess Board effectiveness
- + Develop and recommend corporate governance principles applicable to the Company
- Oversee matters of corporate governance, including ESG matters relevant to the Company

#### S

#### **Financial Expertise**

+ As currently defined under SEC rules and regulations

### **REG Senior Management**

Our business is led by our President and CEO Cynthia 'CJ' Warner, supported by an experienced Senior Leadership Team, responsible for our overall company strategy and performance. Our team is committed to helping our customers succeed and our employees thrive, while creating long-term shareholder value.



CYNTHIA 'CJ' WARNER PRESIDENT AND CEO



OFFICER

**DOUG LENHART** 

VICE PRESIDENT

ORIGINATION

GLOBAL SOURCING-



**ERIC BOWEN** GENERAL COUNSEL AND CORPORATE SECRETARY

BRUCE LUTES

BIODIESEI

OPERATIONS

VICE PRESIDENT





**TODD ELLIS** VICE PRESIDENT, SALES

**NEVILLE FERNANDES** VICE PRESIDENT, CORPORATE AFFAIRS AND DEVELOPMENT



**RAYMOND RICHIE** VICE PRESIDENT. CORPORATE BUSINESS DEVELOPMENT & INTEGRATION



**BOB KENYON** 

SENIOR VICE

& MARKETING

PRESIDENT. SALES

TODD ROBINSON DAVE SLADE DEPLITY CEO & TREASURER & VICE PRESIDENT, INVESTOR RELATIONS



JAN SI AGHEKKE CHIEF TECHNOLOGIST VICE PRESIDENT & MANAGING DIRECTOR INTERNATIONAL BUSINESS

NATALIE MERRILL

PRESIDENT BUSINESS

SENIOR VICE

DEVELOPMENT

CHAD STONE SENIOR VICE PRESIDENT COMMERCIAL PERFORMANCE



PAUL NEES

& TRADING

VICE PRESIDENT.

GLOBAL SUPPLY

DEREK WINKEI VICE PRESIDENT MANUFACTURING DEVELOPMENT. COMMERCIAL PERFORMANCE. AND SERVICES

Responsibility for environmental, social and governance topics are shared across the Senior Leadership Team, with the CEO presiding as ultimate decision-maker, and information flowing to the Board of Directors for oversight. This collaborative model fits REG, as our corporate identity and strategy has deliberately interwoven environmental, social and governance topics throughout. These topics are interconnected and complex which requires oversight and contribution at the highest levels of the Company. Aggregation and communication of ESG information flows through the Senior Vice President, Business Development.

#### **OUR BUSINESS**

# Corporate Culture

Even as markets shift and business conditions fluctuate, our company remains unified in our strong, successful culture. The following elements guide our decisions, how we work and where we set our focus. We intentionally leverage a conceptual format to our cultural components-rather than scripted statements-to enable each employee to fully describe and bring them to life in a way that is personally meaningful.

#### **Our Values** These define who we are and guide our actions.



#### Our Mission It's what drives each of us every day. We are committed to:

#### **SUSTAINABILITY**

- + Accelerating the transition to renewable, clean energy
- + Producing clean, sustainable fuels and making them readily available to customers
- + Vigorously growing a financially sustainable company

#### **Our Purpose** This is why we do what we do. It consists of four related elements:

- + Creating a cleaner world
- + Reducing Greenhouse Gases (GHG) and carbon footprint



#### **ORIVING RESULTS THE REG WAY:**

- + Collaboration
- + Innovation
- + Dedication and passion
- + Effectiveness-Intelligent, focused and reliable delivery

#### **CREATING COMPELLING VALUE FOR:**

- + Society
- + Our ecosystem
- + Employees
- + Customers
- + Shareholders

- + For now
- + For the future

# Stakeholder Engagement

While leadership sets and implements REG's strategy with oversight from our Board of Directors, we look to a variety of stakeholders to inform our actions. To do this, we use several methods to engage with our stakeholders, listening and learning, to gather information and achieve better outcomes. These interactions help to improve our effectiveness through increased trust, confidence and transparency about what we are doing and how and why we are doing it.

We participate in conferences, webinars, and other venues to educate and inform stakeholders, providing thought leadership on industry market trends. We also use our website, press releases, social media and ESG report to communicate with all of our stakeholders. Additional engagement efforts are noted below:

Key Stakeholder	Forms of Engagement	Topics of interest
Employees	Employee surveys, leadership meetings and all-company town halls, internal newsletter, frequent supervisor- employee communication, formal reviews and dedicated human resources business partners	Living our cultural purpose and values, corporate transparency, work environment and experience, compensation, personal development, recognition, proper resources for job functions, inclusivity and appreciation for diversity and community connections
Customers	Communication regarding carbon reduction impact through fuel use, customer surveys, a Customer Advisory Board, interaction through trade associations and presentations, articles in customer facing publications, annual customer appreciation event and relationship and account management	Carbon reduction and emissions of our products, product considerations such as pricing, performance, and availability, alignment with customer values and decarbonization goals, supply chain sustainability and traceability
Suppliers	Meetings, presentations, site visits, conferences, trade shows and trade group interactions	Economic value, REG flexibility which provides easy and consistent experience, circularity
Investor & Analysts	Annual shareholder meeting, quarterly earnings calls, conferences, one-on-one meetings, occasional investor day and routine filings and reports	Financial performance, feedstock security, regulatory environment, low carbon investment projects, increasingly competitive landscape, long term outlook of the business, ESG ratings
Policymakers & Regulators	PAC support for key legislators, grassroots engagement where employees communicate as constituents, lobbying, verbal testimony, written comments on legislation/regulations, media involvement, handouts and plant tours	Advocacy for cleaner fuels with a nonpartisan approach on a principled basis, environmental outcomes such as GHG reductions, and other business impacts, creating value for farmers, incentives for expanding production in specific jurisdictions, zoning/permitting with local elected officials and state regulators
NGOs / Interest Groups	Meetings, direct engagement, coalition building, plant tours, conference participation, speaking engagements, sponsorships and booths, membership in organizations, white papers and other publications	Renewable fuel advocacy and market acceptance, impact of our products, carbon reduction timeframes, REG leadership in sustainable transportation transition, access/availability of products, food vs. fuel, technology education and comparisons, regulation, Argentinian export issues and REG climate change mitigation measures
Communities	Meetings, presentations, coalition building, plant tours, sponsorships, participation in local Chambers of Commerce, participation on boards and committees, volunteer days and philanthropic support	Safety & emergency planning, plant operations, jobs, economic development, corporate citizenship

#### **OUR BUSINESS**

# **Our ESG Focus Areas**

Stakeholder input, in coordination with other tools like ESG frameworks, ESG ratings, and questionnaires, help us prioritize our ESG efforts and disclosure. By understanding what matters to stakeholders throughout our value chain, we can identify and influence the key issues across ESG topics to progress our sustainable development. While ESG topics are embedded across our business and we strive to report on a variety of activities, we use the themes below to focus our efforts.



# **Decarbonization & Enviromental Stewardship**

We are focused on carbon reduction through our products, our production processes and across our supply chain. We aim to embody and enable environmental stewardship now and for the future.

#### Health & Safety

our team's health and well-being.



#### Sustainable Sourcing

The success of our business requires access to reliable and responsibly sourced materials. A robust sourcing strategy accompanied by ongoing innovation and collaboration expands the resources available to us and provides the necessary assurance for the longevity of our business.

#### **Care for People**



people can thrive.

#### **Responsible Business**

As a core value that we consider critical to our identity, it is imperative that we operate with integrity. Strategic leadership, appropriate structures, clear policies and strong practices and systems provide assurance and transparency to our various stakeholders.

![](_page_9_Picture_21.jpeg)

The health and safety of people across our business and our surrounding communities is always our top priority. We emphasize a safety culture that protects our people and establishes a shared responsibility for

Our team provides the innovation, expertise, passion and commitment required to grow our business. We value the unique contributions of each individual and aim to create a productive work environment where

# Our Value Chain

#### **Our Value Chain**

Renewable Energy Group is a vital link in the global supply chain and our impact and ability to create positive change extends well beyond biofuel production. Through strategic sourcing and feedstock development, innovative and efficient manufacturing, streamlined distribution and sales support, and strategic policymaking, our competitive advantage is built on helping companies meet their greenhouse gas and carbon reduction objectives, both today and into the future.

The consideration of our full product life cycle is essential in creating value beyond our organization to help society drive towards a net zero future. At REG, this means taking a holistic view of our sourcing, production and distribution activities.

This approach highlights the numerous interconnected processes within our business and establishes more informed relationships with our stakeholders to help influence and advocate for improved practices in our industry. This also enables improved efficiencies across our business activities and sustains our competitive advantage through streamlined processes, so all of our business is focused upon inspiring change—drop by drop.

# How our production cycle powers a more sustainable, cleaner world.

![](_page_11_Figure_1.jpeg)

# The Value of Biogenic Carbon

Bio-based diesel offers many societal benefits, including fuel independence, additional value to our agricultural systems and contribution to waste circularity. One of the core elements of our value proposition is the low-carbon emissions profile of our fuel, which is explained through the concept of biogenic carbon.

Our global economy has been built on energy dense fossil fuels, resulting in momentous and rapid development. However, when we burn fossil fuels, we take carbon that was sequestered in the ground for millenia and add it to the atmosphere. Increasing levels of carbon dioxide and other greenhouse gases are resulting in expedited global warming, which has significant and increasingly devastating effects.

Bio-based diesel provides a sustainable alternative. Carbon naturally cycles throughout the biosphere at a relatively fast pace, transferring from the atmosphere into living organisms and back to the atmosphere over and over again. By using renewable biomass inputs, such as plant oils and animal fats, we step into this carbon recycling process, thus avoiding the build up of additional carbon. Use of our fuel releases carbon back to the atmosphere, where it was not so long ago, and avoids the build up of additional carbon.

# Measuring Carbon Impact of Our Fuels

Given the carbon-neutral nature of our fuel, the combustion of bio-based diesel results in minimal non-biogenic tailpipe emissions. In fact, a customer using bio-based diesel can achieve close to 100% reduction in their direct or Scope 1 emissions compared to using petroleum diesel\*. This is especially notable for organizations that have set Scope 1 & 2 GHG reduction targets, as switching to bio-based diesel today enables significant and immediate progress towards these goals.

However, there are GHG emissions associated with our fuel beyond combustion. An alternative way to measure the carbon impact of our product, or the carbon intensity (CI) of our fuel, is by using a Life Cycle Assessment (LCA), which quantifies a fuel's "well to wheel" GHG emissions. The CI of a fuel is calculated by totaling the net non-biogenic carbon GHG emissions associated with each aspect of producing the fuel-feedstock used, manufacturing process, transportation required throughout the supply chain and tailpipe emissions. Use of CI allows for understanding of fuel impact and comparability across technologies.

The LCA approach is used in many of the leading carbon reduction programs noted on the following page. While the detailed objectives differ and the methodologies to measure impact varies, the general theme across these programs is to decarbonize the transportation industry through rigorous and reputable practices.

\*Non-biogenic carbon emissions from combustion of biofuels are related to emissions of CH4 and N2O that equate to less than 1 gCO<sub>2</sub>e/MJ, per CA-GREET. Scope 1 emissions reductions are demonstrated through use of GHG Protocol GHG Emissions from Transport Mobile Sources tool, https://ahaprotocol.org/calculation-tools

# **Both categories must achieve** at least 50% lifecycle GHG reduction compared to a 2005 petroleum baseline.

Per California Low Carbon Fuel Standard, REG currently maintains close to 60 different fuel pathways that quantify the carbon intensity of our fuels based on a lifecycle assessment. These pathways are all publicly accessible and show we are capable of achieving up to 88% carbon reduction with our best-in-class fuel.\*

y as of 12/31 for REG used cooking oil biodiesel from REC ert Lea: revisions to this pathway to occur in 2022

Per U.S. Environmental Protection Agency Renewable Fuel Standard, REG's primary fuels, biodiesel and renewable diesel, qualify as biomass-based diesel (D4) and renewable naphtha and renewable propane may qualify as an advanced biofuel (D5).

> Up to 88% Fossil Carbon Reduction

# Regulatory & Sustainability Programs

The regulatory environment is an embedded piece of our business as market forces often dictate where our fuel is placed and under which regulatory framework it falls. REG participates in a variety of process safety, governmental and third-party compliance programs that are meticulous in their standards. These programs have a variety of approaches, metrics and rules, but overall, they collectively help assure that REG manages its operations with utmost care, appropriate oversight, and in fulfillment of our compliance obligations.

All REG renewable fuels and associated feedstocks meet the qualifications of at least one decarbonization or sustainability program. Many of our products meet the specifications for multiple programs and we look to market forces to determine the appropriate placement of our fuel. Below are some of the notable programs and sustainability standards applicable to our business:

Program	Summary
Renewable Fuel Standard (RFS) and Renewable Identification Numbers (RINs)	U.S. federal policy establishes renewable volume obligations (RVO), which require a certain volume of renewable fuel to replace or reduce the quantity of petroleum-based gasoline transportation fuel and heating oil. Among other requirements, advanced biofuels must achieve at least a 50% reduction in GHG emissions compared to a 2005 petroleum baseline, used must qualify as renewable biomass. RINs serve as the tracking and compliance mechanism to facilitate this program. Participation requires third-party review and routine repor Biodiesel, renewable diesel and sustainable aviation fuel can generate D4 RINs (biomass-based diesel) if they meet the applicable requirements.
California Low Carbon Fuel Standard (LCFS)	This regulation is designed to decrease the greenhouse gases associated with California's transportation fuels and increase usage of low-carbon fuel alternatives. All fuel receives a c (CI) score based on that fuel's life cycle assessment, which includes inputs like feedstock type, refining technology and transportation distances. All CI scores are validated by a third professional engineer and documented in an approved pathway accessible on the CARB <u>website.</u> Participation requires ongoing reporting and third-party verification.
Oregon Clean Fuel Program	This state program is designed to reduce the average CI of Oregon's transportation fuels and leverages many aspects of the California LCFS program. In addition to the requirements Program, Oregon law requires that all diesel fuel sold in the state be blended with at least 5% bio-based diesel.
European Renewable Energy Directive (RED II)	In the European Union (EU), the RED II establishes renewable energy targets within the transportation sector. The program prioritizes the use of biofuels produced from certain wast feedstocks. While RED II sets the overarching objectives, each member state is allowed to uniquely implement.
International Sustainability and Carbon Certification (ISCC) and REDCert	These certification programs cover sustainable biomass, biofuels and bioliquids, specifically for the EU RED II. Developed as part of a multi-stakeholder process and governed by ass research institutes and NGOs, these programs require all elements of the supply chain to be individually certified. Participation includes annual reporting and third-party attestation.
Norwegian Environmental Agency Guidelines	These guidelines cover sustainability criteria, reporting and verification for GHG emission savings, land use criteria and a mass-balance system as set forth in Norwegian legislation, v in 2014 and allows for reporting aligned with RED or RED II. Participation requires independent third-party review of feedstock origins, sustainability criteria associated with mass ba calculations for refinery production and an annual attest engagement.
Canadian Federal and Other Provincial Minimum Blend Programs	The Canadian federal government aims to reduce the amount of GHGs emitted through fuel combustion and currently requires 2% bio-based content to be blended into the diesel provinces also have minimum blend standards for bio-based diesel, including Alberta (2%), Saskatchewan (2%), Manitoba(3.5%-5%) and Ontario (4%), that encourage additional renew and greenhouse gas reduction.
Canadian British Columbia (BC) LCFS	The BC also maintains a minimum bio-based blend requirement of 4%. Additionally, the province established the BC-LCFS in 2008, with implementation in 2013, which aims to reduce used in the province through a current target of a 20% CI reduction compared to conventional fuels by 2030. Fuel CI is determined using an LCA, which includes inputs like feedstoor technology and transportation distances.

# and diesel used in and the feedstock rting requirements.

carbon intensity I-party auditor and

ts of the Clean Fuel

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sociation members, .

which took effect alance, GHG

pool. A number of wable fuel usage

ice the CI of fuels ck type, refining

Additionally, according to the U.S. Department of Energy, more than 40 states have implemented various programs that encourage the use of bio-based diesel through blending requirements, as well as various tax incentives. In recent years, we have had notable regulatory support and success in Iowa, Illinois, Missouri, New York and Washington. REG participates in many of these programs to varying degrees.

These different programs provide us different forms of economic incentive to produce increasingly result in benefits frequently shared throughout our value chain. Based on the unique implementations of these programs and the ways in which the market adjusts in response to this added value, it is difficult to clearly define what qualifies as a subsidy and to isolate the amount of benefit REG retains through these government programs. For 2021, we reported just under \$291 million of revenue from bio-based diesel government incentives. This figure consists of Biodiesel Mixture Excise Tax Credit and some state activities, and only represents the amount by REG and not any portions that were contractually shared with our downstream.

# Advocacy

REG is passionate about the impact our business can make on the planet and engages politically across a number of issues

that drive the energy agenda in our markets. We take political positions to drive higher standards, promote fairness and support the development of programs, policies and political positions that result in the growth of sustainable energy options.				
A few of our 2021 efforts are noted below:				
	Our Position	Our Efforts	Outcome	
<b>Expanding LCFS markets</b> Expanding and instating LCFS markets and policies on the West coast, in the Midwest, in New England and in Canada	We actively support clean fuel programs to combat climate change at a low cost to consumers and provide air pollution reduction. These programs could expand our current market reach.	We engage with legislatures, build industry coalitions, provide expert testimony and engage key stakeholders.	Multiple states and provinces have passed or expanded rule-making, while others have introduced or discussed similar legislation. State of Washington passed the Clean Fuel Standard in 2021.	
<b>Support for higher blends</b> Establish minimum blend standards, higher blend use and 100% biodiesel use	We want to enable fleets to use higher blends and accelerate their decarbonization efforts. We believe certain challenges, such as OEM limitations and concerns, are inflated and unnecessarily inhibiting fuel user GHG reduction impact.	We work alongside business leaders, policy makers and industry bodies to educate and introduce best practices for biofuel use.	Certain states require and incentivize the use of bio-based diesel through minimum blend rates. Many states and municipalities encourage the purchasing of vehicles which use high blends of bio-based diesel.	
<b>U.S. Renewable Fuel Standard (RFS)</b> Sets Renewable Volume Obligation (RVO) levels on an annual basis for producers and importers of diesel and gasoline	We believe that there is sufficient feedstock and production capacity to support the RFS and grow the RVO to drive industry growth and GHG emissions reductions.	We engage with U.S. Senators & Representatives, the Administration and other elected officials and staff, as well as leaders in EPA and trade associations to amplify support for RVO growth. Several REG executives gave testimony at the EPA hearing on the 2020, 2021, and 2022 proposed RVOs. We also submitted written testimony that the RVO for biomass-based diesel should be increased to 4 billion gallons (actual) and the RVO for advanced biodiesel should be increased to 7 billion gallons (ethanol-equivalent gallons or RINs).	We expect a final ruling on 2022 RVO levels and a proposed rule for 2023 volumes from EPA by mid-2022.	
<b>Tax incentives</b> Continuation of the Biodiesel Mixture Excise Tax Credit (BTC) which provides a \$1.00 refundable excise tax credit per gallon to the first blender of record for bio-based diesel with petroleum diesel and growing and extending Midwest retail and tax incentives	We support incentives that will help grow the bio-based diesel industry, encourage higher blend usage and decarbonization and encourage local production and consumption.	We engage in lobbying, grassroots and public opinion efforts, educational engagements and coalition building to establish reliable, long-term incentives.	U.S. federal efforts currently offer greater visibility than ever before, with anticipated phasing out of current incentives. Illinois, Iowa and Missouri recently passed supportive legislation for bio-based diesel.	
<b>Europe's "Fit for 55" package</b> References a climate target of 55% GHG reduction by 2030 in the European Union, and includes REG-relevant legislation: RED for road transport, ReFuelEU aviation and FuelEU Maritime as well as Fuels Quality Directive	We advocate for a level playing field across all transport sectors (road, marine, aviation) and technology neutrality, as well as maximization of GHG reduction per feedstock molecule.	We conduct direct advocacy with European and Dutch representatives of parliament, coordinate with industry associations and other industry players and leverage media coverage.	An initial proposal to offer extra incentivization for the use of waste lipids in aviation biofuels vs. terrestrial biofuels has been changed.	
<b>Other International</b> Exemption for used cooking oil (UCO) as an animal byproduct (ABP) Establish new specs for fatty acid methyl esters (FAME) for inland-shipping Increase public fuel station bio-blend levels	We want to ensure fuel users have access to high quality product that advances decarbonization goals and is free of regulatory confusion. We are supportive of UCO being exempt from ABP rules; supportive of improved FAME quality for the inland shipping market; and supportive of increasing bio-blend levels from 7% to 10% (B7 to B10).	We work with governmental bodies and partner with other industry players to collaborate with Dutch Oils and Fats Industry.	There has been positive momentum on these topics, with further clarity expected by mid-2022.	
Fair incentivization for Sustainable Aviation Fuel (SAF) and competitive technologies	We are supportive of GHG reduction efforts across industries and specifically recognize the lack of options available to the aviation industry. However, with a global goal to decarbonize, we believe no solution should unfairly disadvantage other low-carbon options.	We use both grassroots and grasstops efforts, in addition to earned and paid media to educate and engage across the industry to promote a level playing field for decarbonization efforts.	Proposed legislation that would over-incentivize SAF is currently stalled in the U.S. Senate. We are continuing our grasstops efforts to educate on this issue.	

# Partnering for Success

Part of our commitment to operating responsibly is making sure we work with businesses who do the same. We are extraordinarily proud of our numerous and lengthy business relationships. This loyalty directly translates to improved results, as our partners seek us out over other options and we collectively work through challenges.

We conduct due diligence on new, potential partners to evaluate the compatibility of values and practices, including their treatment of people and the environment and to make sure they comply with our policies, as noted in our Vendor Code of Conduct. This process includes use of background checks, international watch lists, media reviews, direct solicitation of company information, REG-conducted research and Compliance Team assessment. We also perform annual reviews of our partnerships based on materiality to our business and assessed risk of the relationship based on various factors. Additionally, we participate in several third-party programs that also require some sort of supply chain review or audit, as noted on pages 26-27.

#### **Vendor Code of Conduct**

We expect all of our vendors to read, understand and follow our policies, support REG's commitment to the highest levels of integrity and ethical standards, and in keeping with our core values and in accordance with all applicable laws. This includes agreeing to our standards across the following areas:

- + Compliance with laws, rules and regulations
- + Conflicts of interest
- + Gifts, hospitality and expenses
- + Facilitation payments

- + Fair dealing
  - + Health, Safety & Environmental practices + Anti-bribery and anti-corruption + Human rights and social duty

![](_page_15_Picture_12.jpeg)

![](_page_15_Picture_14.jpeg)

#### **Distribution partners:**

LEASED RAILCARS FOR TRANSPORTATION

Leased bio-based diesel storage tanks in 47 terminals in North America and two terminals internationally.

![](_page_15_Picture_21.jpeg)

![](_page_16_Picture_0.jpeg)

#### Waste & Residual Stream Feedstocks

REG recycles primarily waste fats and oils into high-quality, lower-carbon fuels. Known as feedstocks, these raw materials are biogenic in origin and derived from waste and residual stream fats and oils from other industries. This not only allows for a finished product that is less carbon intensive than fossil fuel products, but also contributes to circularity by keeping usable materials out of landfills and making full use of our agricultural system.

We understand the necessity of creating a sustainable supply chain to ensure the longevity of our business. Feedstock sourcing represents one of the largest components of our supply chain, which is why we work alongside our suppliers to overcome challenges and create new opportunities that further our efficiencies at every level of business, be it economic, environmental or societal. This includes key supply chain activities across renewable energy, waste, human rights, digitalization and innovation.

	Feedstock Type	Description
	CANOLA OIL	When crushed, canola see is used largely in animal fe oleochemicals for various to produce bio-based dies
	SOYBEAN OIL	Soybeans are crushed for used largely in animal fee in various industrial applic bio-based diesel.
CI SCORE	INEDIBLE ANIMAL FATS	Inedible animal fats such fat, are waste products fro consumption.
	DISTILLERS CORN OIL	Distillers corn oil comes f which is then boiled off. T in animal feeds, some ind
	USED COOKING OIL	Used cooking oils are the a variety of vegetable oils waterways and instead ma produce bio-based diesel

ed results in protein dense meal (~60%) and oil (~40%). Canola meal eed and for fertilizer treatments. Canola oil may be used in industrial applications, refined for human consumption or used sel.

their protein dense meal (~80%) and oil (~20%). Soybean meal is ad and some human consumption. The soybean oil may be used cations, refined for human consumption or used to produce

as beef tech tallow, choice white grease from swine, and poultry om the rendering process and typically are not fit for human

from corn ethanol production. Corn is fermented to form ethanol The remaining distilled mixture may be further processed and used lustrial applications or to produce bio-based diesel.

waste oils and greases from cooking and frying, consisting of and animal fats. This material can be detrimental if disposed in ay be collected and used in oleochemicals, animal feed or to l. 1.75MM MT

**TOTAL FEEDSTOCK CONSUMPTION FOR 2021** 

In 2021, we used 14 different feedstock types, which can be broadly grouped into five categories, as shown on page 33. We adjust our feedstock mix, as shown on the chart below, to accommodate market changes. Approximately 78% of our feedstock usage was from harder-to-process, lower-carbon waste and residual streams, like distillers corn oil, used cooking oil or rendered animal fat feedstock. The remaining 22% consisted of refined vegetable oils, such as soybean oil or canola oil.

**OF FEEDSTOCK USAGE WAS FROM HARDER-**TO-PROCESS, LOWER-CARBON WASTE AND

**CONSISTED OF REFINED VEGETABLE OILS,** SUCH AS SOYBEAN OIL OR CANOLA OIL

![](_page_17_Figure_7.jpeg)

FEEDSTOCK 1 FEEDSTOCK 2 FEEDSTOCK 3 FEEDSTOCK 4 FEEDSTOCK 5

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# Feedstock Flexibility 2019 Q1 2019 Q2 2019 Q3 2019 Q4 2020 Q1 2020 Q2 2020 Q3 2020 Q4 2021 Q1 2021 Q2 2021 Q3 2021 Q4

The biodiesel industry supports farmers, local **businesses and local** communities by taking a waste product and turning it into something that's good for our environment.

![](_page_18_Picture_1.jpeg)

## Driving the Circular Economy A continual process that starts right here

Used cooking oil creates lower-carbon bio-based diesel and is a top choice for fleets to reduce their emissions now.

Midwest Renewable Biofuels is a small-town business dedicated to worldwide change.

The company collects millions of pounds of used cooking oil from restaurants, bars, schools, amusement parks and other locations throughout lowa and the surrounding states.

- + In the past, this grease would be sent to a landfill.
- + Now, it is cleaned and recycled into a high-quality, cleaner-burning fuel that can be used in any diesel engine.

### French fry oil = alternative fuel

Founded: 2012

**Headquarters:** Prairie City, lowa

![](_page_18_Picture_11.jpeg)

JOE KOOKER, MRB OPERATIONS MANAGER

![](_page_18_Picture_17.jpeg)

#### FEEDSTOCK SOURCING

# Components of Our Feedstock Sourcing Strategy

Given the importance of feedstock to our operations, REG employs a multifaceted sourcing strategy. These actions provide for our future growth and protect against supply chain risks, including availability concerns, pricing sensitivities and sustainability impacts associated with our supply chain.

#### **Feedstock Flexibility**

Bio-based diesel can be produced from any biogenic fat or oil. However some feedstocks are harder to process, produce different product yields and can result in substantially different economics. Many bio-based diesel producers only leverage refined vegetable oils, such as soybean oil or canola oil, which are typically easier to source and process. REG has developed proprietary technology that enables us to use a wide variety of feedstocks, including harder-to-process materials such as distillers corn oil, rendered animal fat and used cooking oil. These harder-to-process materials are typically considered wastes from other industries and therefore less carbon intensive and more valuable in low carbon markets.

Our feedstock flexibility allows us to better adapt to market changes, making us and our customers less susceptible to price and supply issues. It is also advantageous for our suppliers, as we are better equipped to accommodate unforeseen supply chain challenges.

#### **Strong Supply Network**

Our 25 plus years in the industry have allowed us to develop a strong supply network and we have built trusted relationships with our feedstock suppliers. We source our feedstocks from over 100 vendors worldwide, in quantities ranging from truckload to railcar to marine vessel. At the end of 2021, over 95% of our suppliers had been with us for over five years and more than 70% for over 10 years. Our long-standing suppliers have grown with us and we fuel added growth by seeking out new sources and suppliers as well.

#### **Contracts and Hedging**

The prices for feedstocks and bio-based diesel, including the value associated with government incentives, can be volatile and are not always closely correlated. Low-carbon feedstocks are particularly difficult to risk manage given that such feedstocks are not traded in any public futures market. To manage feedstock and bio-based diesel price risks, we utilize forward contracting, hedging and other risk management strategies, including the use of futures, swaps, options and over-the-counter products.

In establishing our risk management strategies, we draw from our own in-house risk management expertise and consult with industry experts. We utilize research conducted by outside firms to provide additional market information and risk management strategies.

#### Feedstock Innovation, Research & Development

We are excited by the feedstock innovation occurring that will support the growth of our industry. Through funding and collaborative research and business development, we work with developers of next generation feedstocks, such as algae and cover crops, to assist them in developing and scaling these emerging technologies. Not only do these new feedstocks provide additional supply for our industry, but many have additional advantages. For example, cover crops can produce useful meal, oil, and contribute to regenerative agriculture through improved soil health, carbon sequestration, and waterway protection.

We also partner with companies and universities to further advance the science of biofuels. In 2021, we partnered with Iowa State University to create a hydrotreater pilot plant to understand how various biomass feedstocks can play a role in the production of renewable fuels with a specific focus on renewable diesel. The research will specifically support our Geismar facility by helping to evaluate new low-carbon feedstocks and optimize production of renewable diesel and sustainable aviation fuel.

#### FEEDSTOCK SOURCING

# Feedstock Sourcing Risks & Impacts

#### **Availability and Cost**

With numerous renewable fuel projects announced globally, some groups have raised concerns about the amount of feedstock required to support the growth of the industry and associated cost increases. There will undoubtedly be a period of market adjustment, as competition increases, but with components of the biogenic cycle serving as our feedstock, we are confident in an abundance of affordable options. In contrast to extractive operations, such as mining, expanding supplies of sustainably grown bio-based oils is an important part of an expanding circular economy.

### It's going to be a lot easier to find more lipids than to find more lithium. Think about that when comparing choices.

CYNTHIA 'CJ' WARNER, PRESIDENT AND CEO

#### **Biodiversity and Deforestation**

Biodiversity degradation and deforestation are commonly voiced concerns regarding global biofuel production. Where and how we farm can have substantial impacts on the natural environment. These topics are further complicated by socio-economic considerations, such as world hunger and earning a living wage. These topics can be complex and challenging to address.

![](_page_20_Picture_8.jpeg)

REG is committed to creating a better environment and does not support deforestation. We take various actions to address related concerns.

- + We adhere to all applicable laws and regulations and abide by the environmental requirements set forth by the fuel programs in which we participate.
- + We rely on independent certification programs related to feedstock sourcing.
- + Our initial business partner screening process includes checks related to environmental violations.
- + We expect all suppliers to adhere to our Vendor Code of Conduct, which explicitly notes a mutual commitment to the environment.
- + We maintain traceability to the point of origin or aggregation for all of our feedstocks.
- + We avoid using particular feedstocks, such as palm oil, or doing business in certain jurisdictions that tend to be higher risk of negative impact.
- + We will investigate any report of wrong doing and try to work with suppliers to remedy issues, but are prepared to sever relationships if REG's environmental standards cannot be upheld.

#### **Indirect Land Use Change**

Indirect Land Use Change (ILUC) is a concept that biofuel production encourages global conversion of non-agricultural land into cropland, which has the unintended consequences of additional carbon emissions from disruption of natural carbon sinks, release of soil carbon, and other environmental and societal impacts. ILUC models often suggest native habitats, like forests and grasslands are cleared for the sole purpose of producing biofuels and therefore assign all ILUC impacts to biofuels.

Some critics have even demanded a ban on the use of feedstocks with ILUC impacts.

However, ILUC is not easily measurable in the real world, as land conversion is the result of complex socio-economic interactions. It exists in models based on academic and scenarios and tend to be complicated by politics. In fact, in the while acres planted is decreasing, a point in contrast to the land use argument\*. There is not consensus on the true impact of ILUC across studies or fuel programs related to the validity and measurement of ILUC impact.

#### Food vs. Fuel

Biofuels are sometimes critiqued for competing with food sources, causing land diversion and higher food prices. However, similar to ILUC, the relationship between agriculture, food and fuel is quite complex and difficult to measure.

REG has always supported a "food THEN fuel" sourcing philosophy. We contend that we add value to our food system by providing a supplementary revenue stream for food producers, thereby strengthening food security and keeping grocery items, like meat, from increasing at even greater rates.

Additionally, many of the feedstocks we use are waste from other industries and processes and are not fit for human consumption. We provide a beneficial outlet for these materials and contribute to a circular economy.

#### **Supply Chain Integrity and Human Rights**

Operating with integrity is one of REG's core values and this extends to our supply chain. As noted on page 30, our suppliers are expected to adhere to a high level of care and duty in their business. We diligently screen our business partners and provide clear expectations to quide our supply relationships and ensure we can work together to respect and protect our various stakeholders.

One such expectation is a commitment to international standards of human rights practices. This includes avoiding forced or underage labor, trafficking, discrimination or any other violation that promotes unsafe work practices or behaviors.

\* Wang, Sun-ling, Mosheim, Roberto, Nehring, Richard, and Njuki, Eric. Productivity Growth in U.S. Agriculture (1948-2019), January 2022, https://www.ers.usda.gov/data-products/agriculturalproductivity-in-the-u-s/summary-of-recent-findings/

#### VARIATION IN ILUC ASSESSMENT ACROSS **JURISDICTIONS FOR SOY BIODIESEL**

Program	ILUC Penalty (gCO2e/MJ)
California LCFS	29.1
Oregon CFP	29.1
EPA RFS	34.0
GLOBIOM (EU)	150.0

Some recent academic research suggests the figure should be closer to 17.5 g  $CO_2e/MJ^{**}$ .

\*\* Taheripour, F., Tyner, W.E. US biofuel production and policy: implications for land use changes in Malaysia and Indonesia. Biotechnol Biofuels 13, 11 (2020). https://doi.org/10.1186/s13068-020-1650-1.

![](_page_21_Picture_0.jpeg)

#### Production

REG is among the most experienced companies in North America at designing, constructing and upgrading biorefineries. Our experience and expertise have allowed us to continuously improve and innovate, resulting in competitive operating costs, improved yields, expanded ability to process lower-carbon feedstocks and higher quality standards at our renewable fuel facilities. The REG network of state-of-the-art biorefineries ensures we can deliver the highest quality product where and when it is needed.

![](_page_21_Picture_3.jpeg)

\* REG renewable fuel meets the GHG reduction thresholds outlined by U.S. EPA RFS. Generally, biodiesel and renewable diesel qualify as Bio-mass Based Diesel (D4) and renewable naphtha and renewable propane qualify as Advanced Biofuel (D5).

![](_page_21_Picture_5.jpeg)

# **Our Biorefineries**

We currently own and operate a network of 11 biorefineries, located in the U.S. and Germany. Our Geismar, Louisiana facility produces renewable diesel and the other ten facilities produce biodiesel. In aggregate, our production facilities have a nameplate capacity of 470 MMGY, which is based on the original plant designs. Due to our numerous improvement projects, our facilities have an effective capacity of 599 MMGY, which represents the maximum average throughput that satisfies certain defined technical constraints.

REG Operations Commenced: 2007

Feedstock Capability: Crude, High

FFA and Refined Oils and Fats

Use: Biodiesel Production

We are continuously reviewing our operational strategy. This led to our decision to close our Houston, Texas biorefinery where production ceased in November 2021. See how we took an employees-first approach to this decision.

**PRODUCTION CAPACITY** 

#### **REFINERY INFORMATION**

#### Albert Lea, Minnesota Nameplate Capacity (MMGY): 30 Grays Harbor, Washington Effective Capacity (MMGY): 46 REG Operations Commenced: 2005 Nameplate Capacity (MMGY): 100 Madison, Wisconsin Feedstock Capability: Crude, High Effective Capacity (MMGY): 109 FFA and Refined Oils and Fats Nameplate Capacity (MMGY): 20 REG Operations Commenced: 2015 Use: Biodiesel Production Effective Capacity (MMGY): 28 Feedstock Capability: Refined Oils and Fats REG Operations Commenced: 2016 Use: Biodiesel Production Feedstock Capability: Crude, High **TOTAL NAMEPLATE** FFA and Refined Oils and Fats **CAPACITY (MMGY)** Use: Biodiesel Production Mason City, Iowa Nameplate Capacity (MMGY): 30 Seneca, Illinios Effective Capacity (MMGY): 39 REG Operations Commenced: 2013 Nameplate Capacity (MMGY): 60 Emden, Germany Effective Capacity (MMGY): 80 Feedstock Capability: Crude, High FFA and Refined Oils and Fats REG Operations Commenced: 2010 Nameplate Capacity (MMGY): 27 Feedstock Capability: Crude, High Use: Biodiesel Production Effective Capacity (MMGY): 33 FFA and Refined Oils and Fats REG Operations Commenced: 2016 **United States** Use: Biodiesel Production Feedstock Capability: Crude, High FFA and Refined Oils and Fats Use: Biodiesel Production Danville, Illinois Ralston, Iowa Nameplate Capacity (MMGY): 45 Nameplate Capacity (MMGY): 30 Oeding, Germany Effective Capacity (MMGY): 50 Effective Capacity (MMGY): 49 REG Operations Commenced: 2009 Nameplate Capacity (MMGY): 23 REG Operations Commenced: 2002 Feedstock Capability: Crude, High Feedstock Capability: Refined Oils and Fats Effective Capacity (MMGY): 25 FFA and Refined Oils and Fats Use: Biodiesel Production REG Operations Commenced: 2016 Use: Biodiesel Production Newton, Iowa Feedstock Capability: Crude, High FFA and Refined Oils and Fats Nameplate Capacity (MMGY): 30 Geismar, Louisana Use: Biodiesel Production Effective Capacity (MMGY): 40 Nameplate Capacity (MMGY): 75

Effective Capacity (MMGY): 100

REG Operations Commenced: 2014

Feedstock Capability: Crude, High

FFA and Refined Oils and Fats Use: Renewable Diesel Production

![](_page_22_Picture_7.jpeg)

# **Production Processes**

REG's multi-feedstock capability allows us to convert a variety of fats, oils, and greases into lower-carbon fuels. Prior to the fuel production process, many of the feedstocks require pretreatment to remove impurities that may interfere with chemical reactions, negatively impact equipment and result in inconsistent product. Once feedstock has been treated, we use different processes to convert the feedstock into renewable fuel.

#### **Biodiesel**

Biodiesel is made through a process known as transesterification. Feedstocks, or triglycerides, chemically react with methanol (MeOH) resulting in glycerin and fatty acid methyl esters (FAME), which is another name for biodiesel. We use several different technologies to purify the biodiesel throughout the process to ensure a high quality finished product.

![](_page_23_Figure_5.jpeg)

#### **Maximizing Production**

While biodiesel and renewable diesel are our primary products, our processes result in additional product offerings. We work with our customers to find a variety of applications for these products, as described on <u>page 61</u>. Not only do these efforts better serve our customers and result in greater value for our business, but they also maximize the output from our operations.

#### **Operational Excellence and Innovation**

REG focuses on efficiency in our operations for improving economics and driving overall sustainability for our company. We have staff trained in various optimization and process improvement techniques and maintain a special award for continuous improvement efforts that lead to enhanced profitability and better resource management. We also have a designated Innovation team that is working to foster ingenuity across the organization through cultural enhancements, training, awareness and access to proper resources.

Our efforts have allowed us to grow organically, resulting in over 30% production capacity increase over the last five years. Last year, we had a significant number of projects under development that focused on carbon reduction improvements for our business. We continue to do more with less and look to reduce negative impacts from our operations. The majority of our natural resource usage occurs at our production facilities and is highlighted on the following pages.

#### **Renewable Diesel**

REG renewable diesel is produced using Bio-Synfining<sup>®</sup> technology, developed and patented by REG Synthetic Fuels. Pretreated feedstock undergoes hydrotreating, where hydrogen is added to the process to remove atoms other than hydrogen or carbon. The carbon chains are then reordered and branched through isomerization which improves certain qualities of the fuel. Finally, the three finished products—renewable diesel, renewable propane, and renewable naphtha are separated using fractionation.

Additional detail on the characteristics of finished fuel can be found on page 59

# GreenTeams

In 2021, we launched a new employee engagement sustainability initiative called Green Teams. Employees are encouraged to collaborate to implement their sustainability ideas with the support and oversight of a cross-functional steering committee.

One of our successful campaigns, Bacon-to-Biodiesel, encourages Ames office employees to bring in used cooking oil from home, which is then sent to one of our biorefineries and processed into lower-carbon biodiesel. This allows employees a new and personal way to contribute towards the renewable fuel production process and makes better use of personal kitchen waste. Our team of committed employees leading this project hope to expand the effort to other REG locations and potentially invite our local communities to participate.

# **REG** has been an exceptional partner for our state. Together we are helping our world meet lowercarbon goals, all while providing a great benefit to our local economy.

JOHN BEL EDWARDS, LOUISIANA GOVERNOR

# **GEISMAR EXPANSION & IMPROVEMENT PROJECT** The Right Time to Expand Renewable **Diesel Production REG Geismar is the right place**

REG is investing an estimated \$950 million at our Geismar, Louisiana biorefinery to increase production capacity, enhance existing operations and improve operational reliability and logistics.

Geismar is helping us further our mission to transition the world to renewable energy.

To support this project, REG established a Green Bond Framework, accessible on our website, which has helped secure a portion of the necessary funds. Additional information on these notes can be found in the Appendices.

#### **Projected Results:**

- + Annual carbon emissions reduced -2.4 million metric tons (up from 600,000)
- + Jobs created 500+ Construction; 60+ Permanent
- + Production capacity increase 277%

# Acquired: 2014

Located: Ascension Parish, Southern Louisiana

![](_page_24_Picture_14.jpeg)

#### **PRODUCTION SPOTLIGHT**

![](_page_24_Picture_16.jpeg)

**Operations:** Was first largescale renewable diesel facility built in the U.S

![](_page_24_Picture_18.jpeg)

Project will increase production capacity from 90 million gallons per year to 340 million gallons per year

# **Our Water Process**

The majority of our direct water usage occurs in our production processes. While our processes are less water intensive than those for other biofuels, such as ethanol, we recognize the importance of water conservation and need for sound water management practices. The majority of our water is sourced from thirdparties, such as municipalities (70%), with the remaining water (30%) sourced from groundwater or wells. None of our production facilities are located in areas that experienced high water stress, per the Aqueduct Water Risk Atlas. We adhere to water permitting at all of our locations and routinely monitor usage and disposal to ensure compliance and identify opportunities for improvement.

#### **Renewable Diesel Production Water Flow**

Water is conditioned and used for feedstock pre-treatment, similar to biodiesel production. However, the chemical reaction that occurs during isomerization results in the creation of water molecules, so more gallons are discharged than withdrawn. Additionally, the renewable diesel process is exothermic, resulting in slightly less water demand for cooling towers.

Our water usage increased in 2021, in part due to increased distillation activities, which allow for a purer finished product. We also had one water incident that resulted in a notice of violation and \$150 in fines and two incidents that resulted in notices of violation but no fines. While we consider these incidents to be minor, we always apply our learnings and communicate across the organization to reduce the likelihood of future issues.

Торіс	2021
Water withdrawal (m³)	1,376,224
Hazardous waste (MT)	29.8
Non-hazardous waste (MT)	13,537.3

Торіс	2019	2020	2021
Water withdrawal intensity (m³/ MT total product)	0.73	0.68	0.77
Non-hazardous waste intensity (MT/MT total product)	0.01	0.01	0.01

#### WATER USAGE FOR BIODIESEL PRODUCTION

WATER CONDITIONING - To ensure efficient biodiesel process reactions and to maintain equipment integrity, raw water must be treated by industrial water softeners.

**FEEDSTOCK PRE-TREATMENT** — Impurities from REG's variety of low carbon feedstocks are removed using concepts such as water solubility and density.

**BIODIESEL PRODUCTION** — During the biodiesel production process, water is used to purify biodiesel using solubility concepts. Excess water and unreacted methanol are recycled back into the process.

**COOLING** — Water is used in cooling towers to cool condensers for the Stripping and Rectification columns. Some water is lost through evaporation and occasional cooling tower blowdowns, but is largely recirculated.

![](_page_25_Figure_14.jpeg)

# Waste

Historically, we have generated negligible amounts of hazardous waste at our facilities, as reported in past years. Our reportable figure this year is due to a few items. We produce a small amount in our labs and due to improved tracking processes, we are now including this quantity in our reporting. We also had one issue where material was sent offsite before being properly neutralized, resulting in hazardous waste. We were able to correct this situation and have improved our internal processes to mitigate any future instances. Finally, there is historic contamination at our Geismar facility, which has been disturbed due to our expansion project. The proper permits, monitoring and mitigation plans have been established to address this project impact.

# Energy Consumption

Our direct and indirect energy consumption is largely associated with our production processes. We use natural gas, electricity and steam to power our operations. We aim to do more with less and constantly look for efficiency opportunities. By prioritizing efficiency, we can minimize emissions and avoid the need to overbuild renewable energy infrastructure.

We are also looking for cleaner forms of energy to reduce the impact of our production processes. 2021 was the first full year that our Albert Lea, Minnesota facility was powered by a third-party owned wind turbine. We are evaluating renewable energy projects for several of our other facilities and have provided financial support for local utility efforts to increase renewable power generation for the grid.

#### **Energy Consumption - REG Enterprise**

Thousands Gigajoule (GJ)	2021
Direct energy consumed (excluding fleet vehicles) <sup>1</sup>	2851.15
Indirect energy consumed <sup>2</sup>	802.60
6% REG-sourced renewable electricity / 94% grid electricity <sup>3</sup>	

GJ/MT Total Products	2019	2020	2021
Combined energy intensity	1.97	1.94	2.04

<sup>1</sup> Representative of the energy contributing to Scope 1 emissions, excluding fleet fuel consumption

<sup>2</sup> Representative of the energy contributing to Scope 2 emissions; includes energy from renewable and non-renewable sources

<sup>3</sup> Grid electricity may include renewable power generation

As REG grows its fuel distribution business, as described on <u>page 44</u>, we are conscious of the impact of our fuel use. Our small Des Moines fleet of heavy duty distribution vehicles are equipped with technology that allows for 100% biodiesel usage, allowing us to minimize our emissions impact, as well as demonstrate the value of such technology for our customers. The acquisition of California fuel distributor, Amber Resources, at the end of 2021 increases the number of owned vehicles and will increase our energy consumption and GHG emissions inventory once that data is incorporated into our tracking systems. Part of our integration planning includes enabling greater bio-based diesel usage for these vehicles.

We also maintain a fleet of diesel passenger vehicles for employee business use. Our streamlined fleet management tool enables carpooling coordination and we recently invested in an onsite fuel tank that will allow us greater control of biodiesel blend levels as seasons change. We expect that we can utilize blends with renewable content as high as 50% during warmer months.

### PRODUCTION

Ot

Fac

# Air Emissions

Each of our facilities is a "small source" of air emissions according to Title V definitions of the Clean Air Act. Other air emissions are not a source of significant impact for our business. We had zero incidents of non-compliance with air quality permits, standards and regulations.

# Incidents of non-compliance with air quality permits, standards and regulations.

		Sector Se
ner Air issions - REG iduction ilities	мт	2021 Performance
	Nitrogen Oxides (NOx)	130.6
	Sulfur Oxides (SOx)	30.5
	Volatile Organic Compounds (VOCs)	37.0
	Particulate Matter (PM10)	9.9
	Hazardous Air Pollutants (HAPs)	29.0

# GHG Emissions Inventory

We follow Greenhouse Gas (GHG) Protocol guidance to quantify our GHG emissions inventory. This approach categorizes emissions across an organization's value chain based on source.

As noted, the majority of our direct and indirect energy consumption is associated with our production processes and serve as the primary drivers of our scope 1 and 2 GHG emissions. Scope 1 emissions are direct emissions from owned or controlled assets, which includes on-site natural gas combustion and the fuel used in our vehicle fleet. Scope 2 measures the indirect emissions from purchased energy, which includes electricity and steam generation. Finally, scope 3 encompasses the remaining indirect emissions throughout our value chain. We report some scope 3 elements related to parts of our supply chain and are continuing to build out this portion of our inventory. Our inventory also includes biogenic carbon emissions related to the bio-based diesel we sell to customers and our use of bio-based diesel in our own assets. Additional information regarding biogenic carbon can be found on page 24.

![](_page_27_Figure_4.jpeg)

Thousand MT CO <sub>2</sub> e	2021
Scope 1: Direct Emissions	144.0
Scope 2: Indirect Emissions— Location-based	70.5
Scope 2: Indirect Emissions— Market-based	47.2
Scope 3 Partial: Categories 1, 4, 7, 9, 11	1,315.2
Biogenic carbon emissions	4,918.4

Compared to 2020, our organizational GHG emissions decreased. This is largely explained by our reduced production due to market conditions and the closure of our Houston biorefinery and is demonstrated through our intensity figures. Scope 2 emissions were also positively impacted by improved average grid emission factors from cleaner technology utilization, which is shown per the location-based figure. We are also showing a market-based approach for scope 2 emissions, which considers the power generation mix for our specific utility providers and the wind-powered electricity at Albert Lea.

We continue to work towards a more complete and accurate GHG inventory and are working to build our scope 3 inventory. As we enhance our data and refine assumptions used for our emissions reporting, we may include some corrections and methodology changes. Our scope 3 inventory includes some of our purchased goods related to hydrogen and methanol used in our production processes (category 1), upstream transportation and distribution (category 4), employee commuting (category 7), downstream transportation and distribution (category 9), and use of sold products (category 11).

As a company focused on decarbonization, we are committed to growing our business without growing our emissions and have identified many projects to help us further improve our performance. Additionally, many of the fuel programs in which we participate allow us to monetize certain carbon reduction activities, further incentivizing our efforts. As we continue to improve our performance, we also enable our customers to improve their own impact to meet emissions reduction goals and together work towards a more sustainable future.

(MT CO <sub>2</sub> e / MT Total Products)	2019	2020	2021
Scope 1 GHG emissions intensity	0.08	0.08	0.08
Scope 2 GHG emissions intensity—location-based	0.05	0.04	0.04
Scope 2 GHG emissions intensity—market-based			0.03

# Cleaner Fuels

#### **Solutions Overview**

We help industries implement practical solutions to complex sustainability challenges by providing leading-edge quality, go-to-market agility, sustainable partnerships and sensible decarbonization strategies.

REG high quality bio-based diesel offers a way to meaningfully reduce carbon emissions now, without compromising performance or requiring substantial investment. Any asset that uses diesel fuel can use bio-based diesel, without modifications. Plus, bio-based diesel can make use of the existing liquid fuel distribution infrastructure, making it easier and affordable for customers to access product.

#### **2021 SALES PERFORMANCE**

6 STATES SERVED CANADIAN PROVINCES

OTHER COUNTRIES

YOY INCREASE IN ULTRACLEAN BLEND<sup>™</sup> SALES

58%

MILLIONS OF GALLONS SOLD IN 2021

![](_page_28_Picture_10.jpeg)

BIODIESEL

+ additional co-product sales

\* Total may not foot due to rounding

![](_page_28_Picture_14.jpeg)

![](_page_28_Picture_15.jpeg)

![](_page_28_Picture_16.jpeg)

# Enoura Fuels.

#### OUR PRODUCTS

# Clean Fuels

REG is helping to lead the way toward a cleaner, greener future—now with our innovative line of EnDura Fuels<sup>™</sup>. The EnDura Fuels product line is the culmination of our research over the last 25 years and it embodies REG's dedication and leadership to create dependable, quality fuel that offers endless possibilities. Through our complete line of fuel solutions, we can meet our customers' business needs while advancing their sustainability and profitability goals.

![](_page_29_Picture_4.jpeg)

#### BIODIESEL

6

InfiniD<sup>™</sup> is a high-quality biofuel for use in all conventional diesel applications.

![](_page_29_Picture_7.jpeg)

#### ULTRA BIODIESEL

PuriD<sup>™</sup> is produced using advanced refining processes and testing procedures to meet Renewable Energy Group's next-generation quality standards.

![](_page_29_Picture_10.jpeg)

![](_page_29_Picture_11.jpeg)

![](_page_29_Picture_12.jpeg)

![](_page_29_Picture_13.jpeg)

![](_page_29_Picture_14.jpeg)

<sup>1</sup> Product is produced utilizing 100% renewable oils and fats. Methanol used to make biodiesel and hydrogen used to make renewable diesel and SAF are typically made from conventional natural gas. <sup>2</sup> https://afdc.energy.gov/vehicles/diesels\_emissions.html <sup>3</sup> Reductions based on emissions data from California Air Resources Board and compared to U.S. federal ULSD, (Durbin, et al., 2011)

RENEWABLE ENERGY GROUP 2021 E

![](_page_29_Picture_17.jpeg)

Enables decarbonization today with much lower Carbon Intensity (CI) than petroleum diesel

![](_page_29_Picture_19.jpeg)

Sustainable oxygenated fuel option that can improve combustion quality and lubricity of petroleum fuels

![](_page_29_Picture_21.jpeg)

**Cleaner engine emissions:** decreases harmful pollutants in tailpipe emissions from legacy engines and reduces the burden on New Technology Diesel Engines (NTDE) emissions control systems (fewer DPF regenerations, for example)

![](_page_29_Picture_23.jpeg)

Compared to petroleum diesel,  $\mathsf{InfiniD}^{\scriptscriptstyle\mathsf{M}}$  can reduce engine emissions by:

- + Up to 100% for fossil carbon  $^1$
- + Up to 70% for total hydrocarbon<sup>2,3</sup>
- + Up to 70% for particulate matter<sup>3</sup>

![](_page_29_Picture_28.jpeg)

Stringent quality standards that exceed ASTM, CEN and CGSB biodiesel quality requirements

/	
	1

Developed specifically for virtually seamless blending with renewable diesel

![](_page_29_Picture_32.jpeg)

Enables fuel users to confidently increase biodiesel blend levels year-round

![](_page_29_Picture_34.jpeg)

Carbon Intensity (CI) scores that are much lower than petroleum diesel allow for decarbonization now

![](_page_29_Picture_36.jpeg)

PuriD<sup>™</sup> blends with petroleum diesel can be managed using the same cold flow properties used to manage petroleum fuels

![](_page_30_Figure_0.jpeg)

**RENEWABLE DIESEL** 

VelociD<sup>™</sup> is a clean-burning, ultra-high Cetane hydrocarbon renewable fuel.

![](_page_30_Figure_3.jpeg)

Stringent quality standards that exceed ASTM, CEN and CGSB specification requirements

![](_page_30_Picture_5.jpeg)

\_

Low Carbon Intensity (CI) enables decarbonization today

Compared to petroleum diesel, VelociD<sup>™</sup> can reduce engine emissions by:

+ Up to 100% for fossil carbon<sup>1</sup>

freezing point

+ Up to 40% for particulate matter<sup>2</sup>

diesel allow for decarbonization today

+ Approximately 15% for nitrogen oxides (NOx)<sup>2</sup>

![](_page_30_Picture_11.jpeg)

#### **RENEWABLE DIESEL + BIODIESEL**

UltraClean BlenD<sup>™</sup> is a proprietary, 100% renewable fuel combination of VelociD<sup>™</sup> and PuriD™ that allows decarbonization today in virtually any diesel application.

![](_page_30_Picture_14.jpeg)

Carbon Intensity (CI) scores that are much lower than petroleum

Superior lubricity to renewable diesel and can even have a lower

![](_page_30_Picture_16.jpeg)

UltraClean BlenD<sup>™</sup> can provide the lowest overall engine emissions of any diesel fuel option

![](_page_30_Picture_18.jpeg)

Elastomer swell, density and bulk modulus properties of UltraClean BlenD<sup>™</sup> are a better match for conventional diesel than 100% renewable diesel

![](_page_30_Picture_20.jpeg)

#### SUSTAINABLE AVIATION FUEL

BeyonD<sup>™</sup> is a low-carbon sustainable aviation fuel (SAF) that will help lead the decarbonization of the aviation industry.

![](_page_30_Picture_23.jpeg)

Produced from 100% renewable oils and fats, allowing for dramatic reductions in direct aircraft fossil carbon emissions<sup>1</sup>

![](_page_30_Picture_25.jpeg)

Meets the ASTM D7566 fuel specification

<sup>1</sup> Product is produced utilizing 100% renewable oils and fats. Methanol used to make biodiesel and hydrogen used to make renewable diesel and SAF are typically made from conventional natural gas. <sup>2</sup> Reductions based on emissions data from California Air Resources Board and compared to U.S. federal ULSD. (Durbin, et al., 2011)

outputs from our production processes.

Products	Overview & Uses			
Methyl Esters	Methyl esters are another n particular applications, such	ame for biodiesel but the term is more widely used amongst n as solvents and adjuvants.		
Glycerin	Both glycerin and bio- residual oil are created	Glycerin has a variety of uses, ranging from animal feed to industrial applications.		
REG Bio-Residual™ Oil	during our biodiesel production process.	REG Bio-Residual <sup>™</sup> Oil is an exceptional renewable option burned for heat, power generation and other industrial u		
Renewable Propane	Both renewable propane and renewable naphtha are produced as part of the renewable diesel production process.	Also known as bio-propane or renewable autogas, renew propane is used as a lower-carbon fuel in propane engine		
Renewable Naphtha		Renewable naphtha can be blended with ethanol or gaso lower-carbon option for gasoline powered vehicles.		
Bioheat®	Bioheat® is a biodiesel-heating oil blend that enables the heating oil market to reduce ha emissions and extend the useful life of equipment.			
Blended Fuel	We sell a variety of biodiesel blended fuels, as appropriate for customer needs. We work customers to identify blend levels that suit sustainability, performance and financial goal			
Gasoline & Ethanol Blends	REG also sells different third-party products that are typical in fuel distribution. We rea			
Diesel Fuel	our customers have a variety of needs, both renewable and other, and we aim to streat experience. Offering these products also creates opportunities to explore renewable a with our customers.			
Heating Oil				

# **Product Application**

REG products can be used as a lower carbon alternative for any traditional petroleum diesel application. Many of our customers have few, if any, low carbon fuel alternatives that meet their business needs, are readily available and are at a competitive price point. Through use of REG fuels, customers are able to reduce their carbon footprint immediately using their existing assets, which is better for business and better for the planet.

#### **INDUSTRIES WE SERVE**

![](_page_30_Figure_32.jpeg)

![](_page_30_Picture_33.jpeg)

![](_page_30_Picture_34.jpeg)

![](_page_30_Picture_35.jpeg)

#### In addition to our EnDura Fuels, we offer other products to satisfy customer needs and make the best use of all

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### **CLEANER FUELS** Distribution

While our roots are in fuel manufacturing, we continue to move closer to the end user of our fuels. Expanding into the distribution business allows us greater contact with customers to ensure they understand the full benefits of purchasing renewable fuels. Through this collaborative process, we have helped many customers utilize higher blends and increase their sustainability impact.

REG's downstream infrastructure includes a terminal network that spans North America and Europe and offers fuel delivery services in Central Iowa and Southern-California.

Our late-2021 acquisition of Amber Resources, LLC, a leading Southern California distributor, will grow REG's footprint in one of the most renewables-focused regions in the world and is expected to add more than 60 million gallons per year of diesel sales to our portfolio, along with gasoline, lubricants, other transportation fuel components, industrial services and additives. REG has maintained the eight existing locations, including distribution centers and cardlock sites, in addition to retaining all 300+ personnel to ensure customers experience uninterrupted services.

# Partnering with Booster<sup>™</sup>

In addition to our own distribution capabilities, we are partnering with other innovative companies to provide easier access to renewable fuels.

In 2021, we announced a partnership with Booster, a techenabled energy delivery service for fleets. Booster is a fuel distribution company that uses technology to optimize customer experience, routes and profitability. REG now serves as their exclusive supplier of renewable fuels, equipping their mobile fueling platform with high quality, lower-carbon fuel. Together we are improving the impact of the last mile vehicles that support the booming delivery economy.

![](_page_31_Picture_7.jpeg)

![](_page_31_Picture_8.jpeg)

![](_page_31_Picture_11.jpeg)

#### **RELIABLE DELIVERY Overcoming Concerns for Maximum Impact**

Some people point to blend level limitations and cold weather performance issues as challenges for use of biodiesel. However, often these cited concerns do not consider advancements within the industry, thereby hampering the potential positive impact customers can have. While bio-based diesel does require some unique considerations, REG continues to innovate to mitigate these concerns.

Our knowledgeable team works with customers to ensure they get blend levels appropriate for their specific needs. Through investment in our refining processes, we are able to produce fuel with improved quality characteristics and performance that can work well in cold weather and in virtually all diesel engine equipment. Additionally, customers like City of Ames, City of Madison and District of Columbia Public Works have implemented technology that enables 100% biodiesel usage year-round.

"We installed a B100 tank at our new Ankeny location because we wanted to be more forward-thinking as we think about fuel products. This ensures that we can optimize our biodiesel blends through the summer and the winter so our customers get the optimal blend in their trucks."

**NATHANIEL DODDRIDGE,** VICE PRESIDENT OF FUELS AT CASEY'S

ustainability is at the center of how we do business. Like REG, our vision is to power sustainable growth for our customers, our shareholders and the communities in which we operate.

FRANÇOIS BÉLANGER, CN'S CARBON TRANSITION DIRECTOR

# 

# On Track for Tomorrow . . . Today CN's commitment to sustainability is changing the course for the future

On average, trains are four times more fuel efficient than trucks. That means by moving long-haul freight by rail, greenhouse gas (GHG) emissions can be reduced by up to 75%.

#### CN is committed to improving locomotive operating efficiencies to reduce its carbon footprint.

In 2021, CN began transitioning a fleet of trains to run exclusively on fuel blends produced by REG.

- + The rail company purposely chose its Pennsylvania location for the two-year-long test to better evaluate how renewable fuels perform in cold weather climates.
- + The test marks the first where 100 percent renewable fuel is being used in locomotives across Canada and the U.S.
- + Initiating its first long-term test of biodiesel and renewable diesel in cold weather climates demonstrates CN's confidence in REG's solutions.

Founded: 1919

**Headquarters:** Montreal. Quebec

![](_page_32_Picture_16.jpeg)

**Operations:** Nearly 20,000 miles of track across Canada and Mid-America connecting three ports

![](_page_32_Picture_18.jpeg)

**Transports more** than \$250 billion (CAD) of goods every year

# Environment, Health & Safety

♦ REG

#### **Safety Focused**

Safety and humanity are core values at REG. We drive excellence by following occupational, process safety, and health and environmental standards that protect the welfare of our employees, customers, vendors, the communities where we operate and the environment. Environment, Health and Safety (EHS) performance is both a personal and collective responsibility and is reported up to the Board of Directors, with a direct impact on variable corporate compensation.

We maintain a strong safety culture through our VisionZERO model, which sets the vision to have zero injuries, environmental incidents and process safety incidents. We have also established robust EHS management systems through policies, practices and tools designed similar to ISO 45001 and ISO 14001 to facilitate strong safety and environmental performance. Our efforts adhere to applicable laws and regulations and maintain many corporate standards that frequently surpass regulatory compliance obligations.

# VISION ZERO

#### Mindset

Creating a mentality in which safety is a value that we do not compromise.

#### **Expectations**

Ensuring that employees know what is required of them, with the expectations established, consistent and reinforced.

#### Elements of our EHS management systems:

- + Our EHS policy sets expectations and expresses commitment to the safety and health of our employees, customers, vendors and guests.
- + Systems and standards are established, clearly defining roles, responsibilities and requirements to meet regulatory requirements and verify compliance.
- + Facility-specific data tracking and standards that include regulation management, inspection records, auditing results, training logs, and standardized processes for accountability to verify compliance.

#### Commitment

Giving employees responsibility for their co-workers' and their own safety, and creating accountability.

#### Action

Executing, auditing and improving the tools, processes, and systems we've established.

- + Mandatory safety training for all employees, customized based on job function.
- + Cultural integration, such as behavior based safety observations and safety moments to maintain safety awareness at a high level in all situations.
- + Routine and transparent communication to build awareness and share learnings.

#### **ENVIRONMENT, HEALTH & SAFETY**

# **Operational Safety**

Our strong safety performance is the result of our employees' embodiment of our VisionZERO model. Through collective diligence, we have achieved industry-leading performance with a sustained downtrend in our Global Aggregate Total Recordable Incident Rate to the lowest level in our history. Our continuous improvement strategy seeks to build upon our progress to date and includes focused initiatives to continue to engage our employees and drive our VisionZERO culture. We know we need to remain vigilant as we work toward for an injury- and incident-free workplace and we are proud of the progress we have made.

# **Process Safety**

With a stated commitment to the environment and society, REG works hard to prevent releases of hazardous materials that could result in serious injuries or damage. Biodiesel is nontoxic and biodegrades faster than sugar. Despite its innocuous properties, we aim to minimize spills and work diligently to prevent incidents across our operations by:

- + Performing process hazard analysis (HAZOPs) at facilities and implementing layers of protection.
- + Utilizing the Management of Change (MOC) process for all changes to the process, equipment and procedures before implementation and Pre-Startup Safety Reviews (PSSR) to ensure potential hazards of the change(s) have been identified and mitigated.
- + Using currently recognized and accepted good engineering practices in the design, construction and management of facilities and equipment.
- Other EHS best practices including proper training, incident investigation and root cause analysis, routine auditing and continuous improvement efforts.

Safety Data	2019	2020	2021
Total Recordable Incident Rate (TRIR) <sup>1</sup>	0.44	1.10	0.23
Lost- Time Incident Rate (DART) <sup>2</sup>	0.44	1.10	0.23
Fatality Rate	0	0	0
Tier 1 Process Safety Rate <sup>3</sup>	0.11	0.22	0
Tier 2 Process Safety Rate <sup>3</sup>	0.22	0	0.11

NOTE: Excludes COVID-19 Illness cases. Data for REG employees only. Contract worker incidents are not included in these rates, although we do monitor.

<sup>1</sup> Total recordable incident rate as defined by OSHA to determine the relative level of injuries and illnesses per 200,000 work hours.

<sup>2</sup> Davs awav restricted, ot transferred (DART) rate as defined by OSHA to determine relative number of recordable workplace injuries or illnesses resulting in time away from work, restricted job duties or permanent employee transfer.

<sup>3</sup> Process safety incident (API rate per 20,000 incidents). We use API-754 process safety performance indicators for the refining and petrochemical industries for loss of containment incidents.

We have several initiatives lined up for 2022 to maintain and build upon our performance in 2021. These activities contribute to building our VisionZERO culture now and in the future.

**PSM Culture Workshops and Training:** Sessions to further enhance process safety culture and employee knowledge

Continued Behavior Based Safety Rollout: Observation process to proactively, collaboratively observe work tasks and identify opportunities to reduce risk and improve safety

#### **Total Recordable Incident Rate (TRIR)**

![](_page_34_Figure_18.jpeg)

# Environmental Compliance

Our rigorous processes and safety-first mentality enable us to avoid larger-scale environmental issues and minimize negative impact from operations. However, in the event that there are mistakes, we work quickly to rectify and improve issues.

In 2021, REG had no air permit violations. We had three notices of violation regarding waste and wastewater disposal, although all of them were minor incidents, resulting in \$150 aggregate in fines. We also do not currently have any environmental proceedings either pending or threatened against our facilities that would materially affect our business or financial condition.

- Culture Assessments: Obtain employee feedback on the status of our safety culture relative to the VisionZERO Culture Model and identify opportunities for improvement
- **Compliance Assurance:** Implementation of best practices and tools, such as our EHS management software, that support the confidence and required oversight of our EHS compliance

- AIR PERMIT VIOLATIONS
- **NOTICES OF OF VIOLATION REGARDING WASTE AND** WASTEWATER DISPOSAL
- AGGREGATE IN TOTAL FINES

The safety of our team members, their families and the community were our top priority. In advance of the hurricane's landfall, our local team brought down the plant in a safe and secure manner. We are grateful that our employees, contractors and partners were able to remain safe throughout, and for their dedicated efforts that enabled us to restart the plant in a safe and controlled manner.

### Hurricane Ida **Hurrican Ida**

Hurricane Ida created devastating impact to the southeastern United States, including directly crossing paths with our Geismar biorefinery facility in Louisiana. Our Emergency Response Team (ERT) jumped into action to respond and support our employees, resulting in new practices that will benefit the entire organization.

During the days leading up to the hurricane, we prepared by establishing clear communication channels, securing our plant and providing assistance to those who needed it. Our local teams reviewed shut-down procedures, secured loose materials, tested equipment and executed other preparatory measures. REG had team members at our site day and night, and we navigated the hurricane with minimal damage and were able to resume normal operations within two weeks of the storm. We also sourced items for our employees including fuel, food, and other potentially life saving materials (e.g. chainsaws, generators) to have at the ready. This enabled us to respond within 24 hours for most of our employees' needs.

REG is leveraging this experience to inform future crisis response by documenting and refining the operational protocols relevant to the hurricane as a guide for the future. We know our employees and their families rely on us during these potentially devastating events and we are there to support them. This includes storing the supplies needed to respond effectively during times of crisis. It also includes establishing contracts with vendors for fuel supply, home remediation, and temporary housing.

CYNTHIA 'CJ' WARNER, PRESIDENT AND CEO

TAKING ACTION TO SUPPORT OUR EMPLOYEES

# Preparing and managing for the devasting impact of

#### TAKING ACTION TO SUPPORT OUR EMPLOYEES

#### **COVID-19 MANAGEMENT**

Committment to a strong, focused approach of employee well-being, health and safety

Although we entered 2021 hopeful that the disruptions of COVID-19 were waning, we remain vigilant in our emergency response efforts to keep our employees, families and communities safe during the pandemic. We have taken an integrated approach to helping our employees manage their work and personal responsibilities, with a strong focus on employee well-being, health and safety. Our established COVID-19 ERT monitors the health of our employees and continues to provide input to new and ongoing initiatives in response to the pandemic and new variants of the disease.

#### 2021 notable activities:

- + Routine metric monitoring to understand community transmission trends and employee health, which informs our protocols as we look to return to normal operations.
- + Continuation of additional paid time off for employees as needed in order to deal with health or family issues related to COVID-19. This policy was revised throughout the year to consider preventative measures taken by employees.
- + Ongoing procurement of PPE and cleaning supplies to ensure a safe work environment.
- + Hosted voluntary, convenient on-site COVID-19 vaccination clinics.
- + Donated a specialized freezer to a local medical facility to aid in efficient and accessible vaccination efforts.

The past two years have been difficult for everyone, as we have all been touched by the COVID-19 pandemic in some manner. This crisis has challenged and reinforced many elements of our culture and we are committed to altering protocols and work norms in a thoughtful and flexible way to ensure safety while enabling us to reclaim the things we have lost.

#### **ENVIRONMENT, HEALTH & SAFETY**

# Employee Health & Well-Being

The health of our workforce is critical to the health of our organization. Recognizing the multifaceted nature of health, we have created programs to advance overall physical, financial and emotional well-being so that our team can bring their best to work, at home and in our community.

#### **REG's Comprehensive and Competitive Benefits Package Includes:**

Health, Dental, and Vision	Retirement Plans, Including Company Contributions	Rein
Flexible Spending, Health Savings and Dependent Care Accounts	Paid Time Off Programs	( A
Accident and Critical Illness Coverage	Life and Disability Insurance	Emplo

#### **Pillars of Wellness**

REG's employee-led Wellness Committee provides programming related to five pillars of wellness. Activities have ranged from water consumption competitions, virtual yoga, access to personal financial resources, book clubs, coffee chats and volunteering. These efforts promote a balanced approach to health and enrich the employee experience.

![](_page_36_Figure_18.jpeg)

VISION ZERO

![](_page_36_Figure_21.jpeg)

# Employees & Our Community

#### **Our Employees**

REG is a growing company and a rewarding place to build a career. Our employees are industry experts who focus on innovating for the needs of the future, with a drive to succeed.

We recognize our organizational strength is our people. Over the course of 2021, we modified many of our existing programs and instituted new ones to build for the business we want to have. Additionally, we implemented a new people management platform to improve employee access to information and enable enhanced analytics in the future. These efforts help our employees do their best work while also providing managers with access to relevant information on their team members.

#### **People-First Mindset**

We put our people first and this principle is incorporated into each decision we make. A poignant example is in our approach to the closure of our REG Houston biodiesel facility in November 2021. Due to increasingly unfavorable economics at that location, we made the difficult decision to close the plant. Through this time, we remained committed to our employees, working with all Houston staff on retention and relocation opportunities within the production network and providing support during a time of transition. Despite closing the plant, we were able to retain five of the 20 employees from the Houston plant by offering them remote work or opportunities at one of our other refineries. We are extraordinarily proud of the diligent and caring work completed by the team to ensure a safe closure to this part of the REG story.

**It was clear that everyone at Renewable Energy Group took the decision to shut down REG Houston very seriously. During the process,** all of the employees were treated with respect and kindness. REG proved that humanity is a core value at every level of the company.

JOHN PLANT, SENIOR MANAGER, STRATEGIC INITIATIVES, FORMERLY PLANT MANAGER, REG HOUSTON

#### **EMPLOYEES & OUR COMMUNITY**

#### **Recognition & Compensation**

We always want our team members to know the value of their hard work. Practices such as meeting "Shout-outs" are built into our culture, making it commonplace to express gratitude and recognition. We also know people have varying preferences in terms of recognition, so we reinforce this message through a variety of different channels, including performancebased incentive programs, spot bonuses, service awards, gifts and perks, a virtual recognition platform and other public acknowledgments. Managers also have flexibility to provide customized options. Our compensation programs are routinely reviewed to ensure we remain competitive and rewards are applied fairly.

#### **Building Careers and Skills Through Training**

Our training programs enable our team members to build valuable skills that increase performance and enhance careers. Consistent with our experience in 2020, virtual training opportunities were offered in 2021, providing flexibility and global collaboration opportunities. Training in 2021 included dedicated programs featuring manufacturing, safety, leadership development, culture development, and inclusion and diversity. We also sponsor employee participation in external leadership programs and support other training opportunities important to job function or personal development. A new learning platform was delivered in 2021 as part of our new people platform, to provide an improved experience and consistent engagement across the organization. Additionally, all employees are encouraged to create personalized development plans to guide their growth and these plans also aid with succession planning.

![](_page_38_Picture_5.jpeg)

LEARNING COURSES OFFERED

**EMPLOYEES PARTICIPATED IN LEARNING OPPORTUNITIES** 

#### **Flexibility For Performance**

REG deeply values the strength of coming together in-person. Like many other organizations, the pandemic forced us to navigate a remote work environment. Our team has maintained strong performance and many team members have expressed a preference for this style of work. This has led us to update our flexible work policy to harness the benefits of a hybrid approach. As public health safety concerns recede, we will allow for three days in the office and two days working remotely, as feasible based on job duties. We want to enable a productive environment where employees can balance their many responsibilities and we will continue to be responsive to employee feedback as we improve the REG work experience.

There are always through training and development. I feel that

SEAN WEBSTER, BIODIESEL OPERATOR

# opportunities to expand my skills and learn new things leadership was invested in my growth from day one

#### **EMPLOYEES & OUR COMMUNITY**

# Employee Engagement, Retention and Recruitment

#### **Positive Employee Relations**

Our focus on collaboration means we value the ideas and accomplishments of every team member. REG surveys employees, with the results used to support specific efforts in functional areas and to guide corporate-level initiatives. In 2021, we conducted a voluntary survey for all employees, including our manufacturing and office employees. We had a strong participation rate, with an overall positive response rate.

B C EMPLOYEE ENGAGEMENT SURVEY PARTICIPATION RATE

820/ EMPLOYEE ENGAGEMENT SURVEY POSITIVE RESPONSE RATE

Engagement survey questions help us gauge overall employee satisfaction and provide insight on a variety of topics relevant to current corporate activity, including identifying areas for improvement. In response to statements such as "I feel proud to tell people where I work" and "I enjoy my job and look forward to continuing my career at REG", our team responded positively at an 82% rate. Additionally, the company's intentional efforts related to past employee feedback, focused on areas such as communication, flexibility and recognition, received improved responses. We are continuing to analyze these results and work with our different locations and teams to further enhance the employee experience.

To date, we have always found agreeable solutions to employee concerns and there is currently no formal union representation within our organization. Our German facilities participate in a Works Council, which is customary in Germany. We always respect the rights of our workforce and comply with all applicable laws, including freedom of association and collective bargaining.

#### Retention

We are proud of our positive employee experience and work hard to retain our talented staff at our company. This has grown increasingly important as many organizations are experiencing labor shortages. Despite this macro trend, REC did not see a significant number of departures, as demonstrated by our turnover rates shown below, which include both oluntary and involuntary turnover. Our results are well below the U.S. Bureau of Labor Statistics benchmark of 39.9% 2021 for the Manufacturing industry.<sup>1</sup>

2019	2020
17.67%	9.36%

urnover figures do not include interns who completed their program. 2021 figures include discontinued operations a EG Houston. 2019 figures include discontinued operations at REG Life Sciences and REG New Boston. www.bls.gov/news.release/jolts.t16.htm

#### Recruitment

As our business continues to grow, we look for people who share our passion for creating a more sustainable world and innovating for the needs of the future. Our recruitment efforts evolve with the needs of the business. As we work toward more diverse workforce, we continue to expand our recruiting strategy, reaching out to new organizations, institutions and platforms to broaden our searches.

14.93%

#### **Building a Talent Pipeline**

Our internship program remains a critical recruiting tool, offering college students valuable work expe the organization to engage with potential full-time hires. Our program is designed to immerse interns in me work, professional development training, organizational networking and culminates in a value-add project that is presented to senior leadership.

#### 2021 Stats

**35 INTERNS** 

**REPRESENTED 15 EDUCATIONAL INSTITUTIONS**  SERVED 5 REG LOCATIONS

**60%+ OFFERED FURTHER EMPLOYMENT WITH REG** 

he REG internship program was such a great experience. ad the opportunity to do meaningful work centered around my passion for sustainability, while also getting to meet many wonderful people! This experience from last summer led to a part-time position this spring, along with accepting a full-time position upon my graduation from lowa State University in May.

**EMPLOYEE SPOTLIGHT** 

#### **EMPLOYEES & OUR COMMUNITY**

# Inclusion & Diversity

Our culture embraces diversity in employees' personal and professional experiences, and REG seeks people of diverse talents for careers across our organization. We recognize that diversity is experienced in many ways, and we are focused on fostering an inclusive culture that welcomes people from all backgrounds and values the unique contributions of all team members. We are continuing to intentionally build and strengthen inclusion and diversity (I&D) efforts into our corporate culture and processes.

Our I&D strategy is championed by our senior leadership team, shared with the Board of Directors throughout the year to provide oversight and includes employee-led efforts to leverage passion and foster buy-in throughout the organization. This comprehensive approach allows for a wide range of efforts spanning recruitment, representation, retention and rewards, engagement and support, and learning and development.

#### A few key areas of focus and 2021 accomplishments include:

- + Added two new, diverse Board members and implemented diversity targets and tenure guidelines for the Board
- + Performed market-based pay gap analysis across all areas of the business with consideration of diversity
- + Expanded recruitment locations and efforts to encourage greater diversity as part of our corporate growth and natural turnover
- + Grew our three internal resource groups led by employee volunteers to 80 team members
- + I&D Council, BIPOC (Black, Indigenous and people of color) Resource Group and Women's Resource Group informed and drove I&D programming
- + Surveyed workforce in relation to levels of inclusion felt by employees

- + Researched best practices in relevant areas
- + Established partnerships with I&D, community and corporate organizations to share learnings and support community activities
- + Educated workforce on relevant I&D topics (e.g. microaggressions, unconscious bias, multicultural awareness)
- + Enhanced support services and targeted programming for diverse employees (e.g. parent support conversations, executive women's panel, PPE for all body types, newsletter highlights focused on gender, racial and multicultural topics and celebrations)
- + Revised our philanthropy pillars to include a focus on underserved communities

# Engaging with the Community

There is a symbiotic relationship between REG and the communities in which it operates. We understand the responsibility that comes with establishing a business presence in the community. Beyond ensuring our facilities are safe, we are committed to investing in the areas where we live and work.

We work to align our corporate giving with the needs of our local communities and the objectives of our business. In 2021, we updated our philanthropy pillars to reflect our long-term priorities toward community partnerships and reconfirmed our commitment in many ways.

#### **UPDATED PHILANTHROPY PILLARS OF FOCUS**

Safety & Health

Education

![](_page_41_Figure_22.jpeg)

**INITIATED MATCHING GIFTS PROGRAM** Allows employees the opportunity to extend the impact of their personal contributions.

Hours

#### Giving Back to Our Communities

Consistent with REG's purpose of accelerating decarbonization, we supported local sequestration efforts through a multi-year commitment to purchase and plant new trees in the City of Ames, Iowa. The community's forestry plan increases carbon dioxide sequestration, improves water quality and erosion control, provides temperature control and windbreaks, and supports biodiversity through wildlife habitat. The city is also working to replace trees that were downed due to severe weather and invasive insects.

REG will provide \$18,000 in funding over three years to plant close to 100 trees. In addition to funds, REG employees have committed to volunteering their time to help plant the trees that were purchased, giving back to the community and helping the planet.

![](_page_41_Picture_30.jpeg)

![](_page_41_Figure_32.jpeg)

# Responsible Business

#### Building integrity through a responsible approach

Succeeding across our value chain for our employees and within our community, takes strong leadership and a commitment to operating in a responsible way. REG achieves this through a formal risk management process and compliance with regulations pertaining to our business. We also take great care in safeguarding the information entrusted to us by our customers and employees.

# Business Conduct and Risk Management

#### Policies

REG

REG aims to instill integrity through a robust policy structure that establishes guidelines and requirements within our operations. We administer a cross-functional effort to ensure we have the proper documentation in place for areas across the organization to explicitly communicate expectations and practices for relevant stakeholders. Many of our policies have stricter standards than applicable laws and regulations and are further supported through standard operating procedures, stage-gating processes, and other systematic tools to enable reliable and consistent results. Several of our key policies can be found on our website, while employees have access to other internal resources on our intranet.

#### **REG maintains a robust policy structure:**

- + Code of Business Conduct and Ethics
- + Code of Ethics for Senior Financial Officers
- + Trading by Insiders Policy
- + Environment, Health and Safety Policy and Procedures

We are looked to as an industry leader and the regulators hold us to a higher standard. We know our words and actions matter. We focus on what is right and correct, even if it doesn't immediately serve our interests, and I'm proud of the way we handle things.

- + Vendor Code of Conduct
- + Anti-Corruption Policy
- + Comprehensive Employee Handbook
- + Non-Harassment Policy

#### **RESPONSIBLE BUSINESS**

# Ethics Helpline

We also want to keep an open and safe channel for stakeholders to provide concerns regarding our company. In 2021, we made changes to our Ethics Helpline to better serve our business. Our Ethics Helpline, which is hosted by an independent third party ("Convercent"), is accessible both internally and externally via our website, phone call or text message (U.S. only) and allows for anonymity to be maintained throughout the reporting process. Parties may report instances of concern, ask clarifying questions and trace incident status through the Helpline. All information is available in most local languages.

REG is committed to professional, confidential and timely responses. We maintain a non-retaliation policy and train employees regarding ethical behavior and available resources. Our team conducts analytics and uses benchmarks on helpline usage to inform our confidence in our enterprise transparency. All ethics issues are communicated to our Audit Committee of the Board of Directors.

# Enterprise Risk Management

To deepen the level of assurance surrounding our business, significant effort was put toward strengthening our enterprise risk management program in 2021. Additional training and awareness on the importance of risk management were provided to all employees, which enabled greater input and collaboration on areas for improvement. This also reinforced a collective commitment to prioritize this work.

REG has a comprehensive risk register that is generated through conversations with leadership, subject matter experts, risk experts, and process owners within the company. Through these discussions, we identify risks, assess the likelihood and impact of those risks to our business, and determine and catalog appropriate mitigation activities. This process helps us focus on the material risks to our business and determine gaps in our current management practices. Based on this assessment, specific, high-risk topics are elevated to the Board of Directors for routine discussion and review. We offer a more detailed discussion of pertinent business risks in our financial filings available on our website and filed with the SEC.

![](_page_43_Figure_7.jpeg)

# Information Security

Technology is an increasingly integral part of work. We are focused on maintaining and protecting the proper digital infrastructure to conduct our business. There are numerous and evolving risks to our cybersecurity and privacy from cyber threat actors, many of which are becoming more sophisticated in their attempts to access our information technology (IT) systems and data, including the IT systems of cloud providers and other third parties with whom we conduct business. Safequarding against these threats is imperative to our business performance.

We have implemented multiple layers of protection against attempts to breach our network, utilizing various tools and techniques to identify and mitigate information security risk. As part of this approach, we routinely scan, test and update our network and systems based on current threats, as well as require ongoing training and testing for our employees. We also engage a third party to conduct an annual review and intrusion test of our network and systems to strengthen the design and processes to protect our network.

We are pleased to note that we have had no known security breaches leading to loss of data nor any associated costs in the last three years. Despite our efforts to prevent unwanted intrusions and to protect our systems and data, it is possible we may experience cyber incidents of varying degrees in the conduct of our business. In such events, we maintain a cyber and breach insurance policy. All cyber security information is reported to the Audit Committee at least two times per year. The Board of Directors also underwent a Cyber Awareness and Response exercise in 2021 to deepen their understanding on this important topic.

![](_page_43_Picture_12.jpeg)

![](_page_43_Picture_14.jpeg)

We are a green web-hosted business, using green energy to power our corporate website.

https://securityheaders.com/?g=regi.com&followRedirects=on https://www.thegreenwebfoundation.org/green-web-check/?url=www.regi.com

![](_page_43_Picture_18.jpeg)

REG's website security is rated an "A" by Security Headers, providing users a safer experience.

![](_page_44_Picture_0.jpeg)

# SASB Framework

The Sustainability Accounting Standards Board (SASB) standards are intended for use by public companies to inform disclosure information and by investors to inform investment decisions. The standards facilitate disclosure of financially material sustainability-related information in a concise, comparable, cost-effective, decision-useful format.

For the Biofuels industry, the SASB has identified the following sustainability disclosure topics:

- + Air Quality
- + Water Management in Manufacturing
- + Lifecycle Emissions Balance
- + Management of the Legal & Regulatory Environment

Торіс	Accouting Metric	Code	REG Response References	
Air Quality	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2)SOx, (3) volatile organic compounds (VOCs), (4) particulate matter(PM10), and (5) hazardous air pollutants (HAPs)		Air Emissions - <u>page 53</u>	
	Number of incidents of non-compliance associated with air quality permits, standards, and regulations	RR-BI-120a.2	Performance Dara - <u>pages an-ap</u>	
	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	RR-BI-140a.1		
Water Management in Manufacturing	Description of water management risks and discussion of strategies and practices to mitigate those risks	RR-BI-140a.2	Our Water Process - <u>pages 50-51</u> Performance Data - <u>pages 90-93</u>	
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	RR-BI-140a.3		
Lifecycle Emissions     Lifecycle greenhouse gas (GHG) emissions, by biofuel type     R       Balance     R		RR-BI-410a.1	Measuring Fuel Impact - pages 24-25	
Sourcing & Environmental Impacts of Feedstock Production	Discussion of strategy to manage risks associated with environmental impacts of feedstock production	RR-BI-430a.1	Feedstock Sourcing Strategy & Sourcing Risks & Impacts - <u>pages 38-41</u>	
	Percentage of biofuel production third-party certified to an environmental sustainability standard	RR-BI-430a.2	Regulatory & Sustainability Programs - pages 26-27	
Management of the	Amount of subsidies received through government programs	RR-BI-530a.1	Regulatory & Sustainability Programs - pages 26-27	
Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	RR-BI-530a.2	Advocacy - pages 28-29	
Operational Safety, Emergency Preparedness & Response	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	RR-BI-540a.1	Operational & Process Safety - <u>page 68</u> Performance Data - <u>pages 90-93</u>	

Activity Metric	Code	REG Response References	
Biofuel production capacity	RR-BI-000.A		
Production of: (1) renewable fuel, (2) advanced biofuel,		Production - pages 43-45	
(3) biomass-based diesel, and (4) cellulosic biofuel	RR-BI-000.B		
Amount of feedstock consumed in production	RR-BI-000.C	Feedstock Overview - page 34	

- + Operational Safety, Emergency Preparedness & Response
- + Sourcing & Environmental Impacts of Feedstock Production
- + Relevant Activity Metrics

# Performance Data

A summary of our data used within this report is shown below. Totals may not sum due to rounding and items in gray were not tracked or disclosed for the time period. Additional notes regarding data and methodology are located at the end of table.

Twelve Months Ended December 31,	2010	2020	2024
or *As of December 31,	2019	2020	2021
Financial Performance			
Annual revenue (\$ billion)	\$2.6	\$2.1	\$3.2
Adjusted EBITDA (million \$) <sup>1</sup>	\$211.3	\$195.8	\$284.9
Global Sales			
Total fuel sold (million gallons) <sup>2</sup>	700.3	650.5	621.3
Biodiesel	446.8	446.2	411.5
Renewable diesel	116.7	116.2	131.6
Petroleum-based diesel	136.9	88.1	78.2
Biodiesel - ULSD blend rate		13%	13%
Number of U.S. jurisdictions served	45	41	44
Number of international countries served	11	15	20
*Number of customers			500
*Customer longevity (>5 years)			23%
*Customer longevity (>10 years)			59%
Production			
*Number of refineries	13	12	11
*Aggregate nameplate capacity (MMGY) <sup>3</sup>	505	505	470
*Aggregate effective capacity (MMGY) <sup>4</sup>	628.0	643.0	599.0
Actual renewable production (MMGY) <sup>5</sup>	494.5	518.8	479.9
Biodiesel production	410.2	432.2	389.0
Renewable diesel production	76.5	78.2	74.0
Renewable naphtha + renewable propane production	7.8	8.3	8.4
Total emissions avoided through use of biofuel produced	4.2	4.2	<u>م</u> 1
(million MT CO₂e) <sup>6</sup>	Τ.Δ	Τ.Δ	7.1
Feedstock Sourcing			
*Number of suppliers		106	103
*Feedstock supplier longevity (>5 years)		95%	95%
*Feedstock supplier longevity (>10 years)		56%	71%
Number of feedstocks used <sup>7</sup>		14	14
Total feedstock consumption (million MT)			1.75
Feedstocks from waste and residual streams <sup>8</sup>	71%	65%	78%
Feedstocks from refined vegetable oils <sup>9</sup>	29%	35%	22%

or *As of December 31,	2019	2020	2021
Waste & Water			
Water withdrawal (m <sup>3</sup> )	983.3	1,344.1	1,376.2
Water withdrawn from groundwater (% of total)			30%
Water withdrawn from municipalities (% of total)			70%
Water withdrawn from high stress areas (% of total) <sup>10</sup>		0%	0%
Hazardous waste (MT)	Negligible	Negligible	29.8
Non-hazardous waste (MT)	19,011.3	15,083.4	13,537.3
Water withdrawal intensity (m <sup>3</sup> / MT total products)	0.73	0.68	0.77
Non-hazardous waste intensity (MT / MT total product)	0.01	0.01	0.01
Instances of water violations			3
Fines from water violations (\$)			\$150
Energy Consumption (Thousands GJ)			
Direct energy consumed (excluding fleet vehicles) <sup>11</sup>	2,572.7	2,996.7	2,851.2
Indirect energy consumed <sup>12</sup>	805.4	833.7	802.6
Combined energy intensity (GJ / MT total products)	1.97	1.94	2.04
Fleet fuel consumed - Non-renewable <sup>13</sup>		2.3	1.9
Fleet fuel consumed - Renewable <sup>13</sup>		2.9	3.1
Other Air Emissions across REG Production Facilities (MT)			
Nitrogen Oxides (NOx)		141.4	130.6
Sulfur Oxides (SOX)		30.6	30.5
Volatile Organic Compounds (VOCs)		39.3	37.0
Particulate Matter (PM10)		10.8	9.9
Hazardous Air Pollutants (HAPs)		30.9	29.0
Instances of air violations			0
Fines from air violations (\$)			\$0
GHG Emissions Inventory (Thousand MT CO2e) <sup>14</sup>			
Scope 1: Direct emissions	129.4	150.9	144.0
Scope 2: Indirect emissions - location-based <sup>15</sup>	83.4	87.6	70.5
Scope 2: Indirect emissions - market-based <sup>16</sup>			47.2
Scope 3: Partial inventorv <sup>17</sup>	72.4	1.420.4	1.315 2
Biogenic carbon emissions <sup>18</sup>	4 156 4	4,197.0	4 918 6
Scope 1 GHG emissions intensity (MT CO <sub>2</sub> e / MT total products)	0.08	0.08	0.08
Scope 2 GHG emissions intensity - location based (MT CO <sub>2</sub> e / MT total products)	0.05	0.04	0.04
Scope 2 GHG emissions intensity - market based (MT CO <sub>2</sub> e / MT total products)			0.03

Twelve Months Ended December 31, or *As of December 31,	2019	2020	2021
GHG Emissions Breakdown (MT) <sup>14</sup>			
Scope 1 - CO <sub>2</sub>			143,866
Scope 1 - CH <sub>4</sub>			2.7
Scope 1 - N <sub>2</sub> O			0.3
Scope 2 - location-based - CO <sub>2</sub>			70,150
Scope 2 - location-based - CH <sub>4</sub>			5.1
Scope 2 - location-based - N <sub>2</sub> O			0.1
Scope 3 - cat 1 - purchased goods and services (partial) (MT $CO_2e$ ) <sup>19</sup>		163,968	129,652
Scope 3 - cat 4 - upstream transportation and distribution (MT CO <sub>2</sub> e)		77,910	88,911
Scope 3 - cat 7 - employee commuting (MT CO <sub>2</sub> e)			1,842
Scope 3 - cat 9 - downstream transportation and distribution (MT $CO_2e$ )		77,370	85,572
Scope 3 - cat 11 - use of sold product (MT CO <sub>2</sub> e)		1,076,000	1,009,181
Operational & Process Safety <sup>20</sup>			
Total Recordable Incident Rate (TRIR) <sup>21</sup>	0.44	1.10	0.23
TRIR goal		<0.77	<0.77
Lost time incident rate (DART) <sup>22</sup>	0.44	1.10	0.23
Fatality rate	0	0	0
Number of tier 1 process safety incidents	1	2	0
Tier I process safety rate <sup>23</sup>	0.11	0.22	0
Number of tier 2 process safety incidents	2	0	1
Tier 2 process safety rate <sup>23</sup>	0.22	0	0.11
Employees & Community			
*Total employees <sup>24</sup>	829	895	1,196
Employee engagement survey participation rate	95%	N/A	81%
Employee engagement survey positive response rate <sup>25</sup>	85%	N/A	82%
Employee turnover rate <sup>26</sup>	17.67%	9.36%	14.93%
Employee volunteer rate	17%	46%	60%
Volunteer time off <sup>27</sup>	1,000	2,443	3,343
Number of philanthropic causes	145	170	146

# Notes on Reporting

#### Data inclusion and revisions

2021 data is representative of North American and European facilities. Normalizing by applicable total products shows intensity trends over the last three years, irrespective of data set completeness.

It is important to note that we have revised a few data points since our inaugural report in 2019 due to improved data collection, methodology revisions and analysis of our business. As demonstrated by the intensity figures, these revisions do not impact general trends in our resource management performance.

#### Financial Performance

<sup>1</sup> Adjusted EBITDA is a non-GAAP measure. Reconciliation to our reported GAAP financial data and additional information can be found at the end of the Appendices.

#### **Global Sales**

<sup>2</sup> Inclusive of REG produced gallons and third party sales.

#### Production

<sup>3</sup> Nameplate capacity is based on original plant design. Figures do not include discontinued operations as of December 31.
<sup>4</sup> Effectivive capacity represents the maximum average throughput that satisfies certain defined technical constraints. Figures do not include discontinued operations as of December 31.

<sup>5</sup> Per U.S. EPA RFS, biodiesel and renewable diesel may qualify as biomass-based diesel (D4 RIN) and renewable naphtha and renewable propane may qualify as an advanced biofuel (D5 RIN).

<sup>6</sup> Carbon avoidance is based on life cycle analysis of REG-produced fuels versus petroleum diesel based on CA-GREET and GHGenius, as applicable.

#### Feedstock Sourcing

<sup>7</sup> Feedstock types and groupings may be unique to REG and not representative of categories used by third party programs.
<sup>8</sup> Waste and residual streams represent harder-to-process, lower-carbon feedstocks, such as distillers corn oil, used cooking oil or rendered animal fat.

<sup>9</sup> Refined vegetable oil includes feedstocks such as soybean oil and canola oil.

#### Water & Waste <sup>10</sup> Water stress is determined using the Aqueduct Water Risk Atlas.

Energy Consumption

"Includes on-site natural gas usage at headquarters and production facilities. It does not include fuel used in mobile owned assets. Figure contributes to scope 1 GHG emissions.

<sup>12</sup> Includes electricity and steam usage at headquarters and production facilities. Figure contributes to scope 2 GHG emissions. <sup>13</sup> Includes fuel usage in mobile owned assets. Figures contribute to scope 1 GHG emissions and biogenic carbon emissions.

#### **GHG Emissions Inventory & GHG Emissions Breakdown**

<sup>14</sup> GHG emissions data is calculated using emissions factors from the U.S. EPA and California GREET 3.0 Model (CA-GREET 3.0). Methodology is consistent with guidance from GHG Protocol.

<sup>15</sup> Location-based methodology uses grid average emissions factors sourced from eGRID. 2019 and 2020 figures utilize factors from 2014 based on application in CA-GREET 3.0. In 2021, we updated methodology to utilize most recently available factors.
<sup>16</sup> Market-based methodology uses emission factors provided by our local utility providers as available and includes the impact of renewable energy generation from the wind turbine at Albert Lea, Minnesota.

<sup>17</sup> We continue to work towards a more complete and accurate scope 3 emissions inventory, as we deepen our understanding of these topics and establish more robust data management practices across our supply chain. Variation in annual figures is further explained through the GHG Emissions Breakdown figures for scope 3.
<sup>18</sup> Includes biogenic carbon emissions from bio-based diesel combustion in mobile owned assets and the biogenic carbon emissions from our renewable sold products.
<sup>19</sup> Includes only the life cycle emissions from the hydrogen and methanol used in our production processes, which represents a large purchasing category for our business. We are working to enhance this figure with other purchasing information.

#### **Operational & Process Safety**

<sup>20</sup> All safety metrics are for REG employees only; contract worker incidents are monitored but not reported. <sup>21</sup> Total Recordable Incident Rate (TRIR) as defined by OSHA to determine the relative level of injuries and illnesses per 200,000 work hours; excludes COVID-19 relatedillnesses cases.

<sup>22</sup> Lost Time Incident Rate also known as days away, restricted, or transferred (DART) as defined by OSHA to determine relative number of recordable workplace injuries or illnesses resulting in time away from work, restriction to job duties or permanent employee transfer; excludes COVID-19 related-illness cases.
<sup>23</sup> Process safety incident (API rate per 20,000 incidents). We use API-754 process safety performance indicators for the refining and petrochemical industries for loss of containment incidents.

#### Employees & Community

<sup>24</sup> Total employees figure in 2021 inclusive of Amber Resources acquisition on 12/30/21; other reporting elements in this report do not include Amber Resources performance data.

<sup>25</sup> The employee engagement survey positive response rate is based on responses to statements such as "I feel proud to tell people where I work" and "I enjoy my job and look forward to continuing my career at REG.".

<sup>26</sup> Employee turnover rate includes employees from discontinued operations but does not include interns who completed their program. <sup>27</sup> Percent of employees who volunteered based on U.S. employees only. REG adopted a Green Bond Framework to secure partial funding for green projects, such as the Geismar Expansion and Improvement Project highlighted on pages 48-49. The following information supports the reporting requirements associated with the Green Bond Framework.

# **Deloitte**.

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#### **INDEPENDENT ACCOUNTANTS' REPORT**

To the Board of Directors of Renewable Energy Group, Inc. Ames, Iowa

We have examined management of Renewable Energy Group, Inc.'s (the "Company") assertion, included in the accompanying Management's Assertion Regarding Disbursements for Eligible Green Projects ("Management's Assertion Report"), that \$104.5 million of the net proceeds from the issuance of the \$550 million aggregate principal amount of 5.875% Senior Secured Noted due 2028 was disbursed by the Company by December 31, 2021, for the construction of Eligible Green Projects in accordance with the Eligible Green Projects criteria set forth in Management's Assertion Report (the "Criteria"). The Company's management is responsible for its assertion. Our responsibility is to express an opinion on management's assertion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about management's assertion. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of management's assertion, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

In our opinion, management's assertion referred to above is fairly stated, in all material respects, based on the Criteria set forth therein.

Deloitte & Touche LLP

April 15, 2022

#### Management's Assertion Regarding Disbursements for Eligible Green Projects

Renewable Energy Group, Inc. (NASDAQ:REGI) ("Company" or "REG") is responsible for the completeness, accuracy and validity of the Eligible Green Projects Disbursement Report (the "Report") as of December 31, 2021. REG management asserts that \$104.5 million was disbursed by the Company as described in this Report for project costs incurred by December 31, 2021. The remaining balance of net proceeds are being temporarily held at our discretion, per the Green Bond Framework, and will be used toward the Eligible Green Project activities as additional project costs are incurred.

#### **Eligible Green Projects Criteria**

Expenditures for the Eligible Green Projects relate to the construction and associated project work for the improvement and expansion of its renewable diesel facility located at the Company's current Geismar, LA site, which is further outlined in the project framework available on our website, www.regi.com/geismar-expansion-bond.

The project is expected to result in an additional 250 million gallons per year of low-carbon renewable fuel production. The expected completion date for the Eligible Green Project is currently late 2023.

Renewable Energy Group Green Project Disbursement Report As of December 31, 2021

Net Proceeds from Senior Secured Notes Issuance (in millions)

Issuance Date: May 20, 2021 5.875% Senior Secured Notes June 1, 2028

**Total Net Proceeds** 

#### Disbursements for Eligible Green Projects (in millions) as of December 31, 2021

#### Project

Geismar 250 MMGY RD expansion project

#### **Total Disbursements**

cost of the respective Eligible Green Projects.

![](_page_47_Picture_26.jpeg)

\$535.4

\$535.4

Amount Disbursed<sup>(1)</sup>

\$104.5

\$104.5

(1) Amount disbursed during by December 31, 2021 does not represent the full construction

# Adjusted EBITDA

(In Thousands)	12-Months Ended Dec 31, 2019	12-Months Ended Dec 31, 2020	12-Months Ended Dec 31, 2021
Net income (loss)	\$372,495	\$122,813	\$213,819
Adjustments			
Interest expense	\$13,235	\$7,911	\$21,949
Income tax expense (benefit)	\$(570)	\$5,929	\$(14,479)
Depreciation	\$36,298	\$37,315	\$43,430
Amortization of intangible and other assets	\$1,632	\$1,772	\$3,475
EBITDA	\$423,090	\$175,740	\$268,194
Gain on sale of assets	-	\$(205)	\$(1,462)
Change in fair value contingent liability	\$566	-	-
Loss (gain) on debt extinguishment	\$(488)	\$(1,809)	-
Gain on lease termination	-	\$(4,459)	-
Interest income	-	\$(2,225)	\$(2,067)
Other (income) expense, net	\$(1,763)	\$(1,308)	\$(186)
Impairment of assets <sup>1</sup>	\$12,208	\$22,404	\$7,359
Executive severance	-	-	\$663
Stock compensation & expense	\$6,707	\$7,698	\$7,997
Biodiesel tax credit 2018 <sup>2</sup>	\$(229,041)		
Adjusted EBITDA	\$211,279	\$195,836	\$284,947

#### Total balances may not foot due to rounding.

This presentation includes certain financial measures that are not calculated in accordance with U.S. generally accepted accounting principles ("GAAP"), including Adjusted Earnings Before Income Taxes, Depreciation and Amortization ("EBITDA") (including estimated Adjusted EBITDA). These non-GAAP financial measures are not measures of financial performance prepared or presented in accordance with GAAP and may exclude items that are significant in understanding and assessing our financial results. Therefore, these measures should not be considered in isolation, and users of any such information should not place undue reliance thereon. REG's definitions (which may be materially different than similarly titled measures used by other companies) of these measures as well as certain additional information regarding these measures. REG believes the presentation of these metrics may be useful to investors because it supplements investors' understanding of our operating performance by providing information regarding our ongoing performance that excludes items we believe do not directly affect our core operations.

<sup>1</sup> Represents the impairment charge to write down the carrying value of certain assets.

<sup>2</sup> On December 20, 2019, the BTC was retroactively reinstated for the 2018 and 2019 calendar years. The retroactive credit for 2018 is a net benefit to us that was recognized in our GAAP financial statements for the quarter ending December 31, 2019. However, because a portion of this credit relates to the 2018 operating performance, our presentation of Adjusted EBITDA reflects the allocation of the net benefit to each of the four quarters of 2018 based upon the portion of the BTC benefit that related to that quarter.

![](_page_48_Picture_6.jpeg)

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