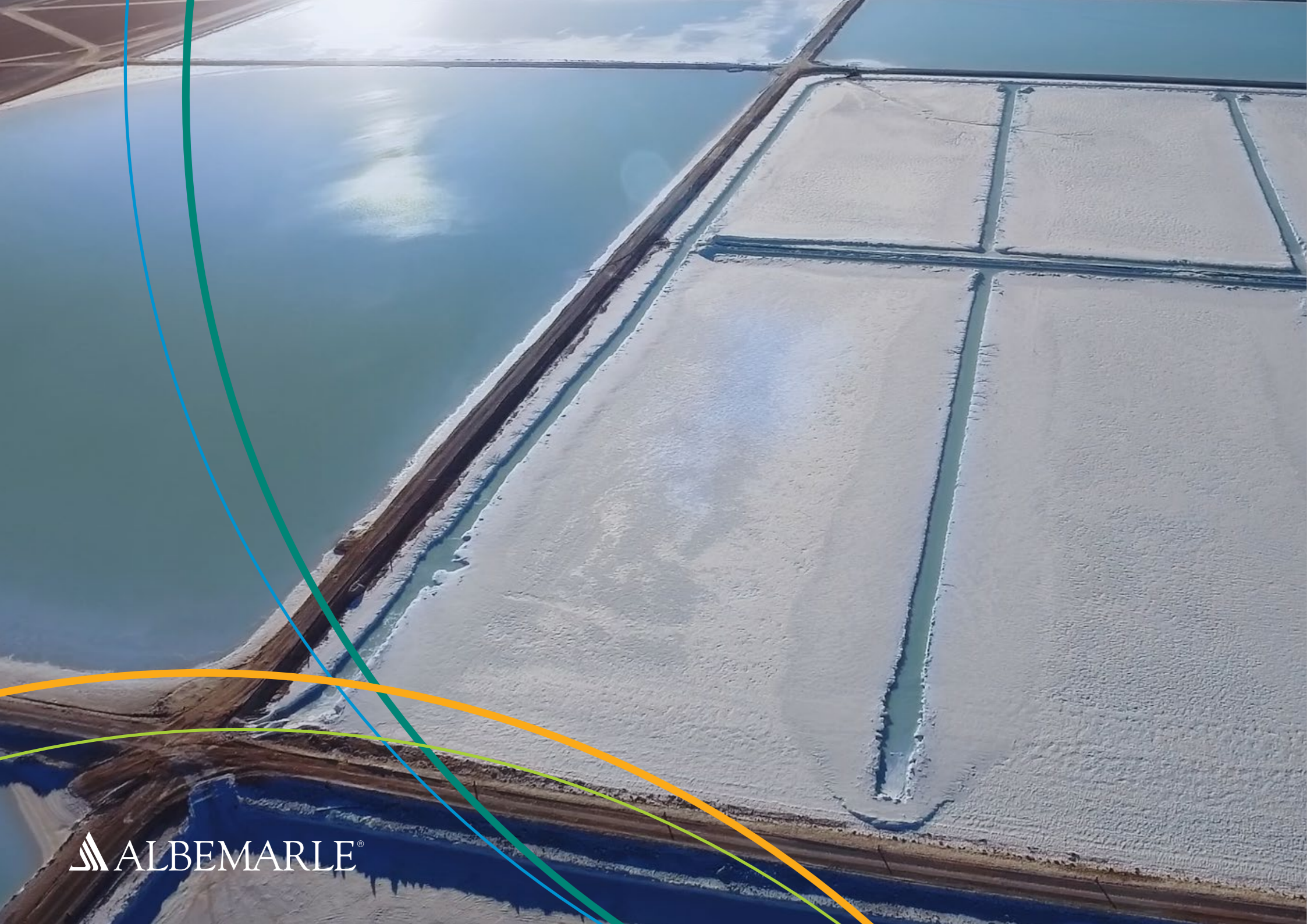


# OUR JOURNEY FORWARD

**2019**  
Sustainability Report

 ALBEMARLE®



# TABLE OF CONTENTS



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# A LETTER FROM THE **CEO**

# A LETTER FROM THE CEO



## Sustainability matters

In the context of doing business in a global marketplace for over a hundred years — sustainability has proven to be a successful strategy. Bridging social and environmental impact with economic performance, Albemarle Corporation (Albemarle) demonstrates that doing what's right creates a strong balance sheet, financial flexibility, and long-term value.

Albemarle's commitment to sustainability includes producing eco-friendly products, in a sustainable manner and employing safe work practices. It entails strong ethics, meeting regulatory requirements and engaging with non-governmental organizations (NGOs). It extends to protection and preservation of the environment and respect and improvement of social and human rights.

At Albemarle, sustainability is also about discovery and continuous improvement. It's about responding to emerging challenges, adapting to new realities, and employing innovation and agility as we journey across a constantly changing business landscape. That landscape is changing in ways we never imagined. As are the requirements for successfully navigating it.

In 2019, Albemarle took a different approach to how we look at sustainability and how it fits into our overall business strategy. Our initial materiality analysis provided insight into the issues that matter most to us.

## Getting It Right

While we still have considerable work to do, the results of the materiality assessment revealed our focus has been on many of the right things. Case in point: water. Reducing its consumption has long been a major company initiative. It's an area in which we've made significant progress, benefiting the communities in which we work, the

environment, and the continued viability of our businesses.

For example, Albemarle is balancing its production of lithium to meet growing demand for electric vehicle batteries and off-grid storage with water conservation in Chile's lithium-rich, yet water-starved Atacama salt flat. By employing transformative technologies, extensive environmental monitoring, and additional voluntary activities, we're now extracting more lithium in that area with little to no increase in fresh water usage.

At the same time, Albemarle is working to ensure the sustainability and equilibrium of that ecosystem, as well as improve quality of life in the local indigenous communities. That includes sharing 3.5% of our Chilean revenue for community development projects. With Chile boasting the world's largest reserves of lithium and a strong global demand for the mineral, investing in both the people and the environment of the area is the right thing to do and is also good business.

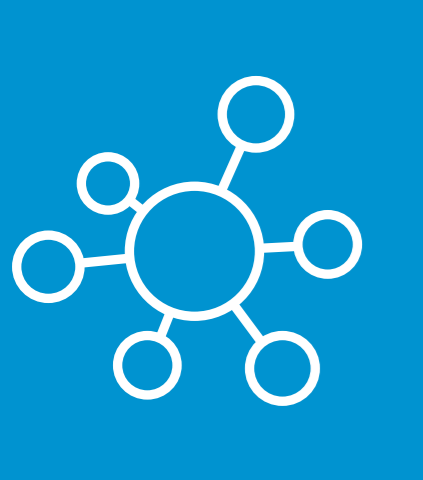
You'll find more examples in this report where we highlight our 2019 initiatives through the lens of our new sustainability framework. It's helping us to better focus our efforts where they matter most, so we can create sustainable value on multiple fronts for our customers and communities — and across the broad spectrum of all our stakeholders.

All the best and keep safe.

## Kent Masters

Chairman, President and Chief Executive Officer





# ABOUT ALBEMARLE

# ALBEMARLE AT A GLANCE

Albemarle Corporation (NYSE: ALB), headquartered in Charlotte, North Carolina, USA, is a leading specialty chemicals company operating under three global business units (GBU): Lithium, Bromine Specialties, and Catalysts. With approximately 5,600 employees worldwide, we serve a broad spectrum of end markets including automotive, construction, consumer electronics, crop protection, custom chemistry services, energy storage, transportation fuels, lubricants, and pharmaceuticals.

While our business is specialty chemicals, what we do at Albemarle is power the potential of a safer, cleaner, sustainable world. Working side-by-side with our customers, we create solutions that meet a diverse range of societal and environmental needs — from enabling grid-scale energy storage to increasing food safety.

We also think beyond “business-as-usual” to drive innovations that meet changing and emerging needs. Our commitment to and investment in research and development enables us to remain agile and open to new opportunities.

# AWARDS & RECOGNITION



Model of Corporate Citizens - Best Social Responsibility Award was granted to Albemarle China by China Chemical News.



Albemarle Corporation was honored by The American Chemistry Council (ACC):

- for implementing energy efficiency improvements in 2019, in the category: “Significant Improvement in Energy Efficiency in Manufacturing”.
- awards in the Waste Minimization category for its substantial achievements
- 2019 Responsible Care Facility Safety Certificate for several sites.

# FINANCIAL HIGHLIGHTS

	2017	2018	2019
<b>NET SALES</b>	<b>\$3.072B</b>	<b>\$3.375B</b>	<b>\$3.589B</b>
<b>NET INCOME</b> attributable to Albemarle Corporation	<b>\$55M</b>	<b>\$694M</b>	<b>\$533M</b>
<b>Adjusted EBITDA<sup>1</sup></b>	<b>\$885M</b>	<b>\$1,007M</b>	<b>\$1,037M</b>
<b>Diluted earnings per share</b>	<b>\$0.49</b>	<b>\$6.34</b>	<b>\$5.02</b>
<b>Adjusted diluted earnings per share<sup>1</sup></b>	<b>\$4.59</b>	<b>\$5.48</b>	<b>\$6.04</b>

<sup>1</sup> Non-GAAP measure. See Non-GAAP Reconciliations in Exhibit 99.1 of the Current Report on Form 8-K filed on February 19, 2020 and Exhibit 99.1 of the Current Report on Form 8-K filed on February 20, 2019 for reconciliations to the most directly comparable financial measure calculated and reported in accordance with U.S. GAAP.



Global Specialty  
**CHEMICALS  
COMPANY**  
Founded 1887



**CORPORATE  
HEADQUARTERS**  
Charlotte, NC



Approximately  
**5,600  
EMPLOYEES**  
Worldwide



**CUSTOMERS**  
in approximately  
**75 COUNTRIES**



**2019 DIVIDEND  
PAYOUT RATIO**  
**29%**

## REVENUE BY GEOGRAPHY

26% North America

23% EMEA

50% Asia (13% in China)

1% ROW



- Global Headquarters
- Best-In-Class Resources
- Manufacturing/Sales/R&D
- Sales/Administrative
- Manufacturing

## HOW WE CREATE VALUE

The most obvious value we deliver is through our products. A conservative estimate shows that at least 50% of our revenue comes from products that have a positive impact on resource efficiency or lowering water usage and greenhouse gases (GHG) emissions.<sup>1</sup>

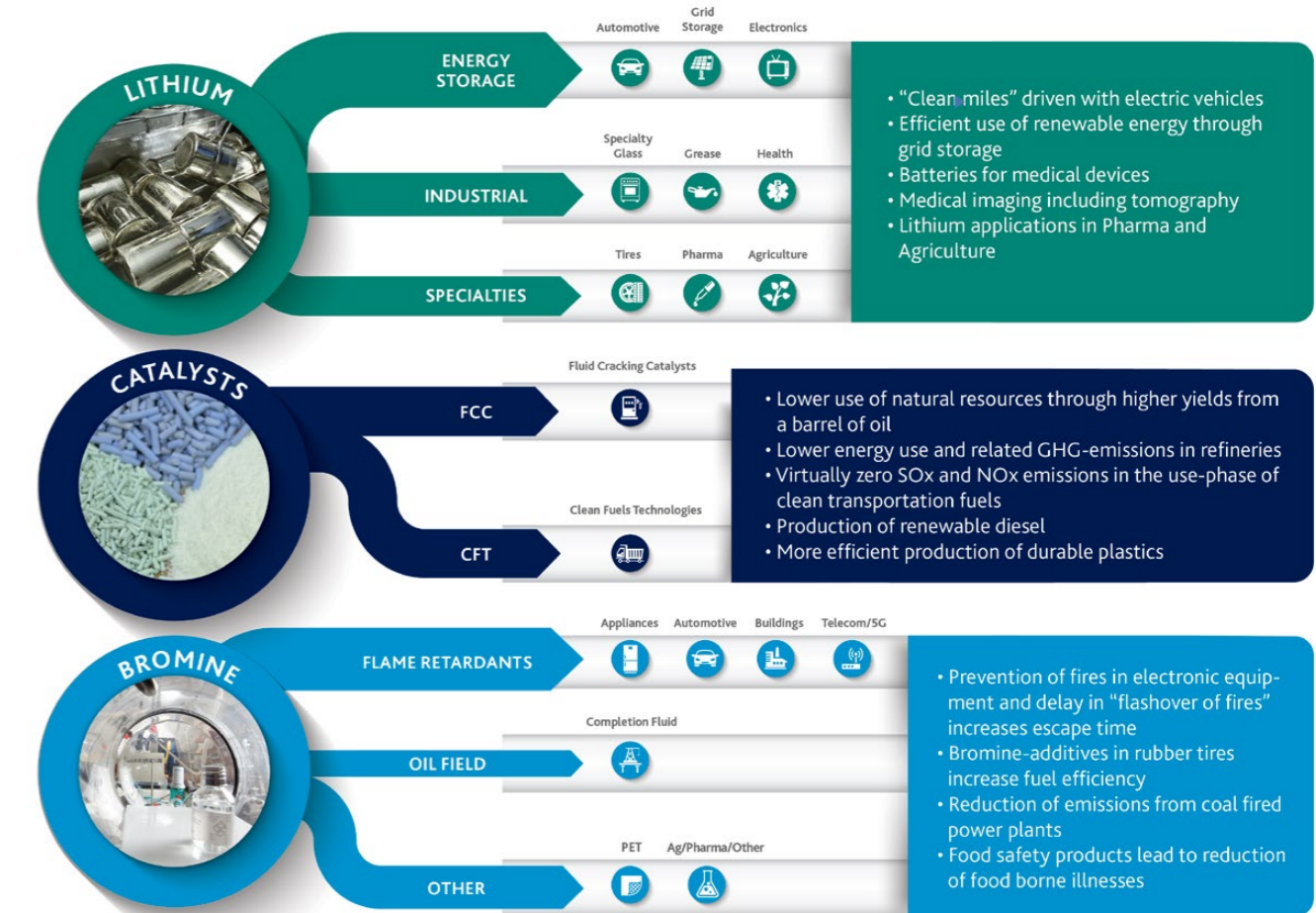
For example, our refinery catalysts remove contaminants like sulfur and nitrogen from transportation fuels. Without the use of these catalysts, it's estimated that approximately 10 million tons of sulfur would end up in the environment each year.

The value Albemarle delivers, however, goes beyond the products we produce and the capabilities and innovations they enable. It impacts our company, employees, and other stakeholders; the environment; the communities in which we live and work; and society in general.

Albemarle generates value through wages, dividends, and taxes paid, and through our interactions with the suppliers who sell goods and services to us. Value is further expressed in our engagement with our local communities, whether it's through our philanthropic efforts, volunteerism, or sharing of resources.

It's also realized by the investments we make in our facilities and in research and development efforts that drive innovation and contribute to and inspire new ways of working and thinking.

More than 50% of the Albemarle revenue comes from products with a positive impact on reduction of GHG-emissions or an increase of resource efficiency



<sup>1</sup>Calculated in accordance with SASB definition of product design for use-phase efficiency. Only direct impacts of our products in their use-phase were used in the calculation. Calculation excludes smaller or secondary impacts on resource efficiencies.

# OUR BUSINESSES LITHIUM

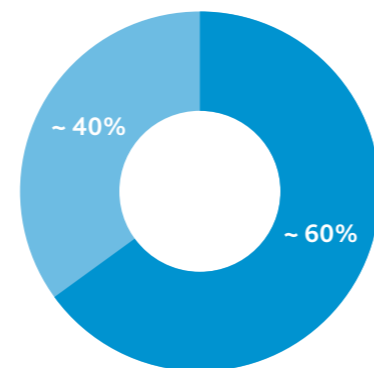


The products from our lithium business enable the growth of “clean miles” driven with electric vehicles, more efficient use of renewable energy through grid storage, batteries for medical devices, and medical imaging – just to name a few.

Albemarle is a leader in this long-term high growth specialty chemicals segment. Our unmatched natural resource position, chemical processing expertise and technology leadership allow us to provide one of the most diverse product portfolios in the industry and to grow sustainably with our end market. We are a low-cost producer of one of the most diverse product portfolios of lithium derivatives in the industry.

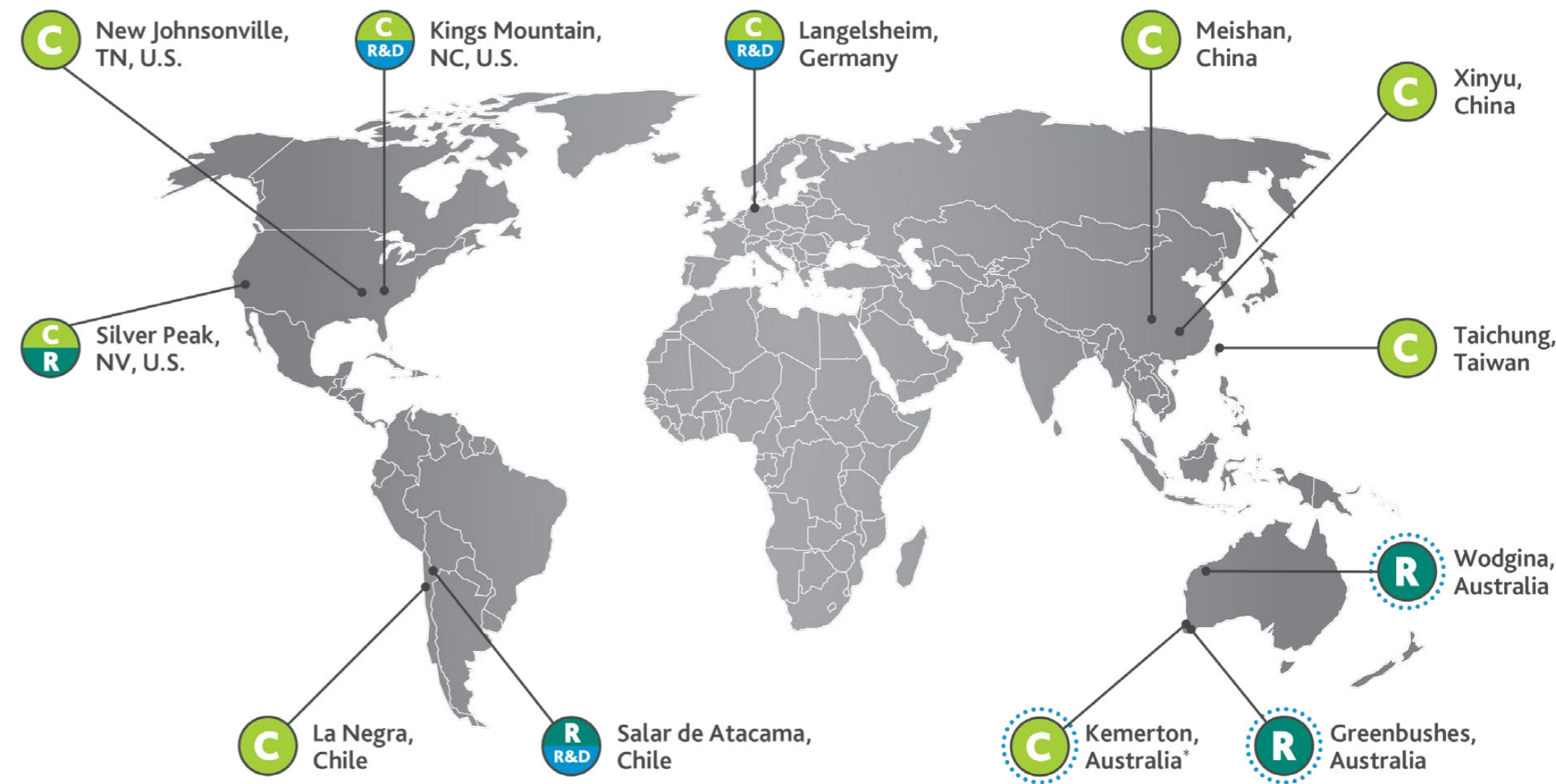
- Globally diverse, high quality, low-cost resource position
- Vertically integrated from natural resource to specialty performance products
- Specialty chemical and extraction expertise
- Strong technical and application expertise

## KEY DRIVERS



- **ENERGY STORAGE:**  
Used for consumer electronics, power grid, and mobility; the primary growth driver - electric vehicle sales.
- **SPECIALTIES AND TECHNICAL GRADE:**  
Used for pharmaceuticals, eco-tires, medical devices, greases, glass and ceramics; the primary driver - consumer spending and industrial production.

LITHIUM	2017	2018	2019
Revenue (\$M)	\$1,019	\$1,228	\$1,358
% Total Revenue	28%	36%	45%
Adj. EBITDA (\$M)	\$447	\$531	\$525
Adj. EBITDA Margin	44%	43%	39%



\* Construction expected to be complete in late 2021



# OUR BUSINESSES BROMINE SPECIALITIES

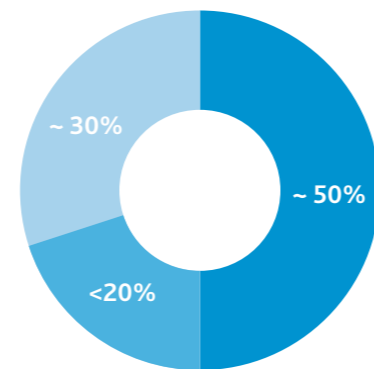


The products from our bromine business enable the prevention of fires related to electronic and durable plastics used in homes, industry and transportation and the delay in “flashover of fires” to increase escape time. Our products also support more efficient oilfield drilling, pharmaceutical manufacturing, pollution control, water treatment, disinfectants, and food safety for a growing world.

Our diverse, low-cost resource position, broad product portfolio and focus on operational excellence are competitive advantages that allow us to deliver custom chemistry solutions to the world’s leading producers of pharmaceuticals, agricultural products and electronic chemicals.

- Globally diverse, high quality, low-cost resource position
- Vertically integrated from natural resource to specialty performance products
- Specialty chemical and extraction expertise
- Strong technical and application expertise

## KEY DRIVERS



### ■ FLAME RETARDANTS:

Used for electronics, automotive, construction, appliances; Primary drivers – Automotive electronics and electrification, 5G, IoT, servers, construction

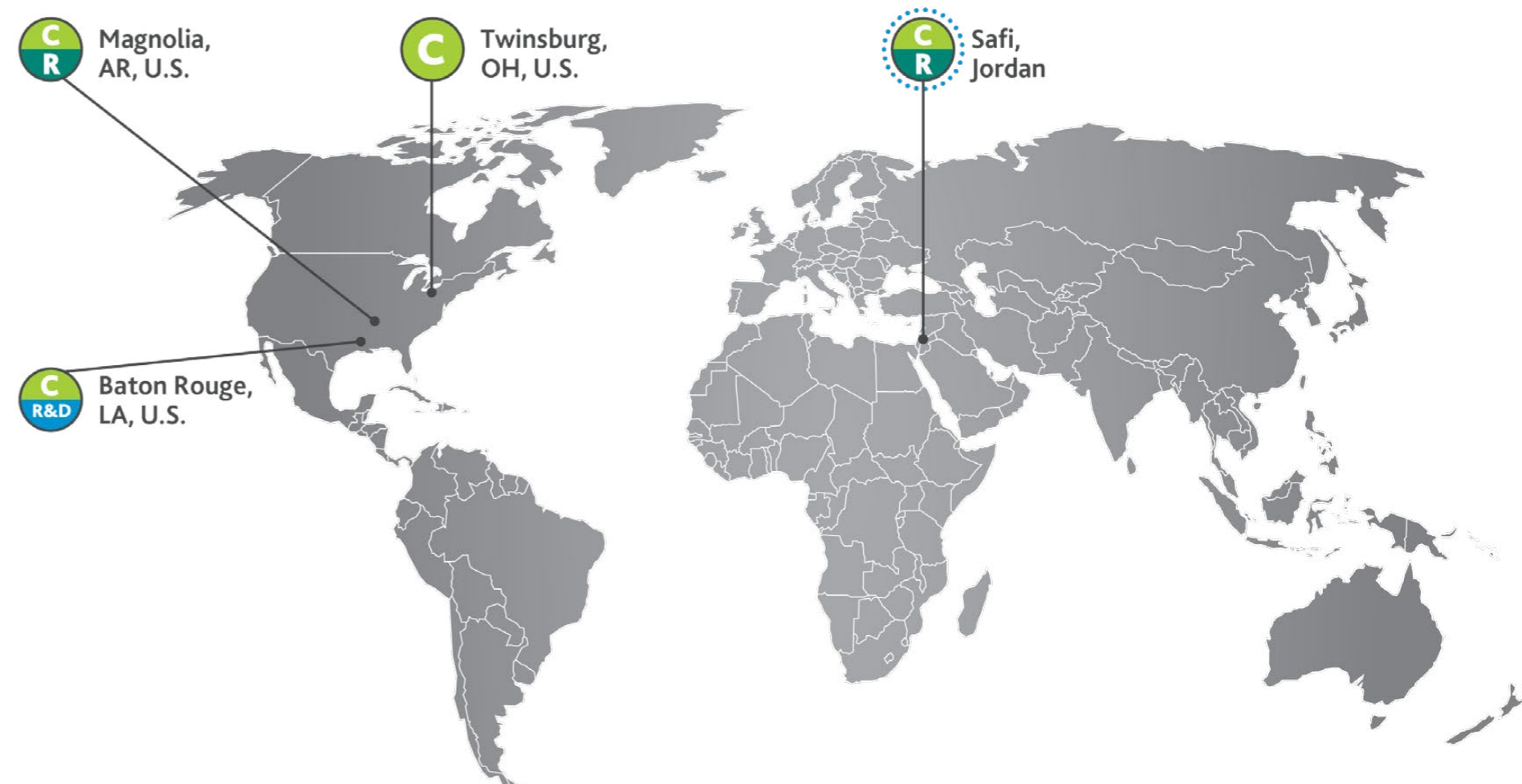
### ■ OILFIELD:

Used for deep water off-shore and high-pressure drilling; Primary drivers – global energy demand and oil price

### ■ OTHER:

Used for agriculture and pharmaceutical intermediates, radial tires, PET plastics; Primary drivers – growing middle class

BROMINE	2017	2018	2019
Revenue (\$M)	\$855	\$918	\$1,004
% Total Revenue	24%	27%	33%
Adj. EBITDA (\$M)	\$259	\$288	\$328
Adj. EBITDA Margin	30%	31%	33%



# OUR BUSINESSES CATALYSTS

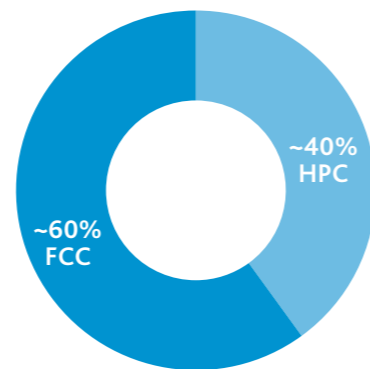


The products from our catalysts segment enable reduced SOx and NOx emissions through cleaner transportation fuels and improve the efficiency of natural resources by facilitating more usable products from a single barrel of oil.

Our catalysts business operates three primary product lines – Clean Fuels Technologies (“CFT”), which is primarily composed of hydroprocessing catalysts (“HPC”) together with isomerization and alkylation catalysts; fluidized catalytic cracking (“FCC”) catalysts and additives; and performance catalyst solutions (“PCS”), which is primarily composed of organometallics and curatives. We are exploring divestment options for our PCS business.

- Focus on value creation for refiners
- Application expertise which drives the optimum catalyst system design
- Strong technical and application expertise

## KEY DRIVERS



■ **FCC (Fluid Cracking Catalysts):**  
Used in refineries to upgrade oils into clean transportation fuels and high-value chemicals; Primary drivers - miles driven/transportation fuel consumption, growing prosperity

■ **HPC (Hydroprocessing Catalysts):**  
Used in refineries to reduce sulfur and other contaminants during refining; Primary driver - environmental sulfur regulations and customer turnarounds

Through cycle, revenues average ~60% FCC and ~40% HPC; HPC business is lumpy due to customer turnaround timing

CATALYSTS	2017	2018	2019
Revenue (\$M)	\$1,068	\$1,102	\$1,062
% Total Revenue	30%	33%	35%
Adj. EBITDA (\$M)	\$284	\$284	\$271
Adj. EBITDA Margin	27%	26%	25%



# CORPORATE GOVERNANCE

Corporate governance provides the framework of rules and practices by which we ensure transparency, accountability, and fairness in the company's interactions with and on behalf all of our stakeholders. It helps ensure the company operates responsibly and with sound ethics.

Corporate governance helps ensure we are honest in our disclosures, strike the right balance in our endeavors, and pursue our goals with integrity.

Albemarle is fortunate to have a diverse, engaged, and accountable board of directors at the helm. Their skill sets and experience, provide essential insights to guide us in achieving our goals and overall long-term vision.

While the entire board of directors is committed to sustainability, the Health Safety & Environment Committee has explicit oversight on the Company's health, safety, environment and sustainability programs and initiatives. It also oversees any matters relating to the company's global reputation for corporate stewardship and social responsibility. In the coming months, we will conduct a detailed review of committee charters to directly set out each committee's responsibility for their portion of the sustainability program.

# CAPABILITIES & EXPERIENCE



# BOARD OF DIRECTORS

Directors bring targeted and valuable expertise and experience.

- Strategy, finance, sustainability, and operations
- Automotive, electric grid, and chemical operations
- Mining and natural resources



**Kent Masters**  
Chairman



**Laurie Brlas**  
Former EVP & CFO,  
Newmont Mining



**Luke Kissam**  
Former CEO,  
Albemarle



**Glenda Minor**  
CEO & Principal,  
Silket Advisory  
Services  
Former SVP & CFO,  
Evraz North America



**James O'Brien**  
Former Chairman &  
CEO, Ashland Inc.  
Lead Independent  
Director



**Diarmuid O'Connell**  
Former VP, Corporate  
& Business  
Development,  
Tesla Motors



**Dean Seavers**  
Former President,  
National Grid U.S.



**Gerald Steiner**  
CEO & Member of  
Board of Managers,  
CoverCress Inc.  
Former EVP,  
Sustainability &  
Corporate Affairs,  
Monsanto Co.



**Holly Van Deursen**  
Former Group  
President,  
Petrochemicals, BP



**Alejandro Wolff**  
Former U.S.  
Ambassador to Chile



- |                                   |  |
|-----------------------------------|--|
| Audit & Finance Committee         | Health, Safety & Environment Committee |
| Executive Compensation Committee  | Chairman of the Board                  |
| Nominating & Governance Committee | Lead Independent Director              |
| Capital Investment Committee      | Chairperson                            |

# PURPOSE & VALUES

The Albemarle purpose statement — **Making the World Safe and Sustainable by Powering the Potential of People** — provides the foundation, inspiration, and motivation for everything we do. That potential plays out in the market sectors in which we work and it's both complemented and reinforced by our core values.

These values are formally embedded within Albemarle's policies, procedures, and systems and permeate all aspects of our company culture.

**CARE**  
We value safety and the well-being of each other. We help make our communities better. We are stewards of the environment.



**CURIOSITY**  
We encourage questions and wonder. We seek continuous learning, improvement and innovation.



**COURAGE**  
We are comfortable being vulnerable. We are willing to take informed and shared risks, but not shortcuts.



**COLLABORATION**  
We believe two are better than one when two act as one. We are empowered to perform our jobs and are accountable for the result.



**HUMILITY**  
We share the credit and value the ideas of others – it's not about me. We value diversity of thoughts, experiences and cultures.



**INTEGRITY AND TRANSPARENCY**  
We are our word. We do what we say. We communicate and act transparently. What you see is what you get.



# STRATEGY

Albemarle's business strategy is informed by secular trends, those market activities that we see staying relevant for the foreseeable future. And, while the specifics have changed over the years, that strategy remains focused on four actions: grow, maximize, assess, and invest.

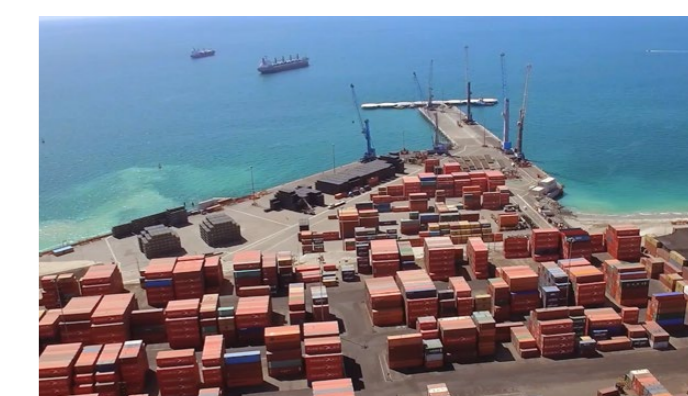
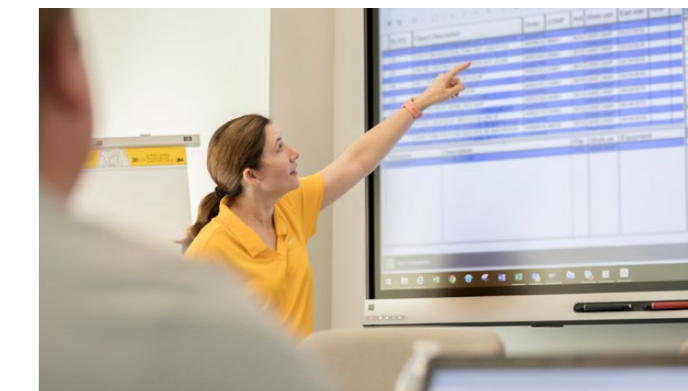
We're confident that we have the right strategy in place to position Albemarle for success. As we have in the past, we will alter and modify the execution of that strategy based on the conditions that we see in the short and midterm.

**GROW** We are investing in the long-term growth of the Lithium market, focusing on cash generation through smart investments that leverage our world-class assets.

**MAXIMIZE** We are driving maximum value of our business through operational discipline including:  
 Manufacturing excellence: best-in-class cost management and product quality  
 Business excellence: delivering exceptional value and service to our customers  
 Capital projects excellence: optimizing capital spend to match demand

**ASSESS** We continue to refine our portfolio, divesting non-core businesses and acquiring or building conversion assets to match demand.

**INVEST** We take a thoughtful, disciplined approach to capital allocation, while preserving financial flexibility.



# COVID-19 RESPONSE

Every now and then, an event occurs that drastically changes how business is done. One of them occurred towards the end of 2019: the novel coronavirus (COVID-19) outbreak and pandemic. It continues to have repercussions around the world, impacting all facets of business, as well as daily life.

While the pandemic itself is not a sustainability topic, how we handle it at Albemarle is. Our actions reflect both our core values and our commitment to safety.

Our operations were first affected by the virus in China in

early 2020. We have been able to take early learnings from our teams there and deploy them around the globe.

At the time of this writing, we have had relatively few diagnosed individuals out of our approximately 5,600 employees worldwide. Using our exposure protocols, we trace the contact path for any confirmed case among employees and have acted to isolate colleagues as needed. We are staying in close contact with impacted employees to monitor their welfare. We are grateful that diagnosed employees have recovered or are recovering as expected.

Nonetheless, we know that the pandemic is affecting our employees and local communities in many ways. To help alleviate some of the negative effects, we're making contributions through the Albemarle Foundation to help those in need.

We will continue to closely monitor the situation and make decisions that will contribute to the well-being of all our stakeholders. We will also remain agile and responsive to changing business needs resulting from the pandemic.

## COMMUNICATION

### Albemarle Executive Leadership Team meeting multiple times per week:

- COVID-19 global cross-functional response team update and recommendations
- Employee health and safety status/actions
- Business, Supply Chain, Manufacturing and Operations status/actions
- Financial status/actions

### Frequent communication with employees

- Weekly email from CEO
- Weekly update from each GBU president, virtual town halls
- Weekly status and protocol update on company intranet

## ACTIONS TAKEN

### Employees

- Protocols to decrease risk for our team, partners and communities
  - Travel restrictions, work-from-home, adjusted shift schedules
  - Health screening, social distancing at the worksite
  - Return-to-work protocols

### Manufacturing & Operations

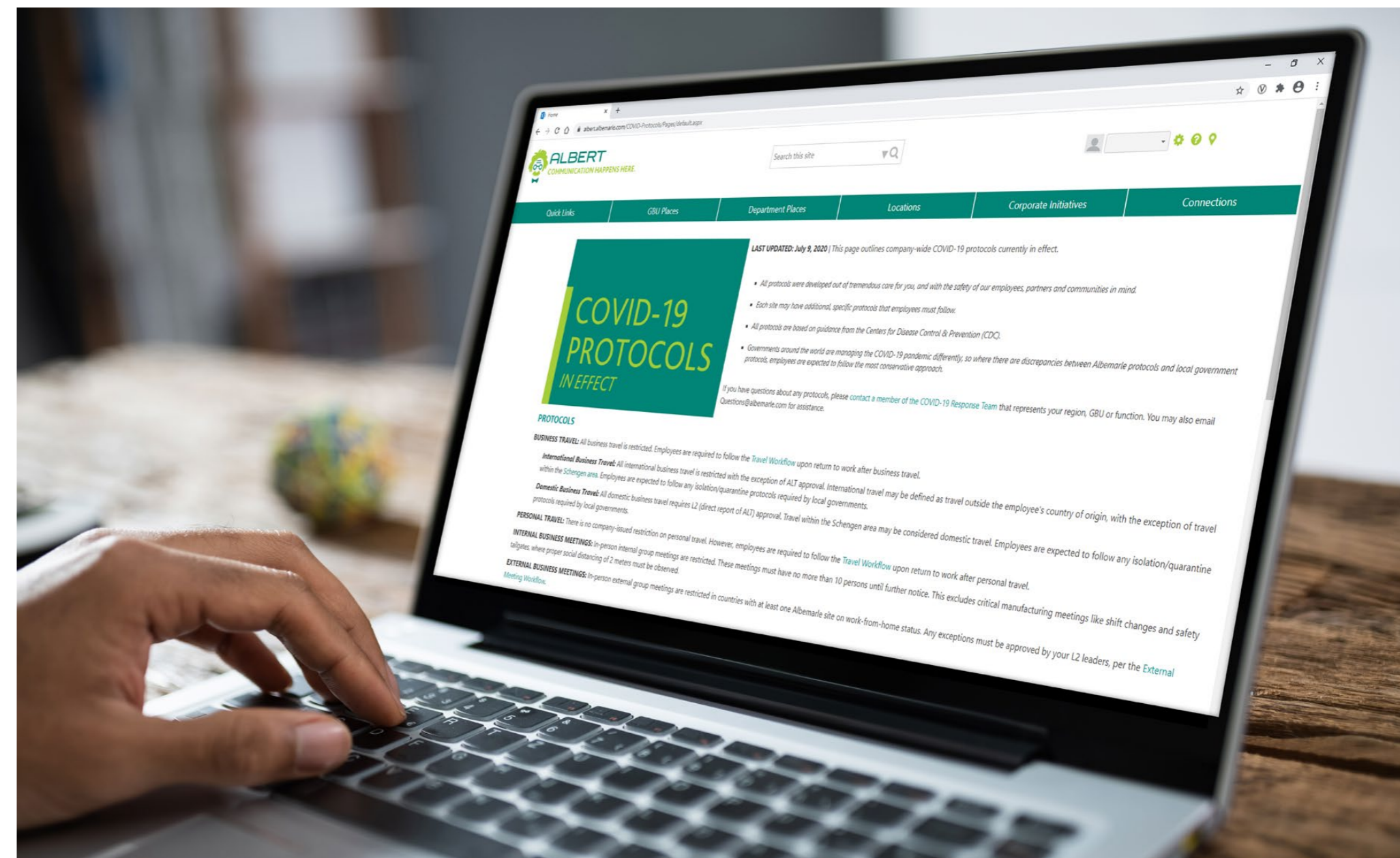
- Business continuity plans in place to serve our customers with minimal disruption
  - Agile logistics team
  - Ability to ship from multiple ports and freight lines
  - Multi-source raw materials and supplies, where possible

### Business Partners

- Frequent communications with customers to help us manage and meet their demand
- Plant entry protocol in place for safe and efficient deliveries

### Communities

- To date Albemarle, the Albemarle Foundation, and our JBC JV have contributed ~\$1.2M to help those in need
  - Donations of PPE globally
  - Fighting hunger
  - Relief for medical responders
  - Research grants
  - Improving access to learning





# MATERIALITY: DETERMINING WHAT MATTERS MOST

## A MESSAGE FROM THE SUSTAINABILITY STEERING TEAM

The Sustainability Steering Committee is both proud of and humbled by our role in helping to unify Albemarle's business and sustainability priorities.

It's increasingly clear that organizations that want to thrive, not just survive, can't delegate issues such as human rights or climate change to silos separate from business objectives.

While sustainability has long been valued and practiced at Albemarle, we are charged with ensuring that it's fully and meaningfully integrated throughout all aspects of the business. Our work is focused on mapping out a multi-year path to guide that integration.

In 2019, we renewed our focus to identify the sustainability issues that matter most to Albemarle's stakeholders and for which our company can make a difference. A global cross-functional sustainability team was created, and dedicated internal and external sustainability communications were launched.

For 2020, our attention is on setting Albemarle's baseline sustainability performance.

We've expanded our sustainability team to include representatives at each of our material sites. We're implementing systems and processes to efficiently collect and analyze relevant data. We're also working to improve reporting transparency.

In 2021 and going forward, the concentration will be on continuous improvement. We'll strive to be even more transparent in how we measure and report on Albemarle's progress in achieving its sustainability goals. We'll continue to engage stakeholders and use their feedback, as well as other resources, to fine tune those goals. We'll gather information and provide guidance to help Albemarle be responsive to trends, challenges, and opportunities that impact its sustainability efforts.

Sustainability is a journey, and we're thrilled to help chart the course for it.

Albemarle has adopted a Health, Safety, Security & Environmental Policy (the "HSSE Policy").

### SUSTAINABILITY STEERING COMMITTEE

**Raphael Crawford** – President, Catalysts

**Karen Narwold** – EVP, Chief Administrative Officer and General Counsel

**Meredith Bandy** – VP, Investor Relations & Sustainability

**Bo Brantley** – VP, HSSE & Operational Excellence

**Michael Brown** – Chief Operating Officer, Bromine & Catalysts

**Mark Mummert** – Chief Operating Officer, Lithium



## HEALTH, SAFETY, SECURITY & ENVIRONMENTAL POLICY

The HSSE Policy covers:

- Governance and Safety Stewardship:** No one will undertake a task unless it can be done in a safe and environmentally responsible manner; employees are empowered to elevate issues to the appropriate level, including (if necessary) discontinuing operations.
- Social Responsibility:** We will extend our HSSE philosophy beyond our workplace and into our communities.
- Green Chemistry Principles, Product Safety, and Environmental Obligations:** We will strive for continuous improvement in environmental performance throughout the entire product life cycle.
- People and Development:** We will ensure our employees have the necessary understanding, education, expertise, and training to allow them to perform in a safe and environmentally responsible manner.
- Financial Performance:** We will make wise investments to improve operational efficiencies and ensure compliance with current and future health, safety and environmental standards.

Albemarle has posted the [HSSE Policy](#) to its website.



# 2019 MATERIALITY ASSESSMENT

To successfully integrate sustainability into all aspects of the business, we must prioritize the topics that matter most — mitigate risks and deliver the greatest value to our stakeholders.

We conducted a materiality assessment in 2019 to identify the "material topics" to form the basis of our sustainability framework. As defined by the Global Reporting Initiative (GRI), these are topics that have a direct or indirect impact on our company's "ability to create, preserve or erode economic, environmental and social value for itself, its stakeholders and society at large."

A cross-functional team was created, drawing from Corporate Strategy, Investor Relations, Legal, and Health & Safety, under supervision of the CEO. The team compiled a preliminary list of material topics based on interviews with a broad cross-section of investors and customers and a review of publicly available competitor and customer information.

The list and the definition of topics were fine-tuned by leveraging the Sustainability Accounting Standards Board (SASB) industry-specific materiality matrix and standards for (i) Chemicals and (ii) Metals and Mining industries. We subsequently engaged with more than 40 leaders and subject matter experts internally and with multiple investors and customers to further sharpen the definition and rank of topics, using online questionnaires. The results are provided in the materiality matrix.

While all of the topics in the materiality matrix are by definition important, topics 1-12 are considered to be critically important for the execution of our strategy and creation of long-term value for our stakeholders.

With the results of this materiality assessment, we worked with senior leadership to establish a sustainability framework in line with Albemarle's vision, strategy, and core values. We introduced this framework publicly in December 2019.



- |   |                                      |   |  |
|---|--------------------------------------|---|--|
|  | 1 Safety                             |  | 9 Innovation                                   |
|   | 2 Inclusive & Diverse Workplace      |   | 10 Customers & Product Quality                 |
|   | 3 Investment in Talent               |   | 11 Business Ethics                             |
|  | 4 Energy management                  |   | 12 Regulatory compliance / product stewardship |
|   | 5 GHG emissions                      |   | 13 Waste management                            |
|   | 6 Water management                   |   | 14 Cyber security                              |
|   | 7 Minerals management                |   | 15 Business resilience                         |
|  | 8 Community / Stakeholder engagement |   | 16 Biodiversity                                |
|   |                                      |   | 17 Human Rights                                |
|   |                                      |   | 18 Data privacy                                |
|   |                                      |   | 19 Supply Chain management                     |
|   |                                      |   | 20 Air Quality                                 |

**SUSTAINABLE BUSINESS MODEL**  
Foster a sustainable business model that creates long-term value for all stakeholders.

**COMMUNITY ENGAGEMENT**  
Actively collaborate and engage in the communities where we work and live.



**OUR PEOPLE & WORKPLACE**  
Promote an inclusive and diverse workplace focused on safety, mutual respect, development and wellbeing.

**NATURAL RESOURCE MANAGEMENT**  
Responsibly manage our use of resources and materials.



# ABOUT THIS REPORT

This sustainability report marks a renewal of Albemarle's sustainability journey. Our 2019 materiality assessment has opened the way to the disclosure of our material subjects using the SASB Standards. For topics that could not be disclosed with SASB standards, we used the relevant GRI standards. As such, parts of this report contain GRI referenced disclosures.

Unless otherwise noted, the 2019 Albemarle Sustainability Report covers calendar year 2019. Some initiatives or targets launched in early 2020, including our response to the COVID-19 pandemic, are included to provide certain up-to-date information for our stakeholders.

Also, unless otherwise noted, financially consolidated joint ventures are included on a pro-rata basis in accordance with guidance published by the World Business Council for Sustainable Development (WBCSD) <sup>2</sup>.

Because financial information is regularly provided in our annual reports, proxy statements, quarterly reports, and SEC filings, we've chosen to only provide financial highlights of it for our 2019 Sustainability Report.

Customers and product quality were also cited as key topics of interest, and have long been cornerstones of both Albemarle's sustainability efforts and our long-term success. Because of the importance of this topic and the limited time for gathering all the information to do it justice, it was determined it would be best to reserve coverage of it to 2020.

The remaining topics gleaned from the materiality assessment are covered in the sections that follow. In some cases, related topics have been combined to provide a clearer picture of Albemarle's work in those areas. The information included represents highlights only; Albemarle's work in and commitment to each of these topics is far-reaching, ongoing, and critical to our economy, society, and the environment, as well as to our company's short- and long-term success.

<sup>2</sup> Guidance for Accounting and Reporting Corporate GHG Emissions in the Chemical Sector Value Chain, published January 30, 2013.





# OUR PEOPLE & WORKPLACE



# SAFETY

At Albemarle, safety is more than a priority. As part of the Care core value, it is woven into our corporate culture and integral to how we conduct business. As a company and as individuals, we make it personal.

We work diligently to ensure our employees have the necessary understanding, education, expertise, and training to perform tasks in a safe and environmentally responsible manner. We encourage and empower them to prevent accidents or incidents before they happen. We pave the way for an even safer future by learning from the past, sharing information, and implementing best practices across our organization.

## Our Approach to Workplace Safety

Our employees, contractors, and visitors follow a comprehensive set of written HSSE policies and procedures at both the corporate and local site levels. While certifications are only issued in the US, each of our global sites strive to meet the Responsible Care 14001 Management System requirement and, in most cases, go beyond standard compliance to include industry best practices and our own documented set of lessons learned. Together, this inclusive set of policies, procedures and standards serves as our guide and outlines our approach to health, safety and environmental stewardship.

## Campaign Promotes Life-Critical Policies and Procedures

In 2019, we introduced Albemarle's eight Life-Saving Rules as part of an internal campaign to generate global awareness of our most important HSSE policies and procedures. The campaign was well-received by employees and will continue to be a focus throughout 2020 and beyond.

### KNOW THE RULES. FOLLOW THE RULES. SAVE LIVES WITH THE RULES.



#### WORK PERMIT

I obtain permits before work begins and abide by the controls.



#### LOCK OUT TAG OUT

I identify, isolate, and test all energy sources, before work begins.



#### LINE BREAK

I verify control of hazardous energy before line break.



#### CONFINED SPACE

I obtain authorization by permit prior to entering confined spaces.



#### WORKING AT HEIGHTS

I work safely at heights, using appropriate fall protection.



#### PPE

I wear all of the prescribed Personal Protective Equipment (PPE).



#### ELECTRICAL

I only use proper, inspected and protected electrical equipment.



#### BYPASSING SAFETY CONTROLS

I obtain authorization before overriding, modifying or disabling safety controls.

## Programs to Enable, Empower and Engage

Albemarle's overarching HSSE program is executed with a continuous improvement mindset and is built upon three foundational elements: sense of vulnerability, leadership commitment and employee engagement.

These elements are supported by various programs and initiatives that fall into the following categories:

### Effective Audits and Assessments

We routinely audit ourselves against Albemarle's policies, procedures and standards, using internal and third-party resources to make sure we are doing work the right way, every time.

### Leading and Lagging Indicator Metrics

We use traditional lagging indicator metrics to monitor what has happened in relation to safety on a daily, quarterly and annual basis. In addition, and perhaps more importantly, we also consider leading indicators like close calls and near misses to try to get a sense for where we are on safety maturity and to help drive continuous improvement activities.

### Reporting and Communications

Consistent with our core value of transparency, we have developed a robust communications program for sharing HSSE performance updates with our internal stakeholders. This program includes incident reporting, safety tailgates, weekly newsletters, intranet-hosted dashboards, quarterly leadership Town Halls, quarterly board of directors HSSE committee meetings and more. Our intranet-hosted dashboards offer HSSE metrics at-a-glance – reporting out on occupational safety, process safety and environmental stewardship. This content is refreshed on a weekly basis offering our internal stakeholders a real-time view of HSSE performance.

### SENSE OF VULNERABILITY

We believe that all incidents can be avoided. Identifying, documenting and clearly understanding the potential risks we face each day is critical to our success.

### LEADERSHIP COMMITMENT

We believe the key to an enduring safety culture is consistent leadership at all levels of the organization. We expect our leaders to set the example, and we hold them accountable for the results.

### EMPLOYEE ENGAGEMENT

We believe that engaged employees are a critical factor in fostering workplace safety and more importantly, inspiring HSSE excellence.

## Root Cause Analysis and Corrective Actions

We consider root cause analyses critical, as they allow us to make certain we are getting to the real, deep fundamental reasons for why incidents are happening. We can then put corrective actions in place to prevent similar incidents from occurring in the future.

### Incentives

Our commitment to safety begins at the top of the organization and is reinforced at every level. For example, we include key company-wide HSSE metrics in our annual incentive plan for all employees, including executives. And, we often use Spot Recognition Awards to recognize and promote outstanding performance.

### Contractor Safety

We regularly employ contractors in our facilities. As such, ensuring their health and safety is critically important, and is reflected in our robust contractor sourcing process. We rely on a third-party system, ISNetworld, to identify and fully qualify safety-conscious contractors who share our commitment to HSSE excellence and hold similar core values. We monitor, assess and report out on contractor safety performance on a routine basis.

## Process Safety

Our process safety program is designed to prevent unplanned or uncontrolled loss of primary containment of any material that could result in an incident such as an injury, fire, explosion, toxic release or environmental impact.

A strong process safety culture is the key to operational excellence. Our approach to process safety involves identifying, managing and mitigating risks by raising awareness, providing strong safety leadership, and continuously improving our process safety procedures, systems, and standards.

In 2019 we implemented a global electronic management of change system. This system ensures a consistent approach to change management in our processing operations. The system also allows us to develop meaningful metrics to track change management performance.

We have also developed standard global process safety leading indicators to identify weaknesses in key work processes, operating discipline, or layers of protection before they lead to a process safety event. We have expanded our leading process safety indicators to 17 and applied them globally to ensure consistent performance management.

## Hazard Recognition Tool Leads to Success in Safety

At Albemarle, we believe that all accidents are preventable and that everyone should return home to their family safe and free from workplace injury or illness. This year, in support of this goal, we launched a refreshed version of a hazard recognition and mitigation tool called **SCAN**.

SCAN is a simple yet powerful tool that helps identify and mitigate potential hazards and reduce the risk of injury. SCAN stands for: Survey, Consider, Act and Notify. Each word represents a vitally important step to help employees see and consider hazards more effectively, and then follow through with action and communication. To achieve zero incidents, we must continuously improve workplace safety by focusing on hazard recognition.



**S SURVEY**  
Observe surroundings for hazards in all work areas, for all tasks, for everyone.

**C CONSIDER**  
Think carefully and ask yourself... "What could happen if...?"

**A ACT**  
Initiate fixes, elevate discussions or STOP work when answers to "what if" questions are unknown or unsafe.

**N NOTIFY**  
Inform all potentially affected people of identified hazard(s).

## Best Practice Sharing Encourages Collaboration

Albemarle's Best Practice Sharing program provides a way for sites with mature safety cultures to share their successful safety practices. As a result, Albemarle's global HSE organization now offers a growing library of best practices, as well as tools, templates, and other resources.

Among the successful tactics that have become best practices are:

- Safety team: a group of employees representing various work groups who act as advocates for safety, take ownership of safety-related issues and initiate positive change
- Safety advocate: a rotational program that takes employee volunteers out of their typical daily job function and temporarily assigns them to a safety-

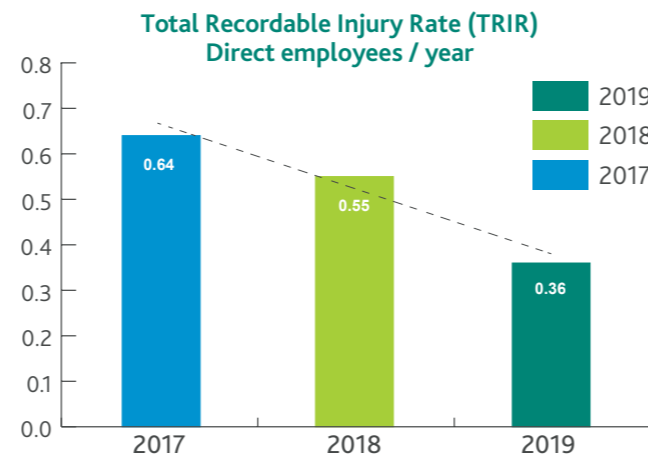
specific role

- Safety tailgates: regular, informal opportunities to share environmental and safety concerns with open discussions on how these concerns should be addressed
- Safety near-miss reporting: a program to identify and address hazards within the workplace before they can cause harm

Each best practice includes a program summary, key benefits, implementation strategy, elements needed for maximum benefit, success stories, and other supporting details. All sites are encouraged to adopt at least one new safety best practice each year.

## Safest Year in Recent History

Albemarle's 2019 safety incident and lost time incident rates were among the best in the company's history, and put us at the top quartile of our peer companies<sup>3</sup>. Our 2019 safety performance demonstrates our commitment to continuous improvement and our focus on achieving world-class safety.



<sup>3</sup> Compares Albemarle's global safety performance to the US-based safety performance of American Chemistry Council members.

# INCLUSIVE & DIVERSE WORKPLACE

"We are committed to building a workplace that is diverse, inclusive, and that treats all employees equitably — not because we are required to do so but because it is the right and fair thing to do."

DeeAnne Marlow,  
Chief Human Resources Officer

It is important at Albemarle to ensure our employees feel safe, supported, and empowered to do the best work they can do. Among the ways we make this happen is by providing an inclusive, diverse workplace.

Doing so also facilitates opportunities for innovation, fosters good decision making practices, and promotes employee engagement and high productivity across an organization. We know because we've experienced it first-hand.

Establishing a sense of belonging so all employees feel valued requires us to be open and transparent about our current inclusion and diversity practices. We welcome feedback and the perspectives of all stakeholders and

actively seek out opportunities to improve.

## Highlights of Inclusion and Diversity Activities

Among our efforts to continue building an inclusive, diverse workplace in 2019 was increasing the representation of women on our board of directors, resulting in a board that is 50% diverse. The addition of two highly experienced women as directors broadens the range of perspectives, insights, experiences, and talents that we can leverage to benefit our organization.

In 2020, we also pledged to build on our commitment to inclusion and diversity through a new action plan to fight discrimination. It includes hiring an inclusion and diversity leader to accelerate our inclusion and diversity roadmap and deliver meaningful change in our global organization.

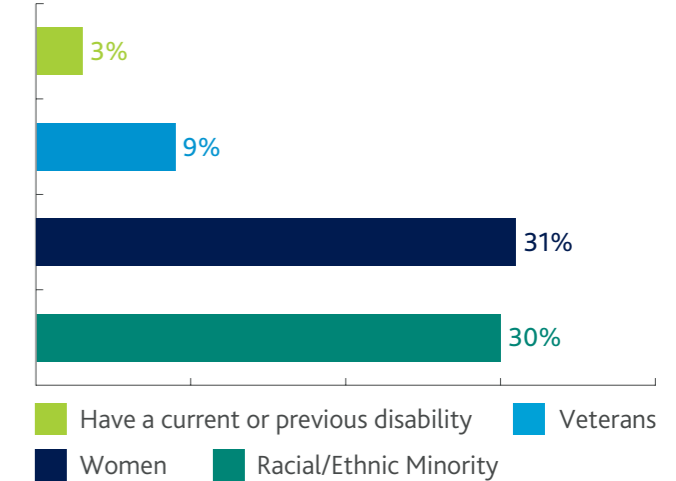
The plan also entails our corporate leaders participating in conscious inclusion/unconscious bias training. In the future, this training will be rolled out to the rest of the organization. In addition, an online module on inclusion will be added to Albemarle's new employee onboarding curriculum.

These actions, along with others currently in process or in development, will help us continue building a culture where our values are clear, all are welcome to collaborate and contribute, and differences are celebrated as a competitive advantage.

## Improving our Recruitment Process

Driving greater diversity in our workforce, including higher representation in the professional and managerial job categories, continues to be a primary focus in our recruiting efforts and related activities. So does ensuring the Albemarle workplace reflects the communities in

Employees hired in the US in 2019



which we live and work

In 2019, we enhanced our recruiting process by implementing diverse candidate slates. Now when we recruit candidates, we interview from a slate of applicants that includes at least two individuals from gender or racial minority groups. This provides a more diverse candidate selection, and introduces us to prospective employees with diverse backgrounds, experiences, and perspectives. We have introduced diverse candidate slates at the manager level and intend to expand the requirements more broadly over time.

To support these efforts, we remain actively engaged with national recruiting conferences in the United States, such as the National Society of Black Engineers, National Black MBA Association, Society of Hispanic Professional Engineers, and the Society of Women Engineers. We also maintain strong recruiting partnerships with two Historically Black Colleges and Universities (HBCU's), including North Carolina A&T State University and Texas' Prairie View A&M University.

## Reviewing and Regulating Fair Pay Practices

Pay equity is an essential part of ensuring an inclusive environment in which everyone feels valued and respected. On an annual basis, we review our pay practices throughout Albemarle to ensure they are fair and equitable. This helps us confirm that employee pay is based on experience, expertise, performance, and the criticality of the role to Albemarle, and isn't influenced by biased opinion or discrimination.

Using our annual pay review process and other tools, we are actively identifying and eliminating pay gaps between individuals who work in the same role at the same location. For example, our 2019 global pay equity study revealed pay gaps between seven male and female employees performing the same job at the same location. Likewise, our 2019 US pay equity analysis by race uncovered a pay gap between four white and non-white employees performing the same job at the same location. In these cases, pay adjustments were made for the affected individuals.

While we conduct gender-based pay equity analysis across all countries in which we have operations, race-based pay equity analysis is conducted only in the United States. In most of the countries where we operate, local laws prohibit the collection of information from employees regarding race. Nonetheless, when we do find any pay equity issues, we address them.

## Developing the Connect Platform

**Connect** is the brand name established to unify Albemarle's employee groups, and to promote an atmosphere of inclusion and encouragement in which every employee's voice is heard.

In 2019, Albemarle employees developed new Connect groups: LatinX Connect, Veterans Connect, Faith Connect,

Black Employees Connect, and Women's Connect. From mentoring to volunteering in the local community, each Connect group provides opportunities for employees to share their backgrounds, experiences, and beliefs, and to use them to benefit others.



# INVESTMENT IN TALENT

"Making the world safe and sustainable by powering the potential of people." As our purpose statement conveys, people are our greatest asset; providing them with the resources to do what they do best is what enables Albemarle to carry out its mission.

That is why talent management is critical to our organization. Engaging, developing, motivating, and retaining top talent, as well as fostering a supportive environment for our high-performing workforce, enables our employees to achieve goals far beyond what they



thought possible.

We also recognize these efforts help position us as a desirable workplace, enabling us to attract candidates who have the skills, experience, and values that align with our organization.

In 2019, our talent management efforts took shape through a number of specific programs and initiatives across the company. Much of this work focused on leadership development, online learning through Albemarle University, and performance management and succession planning.

## Leadership Development

Leadership development is a cornerstone to our talent management strategy. It provides us with critical opportunities to teach our employees how to lead effectively in accordance with our core values. We do this through formal and informal practices including:

**Performance coaching** - to facilitate the growth and development of employees across the company.

**360-degree feedback** - to provide employees with

targeted feedback from a broad subset of stakeholders.

**Experiential development and mentoring** - to provide learning through "doing" using on-the-job training, project development opportunities, and mentoring.

We also have official programs that support our leadership development efforts, including LAUNCH and the Women's Connect Leadership Development program.

**LAUNCH** is a two-year rotational development program for recent graduates. It gives a cohort of recent graduates the opportunity to participate in three assignments (two domestic and one international) to gain unique insight into our organization and processes. Participants are encouraged to apply real-time problem-solving skills, collaborate with industry professionals, and adapt to new and changing environments. In 2019, we welcomed five new LAUNCH program members. This group, in addition to three members welcomed in 2018, collectively worked at seven sites across three countries.



Women's Connect Leadership Development Program is a three-year program designed to educate, inspire and encourage women as they progress toward meeting their individual goals. In 2019, we welcomed our first group of 20 women across 10 of Albemarle's global sites. We'll welcome two more groups in 2020.

## Online Learning through Albemarle University

In 2019, employees averaged 30 hours of online training through Albemarle University, our internal learning management system. Sessions featured topics such as our core values, code of conduct, IT security, and SAP skills. Albemarle University also enables us to track development, provide employee training, and offer opportunities for knowledge exchange.

## Performance Management and Succession Planning

Performance reviews and succession planning also contribute to our talent management endeavors, helping us plan for career progression and increase the visibility of employee talents to a broader set of leaders.

Performance management reviews encourage employees

and managers to participate in meaningful conversations and share valuable, two-way feedback surrounding goal achievement and employee development throughout the year. All employees receive performance feedback from their supervisors at least every six months.

In 2019, we improved the process by standardizing our global performance management template. Doing so removed ambiguity, enhanced the user-experience, and introduced more accurate reporting methods. Now, we can share key data about this process with our leaders, which in turn keeps them informed and engaged in our workforce development efforts.

Succession planning is a critical process for Albemarle because it allows us to be proactive and anticipate key organizational needs for talent and capabilities. This enables us to efficiently and effectively ensure that we have the right talent pipeline to drive Albemarle's success into the future.

Each of our executive and key positions are evaluated for suitable successors, the anticipated timeframe and urgency in which the role would need to be filled, and the future capability needs of the role. The board sees, evaluates, and provides feedback on the roll-up of the organizational succession plans with a specific focus on CEO and executive role successors.





# NATURAL RESOURCE MANAGEMENT

# ENERGY & GREENHOUSE GASES



As a leader in the lithium industry, we believe we have a role to play in reducing energy consumption and emission of greenhouse gases (GHG). Our products are essential in the reduction of GHG, most notably in the use of our lithium products in batteries for electric vehicles. In our sustainability journey, we are committed to good stewardship of the environment and energy-efficient manufacturing of our products. As climate change concerns grow globally, we are committed to reducing emissions of GHG and ozone depleting substances. We will strive to minimize our energy and carbon footprint while continuing to meet growing lithium demand. Ambitious plans for reductions of GHG-emissions are already in place for some of our locations in-line with local legislation.

This year's report serves as a baseline of our energy consumption, enabling us to develop a balanced view of the footprint changes in the next 5-10 years. Properly managing our energy consumption and carbon footprint will allow our customers to develop consumer products with a more sustainable footprint. With this baseline, we can now develop concrete targets in energy and GHG reduction to advance significant and sustainable change, emphasizing the importance of our company's core values. When developing targets and goals, we will not only consider CO<sub>2</sub> and other GHG-emissions but also reduction of hydrochlorofluorocarbons (HCFCs) containing refrigerants, such as R-22, that contribute to the depletion of the Earth's protective ozone layer.

## Use of Passive Solar Energy

As part of our energy conservation efforts, we use passive solar power in Salar de Atacama (Chile) and Silver Peak (Nevada, USA) to concentrate lithium-containing brine. Brine is extracted from salt water aquifers and diverted to a system of large evaporation ponds. The entire concentration process can take 12 to 18 months. The

altitude and inherently arid local conditions contribute to a completely solar-powered evaporation process.

Passive solar evaporation is environmentally responsible because it avoids the use of fossil fuels and the related GHG-emissions. The passive solar energy used for the concentration of brine in Salar de Atacama and Silver Peak is about 50 PJ (50x10<sup>15</sup> Joule) or 14 TWh. If the same energy were generated by combustion of natural gas, the GHG-emissions would have been 2.5 million mt CO<sub>2</sub>e, or 2.5 times Albemarle's total annual GHG emission.

## Progress to Improve Operational Efficiency

Our global HSSE policy includes a focus on continuous improvement, optimizing energy usage to drive efficiencies and technology changes, and reducing GHG at our production sites, which helps improve our low-cost supplier capability.

In 2017, at our Xinyu Lithium hydroxide plant in China, we took the initiative to convert the power supply of the site from coal to natural gas although coal is a more commonly used and a more cost-effective energy source for most manufacturers in China.

In 2017, at our Jordan Bromine Company Limited (JBC) JV, a landmark deal was made with a natural gas firm, Noble Energy, to significantly reduce GHG and SOx emissions by switching from heavy diesel fuel to natural gas. The project also significantly reduced airborne particulates.

In 2017, also at JBC, two heat integration projects were completed reducing site thermal energy by 11% and fresh water usage by 2%.

In 2019, more than 95% of our energy usage at the Salar de Atacama plant in Chile was solar energy used to

concentrate the brine extracted from the salt flats.

In 2019, our refinery catalyst plant at the Bayport facility in Texas was able to improve the slurry feed systems control allowing for the process to reduce variability and operate more efficiently, reducing energy usage by 2% annually for the site; in 2020, Albemarle was honored by the American Chemistry Council with an award for energy efficiency for this project.

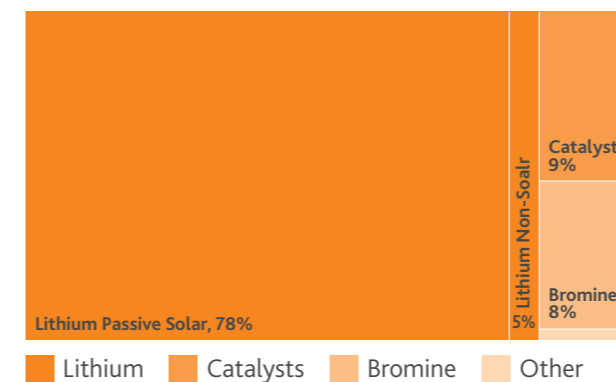
In 2019, at our Magnolia Arkansas plant, we completed modifications to the bromine tower improving the mass transfer and enabling us to decrease the steam usage.

## Energy and Greenhouse Gas Data

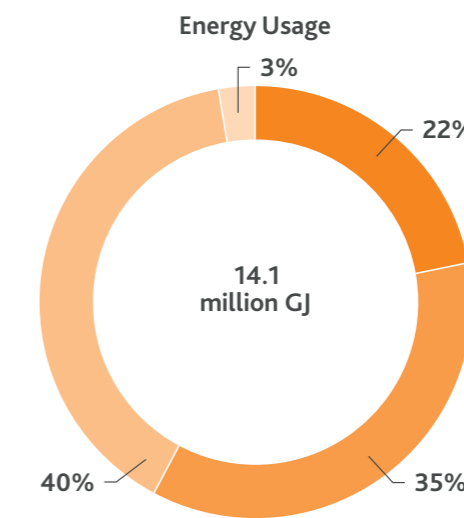
Passive solar energy represents 78% of our total energy use. Passive solar energy is used in Salar de Atacama (Chile) and Silver Peak (Nevada, USA) for the concentration of lithium containing brines. The numbers are based on calculations of water evaporation from brine.

Given the magnitude of passive solar energy consumed, the breakdown of the non-solar energy provides a better

### Energy usage including Passive Solar Energy



view of the energy-intensity of our businesses. Excluding passive solar, Albemarle consumed approximately 14.1M GJ of energy in 2019 of which Lithium consumed 22%, Bromine 35%, and Catalysts 40%. The remaining 3% represents our Fine Chemistry Solutions (FCS) operations, global offices, and company-owned or leased transportation.

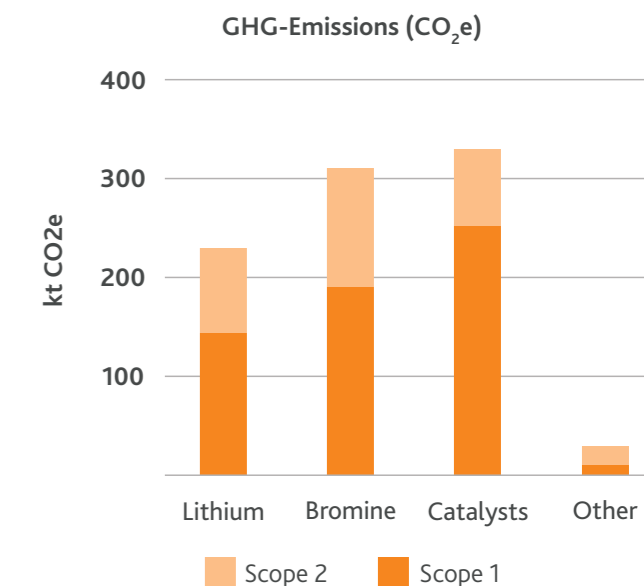


Legend: Lithium (dark orange), Bromine (medium orange), Catalysts (light orange), Other (pale orange)

About 2% of the energy mix (excluding passive solar) was renewable and 11% of the energy consumption is covered under emission-limiting regulations, such as the European Trading System (ETS).

GHG-emissions are broken down by scope 1 and scope 2, as defined in the GHG protocol, WBCSD, and SASB standards. At this stage, we do not have sufficient data to assess scope 3 emissions. Total GHG-emissions in 2019 were 902,000 mt CO<sub>2</sub>e, of which Bromine comprised 35%, Catalysts 37%, and Lithium 26%.

Emissions in 2019 are lower than the reported number in 2018 (0.96 million mt CO<sub>2</sub>e) due to energy reduction measures and better assessment of all GHG sources and the underlying energy mix of the electricity providers.

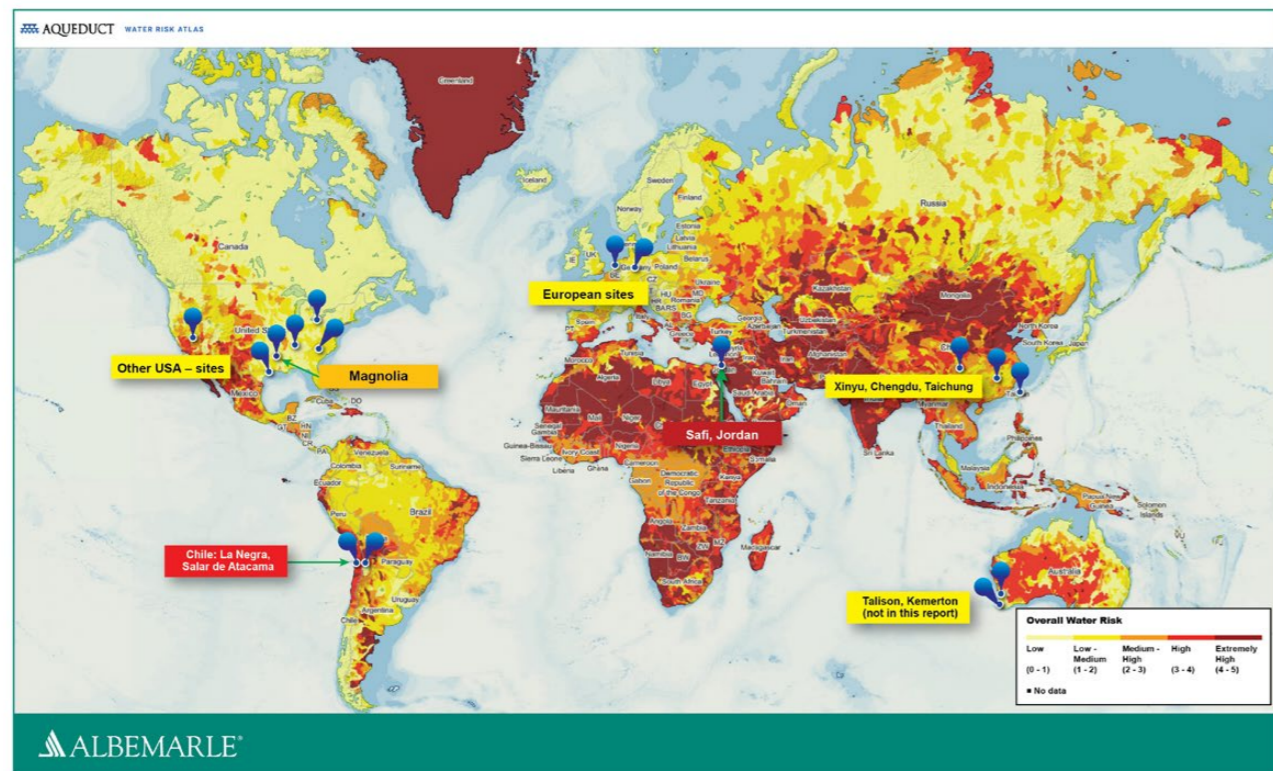


# WATER MANAGEMENT

Efficient water use is integral to Albemarle's business strategy, as well as to its commitment to ethical interactions with the planet and its people. The development of technologies that allow us to increase production using less water will be fundamental to our long-term business.

A number of our plants are located in areas categorized as high or extremely high water risk by the Aqueduct Atlas of World Resources Institute (WRI) <sup>4</sup>. Our lithium-producing locations in Salar de Atacama (Chile) and La Negra (Chile) fall in the category "high overall water risk." Our bromine operations in Safi (Jordan) fall in the "extremely high water risk" category.

Our Chilean production sites are located in areas with an arid climate and low population density, especially in the Salar de Atacama. Our production location in Magnolia, Arkansas, USA — one of the world's largest bromine and bromine chemicals sites — has an artificial marsh, which acts as a unique wastewater treatment facility. Our bromine production site in Safi (Jordan) has extensive water management and reduction programs given the scarcity of fresh water.



## Responsible Users of Water in Water-Scarce Areas

The Salar de Atacama is the largest salt flat in Chile and the highest grade <sup>5</sup>, most productive lithium brine deposit in the world <sup>6</sup>.

Lithium, an indispensable material for electric vehicle batteries, is also key for global energy transition. Understandably, battery producers, automotive OEM's and end users want assurance that emission-free electric vehicles are built using sustainable materials. Water management allows us to provide the lithium the world

needs to combat the effects of climate change in a sustainable manner.

Our plant in the Salar produces lithium from brine that is ten times saltier than seawater making it unusable for human consumption or agriculture.

The Salar de Atacama is a closed basin, surrounded by mountains. All the water that enters by precipitation drains towards the lowest area. There are no surface channels to or from other basins. Water discharges from the basin by natural evaporation and as a result of the pumping of fresh water and, to a lesser extent, brine.

In the Atacama basin, there are three primary zones:

- Salt flat or salar nucleus: where the brine is located
- Mixing or transition zone: where the brine meets the fresh water
- Recharge zone: where surface or groundwater collects

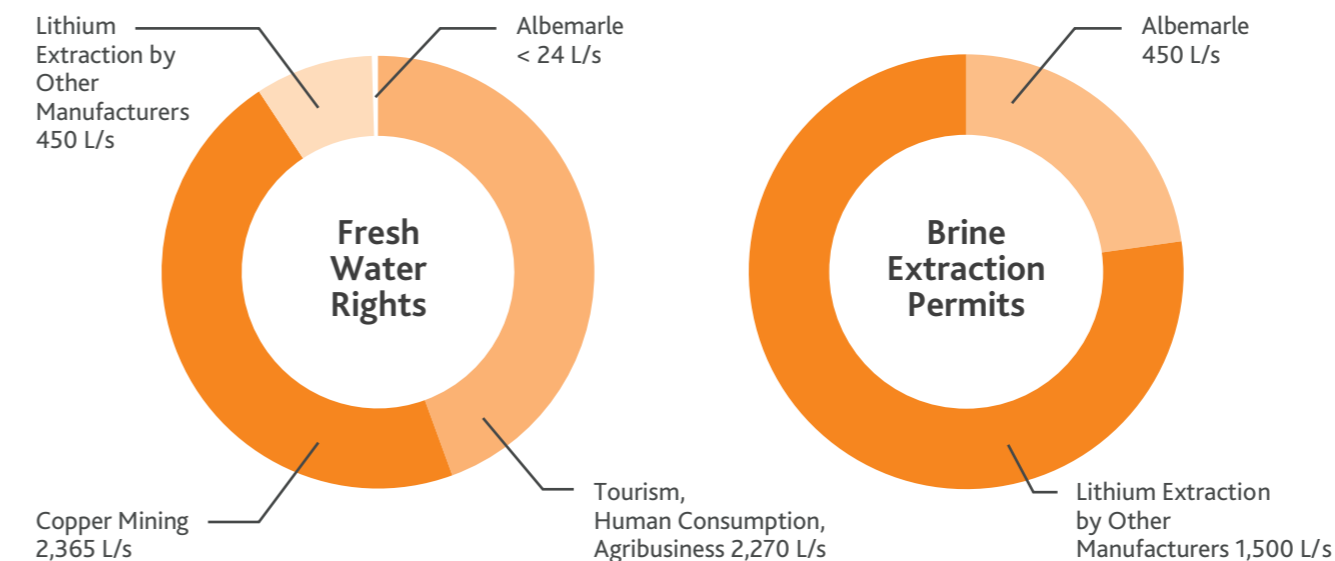
The groundwater that reaches the lowest part of the basin meets the dense brine. Due to this difference in density, the saline interphase is formed, causing the water to be forced to the surface forming lagoons in some areas of the basin. The saline interphase and the low permeability sediments around it minimize the effects of brine extraction in the nucleus.

Albemarle operates an extensive water monitoring network throughout the Salar to help ensure that the pumping of brine is not adversely impacting the water system. Each pumping well is monitored in real-time and reported to environmental authorities. In addition to

the pumping wells, we operate 150 monitoring wells. A representative of the indigenous community accompanies us on each trip to a monitoring well. To ensure transparency, the monitoring data is also shared with the community.

At Albemarle, we understand that fresh water is critical for the communities, the environment, biodiversity, and our operations. Our goal is to produce the lithium that is needed to combat climate change, while minimizing impact to the ecosystem and maximizing benefit for all stakeholders.

Our fresh water rights make up 0.5% or less than 24 liters per second (l/s) of the total fresh water rights in the Salar de Atacama basin. Of those rights we use just nine (9) l/s for the production of potassium chloride and rinsing our equipment. In the Salar de Atacama, no fresh water is used in the brine concentration process.



Source: DGA (Chilean Water Authority)





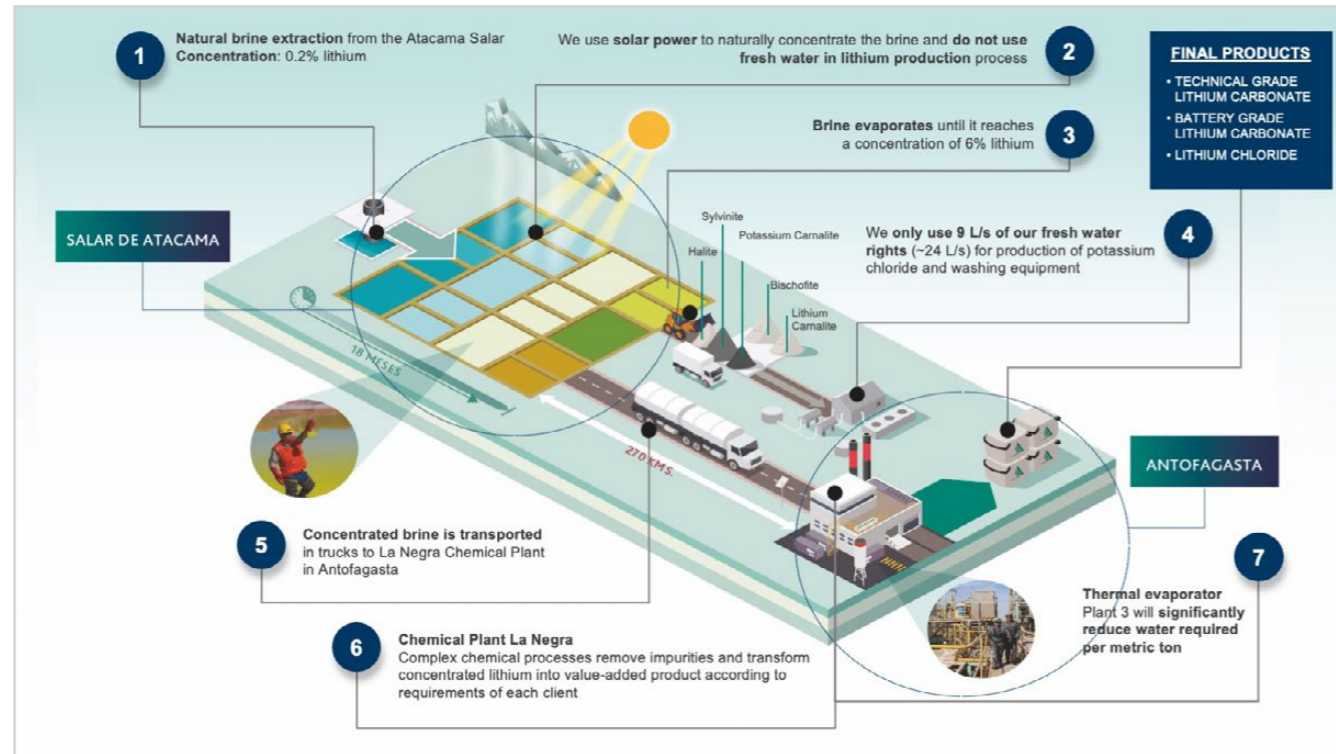
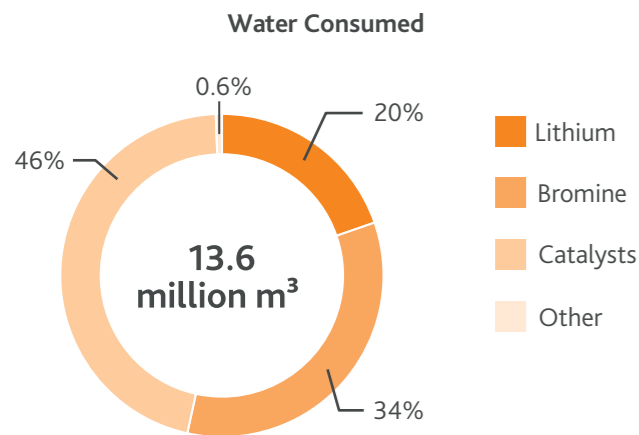
Our current process has a lower water footprint than other technologies currently under development by third parties. We continuously search for efficiency improvements in the use of these resources and assess new technologies against sustainability criteria. We are currently developing a detailed management system for this brine resource in order to improve processes and reduce water requirements.

We're also investing to conserve water. In Chile, we spent more than \$100 million to install equipment in our new La Negra plant expansion that allows us to increase capacity without proportionally increasing the water footprint.

In Jordan we reduced fresh water usage at cooling towers by process heat integration and operating at higher concentrations in certain process streams. Two investments in innovative reclamation of water from waste streams (slated for startup in 2020 and 2021) will lead to further reduction of the water footprint.

### Water Management Data

Assessment of water consumption in this report was performed in accordance with SASB standards.



The total amount of water consumed in 2019 was approximately 13.6 million m<sup>3</sup> including 46% by Catalysts, 34% by Bromine, and 20% by Lithium. Other consumption includes Fine Chemistry Solution (FCS).

Approximately 80% of water is consumed at sites with low to medium high water risk as defined by WRI. The remaining 20% is from high or extremely high risk sites, specifically in Chile and Jordan as discussed above.

Reported water consumption in 2019 was higher than in 2018 (12.1 million m<sup>3</sup>) partially due to higher production, but primarily due to better and broader assessment of all water use streams.



# MINERALS

Natural resources are a critical component and the starting point for processes in two of our our core businesses, Lithium and Bromine. It is our responsibility to manage these natural resources efficiently, effectively, and sustainably and to be transparent through the process.



SALAR DE ATACAMA, CHILE



GREENBUSHES, AUSTRALIA

“As an industry leader, it is important to Albemarle to be a good corporate citizen and to bring about sustainable solutions for the future through our core values.”

Mark Mummert,  
Chief Operating Officer of Lithium.



MAGNOLIA, AR, USA

## Managing Our Natural Resources

To understand the impact of extracting valuable minerals from these natural resources, Albemarle has focused on building detailed models based on data collection on location.

In Magnolia Arkansas, we have built a model of the brine field based on our knowledge of the formation geology and operating history. Using this model, we can predict optimal placement of both supply and injection wells. Effective injection well placement is key to minimize dilution of fresh brine by depleted tail brine.

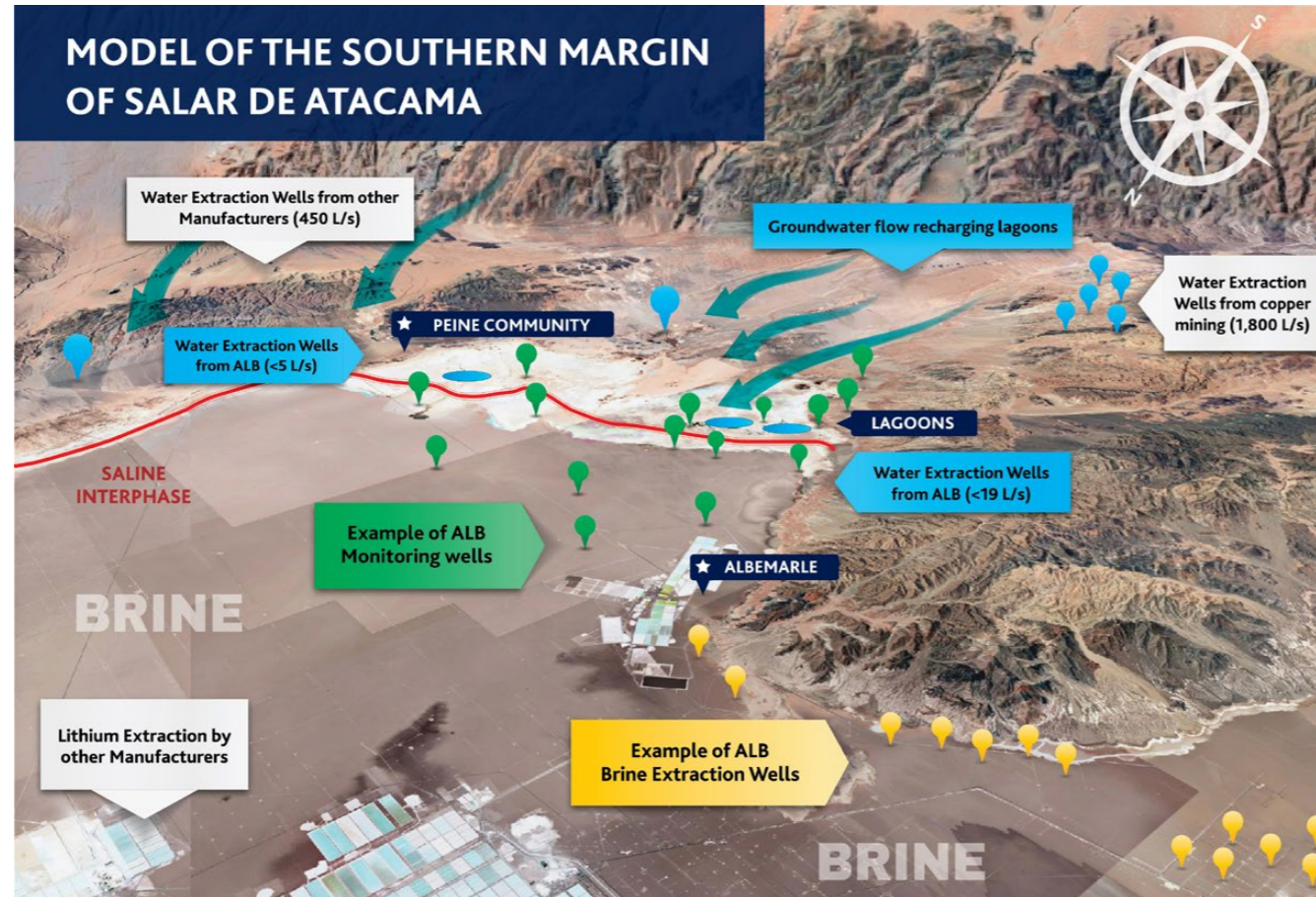
In the Salar de Atacama in Chile, we have collected water level and other environmental variables for more than 20 years and have established a detailed hydrogeological model. As discussed above, the model is used to verify whether the pumping of the brine has adverse effects on the water systems. Results are shared with regulatory authorities and the community. We continue to collect data and input into the model to improve our ability to operate effectively and sustainably.

These models allow us to estimate reserve capacity and life. We have a strong commitment to conserving resources and their ecosystems and these models take that delicate balance into consideration.

## Maximizing Recovery and Recycling

We are committed to maximizing the minerals extracted to allow for the most efficient, sustainable and economical operating processes – this includes optimizing recovery and recycling processes.

In Bromine, we leverage decades of experience to optimize our processes and maximize first pass extraction. We



also recycle the brine extracted to improve recovery before returning it back into the formation. Reinjection is particularly critical for the preservation of the Magnolia Arkansas formation, as it would cause depressurization otherwise.

In Lithium, a by-product (lithium aluminosilicate) is produced when converting spodumene into lithium salts (Hydroxide or Carbonate). At our China conversion sites, this material is 100% reused in the cement industry.

At our spodumene concentrate production plant at Talison<sup>7</sup> in Greenbushes, Australia, a special plant is under construction to reprocess a by-product stream in order to extract additional lithium. When by-products of lithium production cannot be re-cycled or re-used elsewhere, such non-hazardous materials are stored as tailings. We are aware of the public expectation and our responsibility to minimize the volume of tailings. We continue to consider

<sup>7</sup> 49% interest in Windfield Holdings Pty. Ltd., which directly owns 100% of the equity of Talison Lithium Pty. Ltd. ("Talison")

new technologies to reduce the amount of resources consumed to obtain the same amount and quality of production. We will provide more information about waste management in general, and tailings in particular, in future editions of our sustainability report.

## Transparency and Accountability with Compliance and Governance

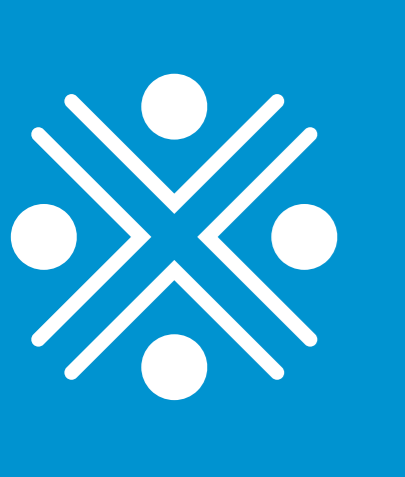
Our company takes pride in our ability to meet permit requirements. Our efforts are concentrated on compliance with those permits. Our procedures and policies are geared toward verifying consistent compliance.

In the Salar de Atacama, we are transparent and report the results of our environmental monitoring to the authorities of Chile and the surrounding indigenous communities to show we are complying with the permits. We foster our relationship with the community by sharing information in our monthly meetings with the Council of Indigenous Peoples (CPA) regarding our environmental commitments.

At our Talison and JBC joint ventures, Albemarle is represented by board members, who are thoughtful about roles and responsibility they provide as a form of governance. They are responsible for approving operating plans and also the goals and targets with respect to sustainability and overall performance of the operations.

Albemarle is setting targets, encouraging continuous improvement, and using new technologies to improve how we manage our natural resources in the most efficient and sustainable manner.





# COMMUNITY ENGAGEMENT

# ALBEMARLE FOUNDATION & VOLUNTEERISM

Albemarle and its employees are committed to improving the quality of life for those living and working in the communities where we operate. This commitment led to the 2007 formation of the Albemarle Foundation, a charitable 501(c)3 organization. Financial support and volunteer efforts are channeled through the Foundation to ensure they have the most meaningful, sustainable impact.

The Albemarle Foundation has launched at all our U.S. sites and is currently being introduced at our international sites. We believe that nurturing our communities and promoting our employees' philanthropic efforts are among our most important responsibilities.

## Growing the Good

Employee engagement is evident each year when the Foundation holds an annual campaign at U.S. sites to collect donations from employees, retirees and directors by payroll deduction or one-time donations. In 2019, 75% of employees participated in the campaign, donating close to \$1 million.

At our New Johnsonville, Tennessee, site we had 100% campaign participation for the second year in a row. In Magnolia, Arkansas, employees hit a new milestone by pledging over \$100,000. At our Process Development Center in Baton Rouge, Louisiana, 95% of employees contributed making it our best campaign to date. The Foundation matches all campaign contributions.

The foundation's board of directors approves an annual budget that is distributed by the foundation staff to site councils. These employee-led councils are responsible for the philanthropic efforts at their respective locations, identifying, leveraging, and maximizing opportunities to strengthen their communities and promote volunteerism.

Financial contributions support key cornerstones of sustainability within the local communities, such as education, health and social services, and cultural initiatives. Potential grant recipients are vetted for their alignment with Albemarle's core values, markers of healthy non-profits, and use of the United Nation's sustainability development goals.

Albemarle granted \$6,198,675 to over 1,000 nonprofits in 2019 through foundation programs. Students at Kings Mountain High School in Kings Mountain, North Carolina, are playing safely on an improved gym floor thanks to a \$45,000 grant from our employees. In Silver Peak, Nevada, employees not only support their volunteer fire department through annual grants, many also volunteer their time to serve with the department.



## A Focus on Education

Across all of our sites, giving to educational programs accounts for more than half of our community investments. This includes a special five-year, \$10 million educational initiative in Charlotte, North Carolina, our corporate headquarters. Through this initiative, in 2019, we distributed \$2.3 million to nine non-profits. Partnering with organizations like Communities in Schools, Read Charlotte, and Carolina Youth Coalition, the Foundation is focusing on early education as well as workforce and college readiness to help students overcome challenges and reach their full potential.

The Albemarle Foundation scholarship program began in 2007 to assist the children and dependents of Albemarle employees. Graduating seniors from around the world who are attending college in the U.S. are invited to apply. The program awards multiple \$10,000 scholarships and the Gottwald Scholarship, a \$20,000 award. Scholarship recipients are selected by an independent scholarship committee comprised of educators from our communities. In 2019, the Albemarle Foundation granted six new scholarships.

## Empowering Employees

In addition to community grants, we empower employees to support charitable organizations through special matching gifts and volunteer opportunities.

The Matching Grant program gives all eligible employees, retirees, and our board of directors the opportunity to support various causes by matching individual donations on a one-to-one basis. Matches are made for up to \$2,500 per eligible contributor each year. Employees can select non-profits that mean the most to them.

The Albemarle Foundation provides employees with a

platform for volunteerism. The Volunteer Grant program honors employees' volunteer time with up to \$1,000 grants per calendar year. The program distributed \$158,000 in 2019 in support of the over 14,000 hours of volunteer service work completed by employees.

In addition, the Foundation collaborates with Albemarle's sites and departments to execute community service projects.

For the past six years, employees at our Bayport and Clear Lake sites in Texas volunteered with CYCLE. The charity rewards students with new bicycles for achieving better academic performance. In 2019, employees contributed more than \$20,000 to CYCLE, in addition to volunteering their time to help build more than 700 bikes to donate to the program.



## Albemarle Care Fund

Established in 2015, the Albemarle Care Fund helps employees through some of life's toughest moments. The fund provides financial assistance to Albemarle employees and retirees who experience financial hardship due to a

natural disaster, life-threatening illness or injury, death or other catastrophic or extreme circumstance beyond the employee's control.

Employees raise money, and the Care Fund matches the donations. To date, over \$1.4 million has been distributed. In 2019, the Care Fund was enacted to help employees suffering damage from Tropical Storm Imelda in Texas and flooding in the Atacama Desert in Chile.

## Going Global

In 2019, Albemarle announced the expansion of the Albemarle Foundation to include Albemarle Foundation Global. This formalized the outstanding and ongoing efforts of our employees at Albemarle manufacturing sites around the world.



The Foundation is working with CAF America to fund grants outside the U.S. These grants will support volunteer and community outreach, allowing our international sites to expand their community engagement.

In 2019, our Singapore site volunteered for Willing Hearts, helping pack box lunches for people in need. Employees in Australia and Chile supported STEM outreach programs. In Shanghai, employees collaborated to help clean up garbage from the coast as part of World Cleanup Day. In Belgium, the team partners with the Pinocchio organization to help children who have suffered burn-related injuries.



Since 2007, we have granted OVER \$39.5 MILLION into our communities!





# COMMUNITY & STAKEHOLDER ENGAGEMENT

Albemarle operates in some of the most beautiful, ecologically sensitive areas in the world. As such, sustainability serves as the cornerstone of our community and stakeholder engagement efforts. We acknowledge that our social license to operate is contingent on the trust and reputation that comes with engagement.

## Approach to stakeholder engagement

As with any large and growing corporation, Albemarle regularly engages with many stakeholder groups<sup>9</sup> to maintain strong relationships, share information, and gather feedback.

## Employees

Albemarle regularly communicates company initiatives, news, goals and performance to employees through daily updates to our Intranet and external website, regular town hall meetings, written memos and face-to-face meetings. Town hall meetings are held at least quarterly by our corporate headquarters and each of our business units. These meetings are recorded and posted to our Intranet site for later viewing.

<sup>9</sup> For a complete list of stakeholders and engagement activities please see the appendix

In 2019, management conducted an employee culture survey to better understand culture and employee engagement and what actions could be taken to make Albemarle a more welcoming place to work. Responses were compared to industry norms and best practices to identify areas for improvement and action items. We intend to conduct this survey periodically.

## Communities in which we operate

Most of our US sites conduct Community Advisory Panels (CAPs) under the Responsible Care Management System, where site leaders and employees meet regularly with members of the community. There are similar programs in other parts the world. The goal of these community meetings is to inform the community about our operations and progress on important initiatives and, in turn, to gather feedback and suggestions from local community members.

Our sites also donate funds and volunteer time toward community initiatives, typically with the assistance of the Albemarle Foundation. From time to time, we open our gates to give area citizens an opportunity to tour our facilities and gain insight into our operations. We also provide technical assistance and expertise by joining forces to with a variety of community organizations. For example, several of our operations run joint firefighting drills with local fire departments.

## Shareholders and the Investment Community

The company regularly updates shareholders and the investment community primarily through our SEC filings. We also host publicly available quarterly earnings calls and other presentations to industry and investor groups. In an

effort to increase transparency, these presentations are webcast and available for replay as often as possible.

## Government and Regulators

Albemarle staff host regular communications via phone, email or in person meetings with government officials and regulators worldwide to help ensure that Albemarle is focusing on the most significant regulatory concerns and initiatives and the compliance of our products and operations.

## Media

Albemarle routinely distributes press releases and grants interviews that are geared toward trade media, customers, regulators and/or other stakeholders. These news releases report on strategic initiatives and significant news about the company.

## Non-Governmental Organizations (NGOs)

Albemarle seeks to engage with global, regional and national NGO's on a range of environmental, health and social issues. We strive to demonstrate the benefits of our products and how we reduce any negative impacts from our production processes. NGO's can also play a role in a number of legislative and regulatory processes in which we engage.

## Industry & Trade Associations

Albemarle is a member of trade associations across the globe. From time to time, we leverage these relationships to influence legislation or regulation of interest to Albemarle. We are in the process of reviewing these

associations and intend to terminate membership in associations whose mission is not consistent with our values, strategy and sustainability priorities.

## Advocacy focused on Sustainable Solutions

Our advocacy efforts are focused on promoting sustainable solutions to global challenges, supporting our communities and customers, and defending the science upon which our chemistry solutions are based.

Some of our primary focus areas in 2019 were and remain:

- Developing and promoting the use of our mercury control technologies to help customers solve regulatory challenges and promote environmentally friendly solutions
- Supporting increased fire safety standards with industry organizations and national regulatory bodies
- Promoting science-based evaluations of flame retardants to drive regulations and contribute to the circular economy without compromising fire safety standards
- Defending our continued ability to use cobalt salts in our catalysts to contribute to increased fuel quality and cleaner air standards
- Compliance with the Lautenberg Chemical Safety Act (LCSA) a chemical regulatory framework to replace Toxic Substances Control Act (TSCA) in the United States

Albemarle is dedicated to the principles of Green Chemistry and Green Engineering. We advocate the use of science-based chemical legislative and regulatory processes in preference to product specific legislation. Through our advocacy and community relations efforts, we seek to gather feedback from multiple stakeholder

groups and educate stakeholders on the merits of our science-based solutions and the positive impacts they have on the world in which we live and operate.

Societal concerns raised by multiple stakeholders about certain chemicals is of particular concern to Albemarle. We have phased-out and replaced the flame retardants Hexabromocyclododecane (HBCD) and Decabromodiphenyl ether (DECA-BDE) with new and safer alternatives. We continue to develop new flame retardant chemistries that, in addition to meeting economic and performance requirements, seek to be non-toxic, non-bioaccumulative, and facilitate recycling.

## A Case Study in Chile

A good example of our community relations outreach efforts is our operations in Chile — specifically in the Salar de Atacama (Salar). Albemarle has successfully operated in this environmentally sensitive area for 40 years.

Our company strategy is to grow by investing in our lithium business with Chile as a key supplier of our product offering. That makes employing sustainable, environmentally sensitive processes mandatory and maintaining a strong relationships with Chile critical. Among the ways we do this is through:

- Consistent dialogue with the local communities where we work
- Monthly meetings with community stakeholders
- Collaboration with the Chilean Economic Development Agency (Corfo)
- Informal daily discussions to better understand risks and opportunities, and to work collaboratively to achieve shared goals

Knowledge-sharing and ongoing engagement with



key stakeholders enabled us to establish long-term agreements founded in transparent dialogue. These agreements among Albemarle and the communities in Chile are initiated and executed voluntarily by Albemarle and are not required by the Chilean government. We do it because it is the right thing to do. As a leader in the lithium market, we strive to lead the way when it comes to community outreach and engagement.

An example of this engagement is at our salar plant, located in the community of San Pedro de Atacama, an Indigenous Development Area (ADI). More than 35% of our direct workers belong to an Atacameña indigenous community. This percentage of direct hiring from within the community is one of the highest in Chile.

Our other contributions to Chile include providing significant funding for research and development in energy storage, advanced battery materials, and renewable energy. We maintain a constructive and collaborative relationship with Corfo, the Chilean



economic development agency. Our contract with the agency establishes rigorous conditions to the benefit of the country, and Albemarle will continue contributing to this relationship as a key pillar of our community relations commitment.

We also have voluntary agreements with local indigenous groups including with the Council of Atacameños Peoples (CPA), which represents 18 indigenous communities that live around the Salar. These agreements are based on UN Declaration of Human Rights principles and principles encompassed in the Indigenous and Tribal Peoples Convention (ILO Convention 169), which recognize

Indigenous peoples' right to self-determination.

Under the CPA agreement, which is in effect through 2043, we contribute 3.5% of our Chilean revenue to the CPA. Resources provided by Albemarle under the framework of the agreement support community development.

Projects carried out include:

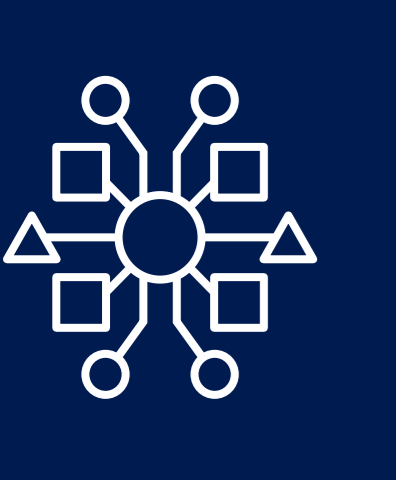
- New and expanded water systems in 50% of the local communities
- Construction of the first photovoltaic plant in the area
- Installation of photovoltaic panels on homes in 50% of the communities, reducing reliance on diesel generators
- Awarding scholarships to 350 students
- Constructing a wastewater treatment plant
- Constructing a community headquarters facility in Catarpe

Thorough audits are conducted to ensure that the funding was utilized according to the communities' project plans.





# SUSTAINABLE BUSINESS MODEL



# BUSINESS ETHICS

Albemarle's potential is powered by our passion to innovate, our dedication to serve our customers, and our willingness to collaborate with each other. It's also driven by the trust we have built with our stakeholders, including customers, neighbors, communities, suppliers, and investors. These attributes have contributed to a reputation that has taken years to build.

To protect and further enhance this reputation, our work is guided by our core values. In August 2019, to support our core values, we launched our newly revised Code of Conduct (Code) which provides an overview of our expectations and standards for ethical behavior and compliance in day-to-day employee activities.

All of us at Albemarle are fully committed to working with integrity. Doing what is right and doing what we say we will do is our starting point for everything. We care as much about how results are achieved as we do about what has been achieved.

## Our Ethics & Compliance Program

Our Code is managed by our chief compliance officer and is approved by our board of directors. The board's audit and finance committee is responsible for assisting the board with oversight for our compliance and ethics program. The chief compliance officer reports to the audit and finance committee on the status of the ethics and compliance program quarterly.

The Code is supplemented by several ethics and

compliance-related policies including:

- A revised Anti-corruption Policy published in March 2019
- A revised Gifts & Hospitality Policy published in March 2019
- A revised Antitrust Policy published in July 2020

These policies are supported by procedures that govern pre-approvals in compliance-sensitive situations and guidance for employees on how to apply these policies in accordance with Albemarle's core values. In addition, appropriate ethics and compliance controls have been incorporated into new global functional policies including:

- A Global Sales Policy published in August 2019
- A Global Procurement Policy published in January 2020
- A Human Rights Policy and a Global Community Relations & Indigenous Peoples Policy are expected to be approved in late 2020

## Risk Assessment

The design and execution of Albemarle's ethics and compliance program is driven by continuous risk assessment, undertaken in accordance with the company's enterprise risk management framework.

For example:

- All Albemarle business partners are subject to sanctions screening.
- The use of third-party sales representatives and vendors who engage with government officials are subject to risk-weighted due diligence.
- Pre-approval is required before making compliance-sensitive payments such as charitable donations or commercial sponsorships.

This day-to-day risk assessment activity is supplemented by periodic assessments of the design effectiveness of Albemarle's ethics and compliance program and the company's ethical culture. During 2018-2019, Albemarle conducted a global ethics and compliance risk assessment at 25 Albemarle sites involving over 500 employees.

In addition, our 2019 employee culture survey sought, among other things, feedback on employee perceptions of senior management's leadership on ethics and compliance, and employees' willingness to speak up if they have a Code concern. These initiatives led to a number of enhancements to our internal controls and an awareness campaign focused on the importance of speaking up. In 2019, Albemarle received an average of 1.73 reported Code of Conduct concerns per 100 employees compared to the industry benchmark of 1.4 reports per 100 employees.

## Monitoring & Audit

To ensure the successful execution of our ethics and compliance program, and to further mitigate associated risk, we undertake:

- Reputational monitoring
- Monitoring of compliance-sensitive payments to third parties, including the pricing of products sold to Albemarle distributors; and
- Monitoring of employee expenses, including gifts and hospitality provided to third parties

In addition, Albemarle's internal audit function undertakes periodic audits of:

- Third-party sales representatives
- Vendors engaging with government officials on behalf of Albemarle
- Non-controlled joint ventures; and

- The execution of our ethics and compliance program at specific Albemarle sites

## Communications & Training

We communicate our expectations of employees in a clear and accessible manner, using our Code and related trainings to demonstrate how employees should act in accordance with our core values.

When we launched our newly revised Code in 2019, we organized it according to common day-to-day work activities, rather than area of law. Employees are encouraged to "start with the Code," especially when they are undertaking an unfamiliar activity.

The Code also directs employees to supporting policies, guidance materials, and contacts within the Company for further guidance. The Code is interactive and accessible to Albemarle employees on their computers and smartphones.

This user-orientated approach is also reflected in our training activities. We provide in-depth compliance training to employees according to the ethics and compliance risks they face. This can include a blend of:

- Universal training intended for all employees (e.g. Code of Conduct)
- Functional training (e.g. sales, procurement) which includes an ethics and compliance component
- Risk-based training (e.g. anti-corruption, data privacy)
- Skills-based training (e.g. conduct of internal investigations)

## Albemarle's Business Partners

Business partners play a critical role in Albemarle's success, helping us to deliver value to our stakeholders.

How our business partners adhere to our core values is an essential part of their performance for Albemarle. In December 2019, Albemarle launched a new Business Partner Code of Conduct. Albemarle expects its vendors, contractors, sales representatives and any other third party doing business with Albemarle to act in a manner consistent with our values and our Code. This includes sub-contractors engaging on behalf of our business partners.

We also seek to influence our non-controlled joint ventures, and our partners in those ventures, to ensure that the joint venture adopts requirements similar to those in our Code and policies.

## Speak Up

Albemarle provides several channels for employees to report suspected violations of the Code. Employees may report their concerns confidentially and anonymously via their supervisor, our Integrity Helpline, the chief compliance officer or a member of compliance officer's team, the general counsel or another member of the legal department, human resources, or the audit and finance committee.

Third parties, including business partners, are also encouraged to speak up regarding any code violations they witness. Information about our Integrity Helpline can easily be found on our website and is also posted at all of our office and manufacturing locations.

Albemarle does not tolerate any form of retaliation against anyone who raises a concern in good faith or who participates in an investigation; this is clearly communicated in the Code and in our investigations policy.

Promptly after receiving a Helpline report, the chief compliance officer, in consultation with the general

counsel and chief human resources officer, determines the steps to be taken. If an investigation is appropriate, the investigation will be conducted in accordance with Albemarle's investigations policy. Code investigations are regulatory reported to and monitored by the board of director's audit and finance committee.





# INNOVATION

Throughout Albemarle, we are inspired by “what’s next” and by our part in transforming that “next idea” into reality. Finding new and more sustainable solutions drives everything we do.

It is about helping our customers create a better tomorrow by designing products with more sustainable footprints and higher added value. That includes enabling energy storage for batteries in electric vehicles and grid storage; raising the standards of fire safety and food safety; and finding better ways to supply clean, reliable energy to a growing global economy.

Our global team of research and data scientists, chemists, hydrogeologists, engineers, and other professionals collaborates across department boundaries to tackle technology challenges, create innovative, more sustainable solutions, and ultimately extend our competitive advantage.

## Innovation Spans from Minerals to Markets

Across the company, our approach to innovation is broad, spanning from minerals to markets. It is also deep, ranging from fundamental materials all the way to customer-tailored solutions.

When we think about innovation at the resource level, it begins with high-end technologies like hydrogeological modeling that allows us to precisely pinpoint the location of the highest concentrations of lithium and bromine. It also includes extraction chemistries that enable us to recover more product from every liter of brine that we process.



Our products are used by our customers in numerous applications. It is in that use-phase that our products manifest added value for the environment and society. For example, the majority of our lithium products end up in the electrode materials of batteries that enable emission-free mobility of electric vehicles. We work with our lithium customers and the automotive industry every day to improve our products.

Our bromine products include flame-retardants that are used in electronics, construction, and transportation applications and which save many lives every day. Our catalysts enable the production of clean transportation fuels, reduce the energy use of refineries dramatically, and reduce the emissions of sulfur and particulate matter to virtually zero. About 50% - 60% of our 2019 revenue comes from products that contribute to the reduction of GHG-emissions or water usage or that lower resource-intensity in the use-phase in accordance to the SASB RT-CH-410a.1 metric.

## Putting Process Technology to work

Most of our processes are energy-intensive by nature, so we focus on process technology to lower the use of energy, water, raw materials, and reduce waste. This helps us maximize the utilization of our equipment, lower our footprint, and increase our return on investment.

We have numerous programs in place for reducing energy usage and GHG-emissions. In Amsterdam, where EU regulations demand 49% reduction of GHG-emissions by 2030, we have an active technology program to realize such reductions. In other energy-intensive locations, we have similar programs aimed at footprint reduction, increasing plant reliability and safety, and enhancing productivity.

## Reduction of the environmental footprint in Amsterdam

In our Research and Technology group in Amsterdam we put technology to work to enable a drastic reduction of GHG- emissions from our catalysts manufacturing plants.



## Improved process control in Bayport

Project teams successfully reduced energy consumption by optimizing drying processes and increasing production throughput. We also achieved higher product quality and reduced water consumption through improved feed control.

## Innovation for and with Customers

As an industry leader, we think beyond business-as-usual to drive innovations that create lasting value for our customers. We collaborate with customers to help them meet their objectives. For example, in Bromine, we work with customers using our flame retardants to improve safety and performance in their new applications. In Lithium, we work closely with cathode and anode manufacturers to create new materials for next-generation batteries. In one case, our Catalyst division partnered with Neste in the development of NEXBTL catalysts, enabling the production of renewable diesel from animal fat, used cooking oil, and other waste streams.

## Next Generation Innovating

If you are not innovating today, you will quickly fall behind. This is particularly true in many of the high-growth markets where we compete. To extend our technical differentiation we are continuously advancing our chemical processes and developing new products. One example of this is the work underway in our USA research laboratories to recycle lithium from end of life batteries. Even though this recycle stream is small today we are thinking ahead to enable lithium’s position as a precious resource in the circular economy.

Our researchers are also engineering and combining new materials for the next wave of battery development. They have already created novel forms of stabilized, water soluble lithium to make safer and longer lasting next-generation batteries. They also advanced the creation of more stable, better performing lithium metal surfaces.

In addition, Albemarle researchers are tackling one of the greatest challenges in battery design: increased battery energy density. Albemarle owns numerous patents, including for lithium-sulfur separators and lithium metal foils — both of which are likely to play a role in solid-state battery design.



Photo provided by Neste

## Celebrating Innovation

Albemarle has built a culture that celebrates curiosity and courage. This year, 193 employees were honored as winners of the 2019 Albemarle Technology Awards for their contribution to one of 47 unique global projects. This program, sponsored by technology leaders of our business units, recognized individuals and their internal projects that delivered outstanding approaches to technology challenges, created innovative and more sustainable solutions, and ultimately extended our competitive advantage. The awards were granted for the following six categories: Customer Aligned Innovation, Technology Excellence, Manufacturing Innovation, Material Breakthrough, Safety in Practice and Sustainability.





# APPENDIX

# ADDITIONAL GENERAL DISCLOSURES (GR 102)

## Organizational Profile

For more information on our organizational profile, please see our [annual report filing](#).



## Information on Employees and Other Workers

Regular Employment denotes Albemarle employees hired for an indefinite period. Fixed Term Employment denotes Albemarle employees hired for a specific amount of time. Contractors include third party employees who require access to Albemarle's systems.

2019 Worldwide Staffing Summary (as of December 31, 2019)

Region	Employees		Contractors	Total
	Regular Employment	Fixed Term Employment		
North America	2,048	0	979	3,027
Latin America	745	31	70	846
EMEA	1,451	40	218	1,709
APAC	1,280	9	90	1,379
Total*	5,524	80	1,357	6,961

\*Total does not include employees of our consolidated joint ventures.

## External Initiatives

Following is a list of principles and initiatives that Albemarle has endorsed or adopted:

Principle / Initiative	Date of adoption	Countries	Stakeholders involved in development and governance	Voluntary/ Mandatory
Responsible Care® 14001	1988	United States	The International Council of Chemical Associations (ICCA) and member association ACC	Voluntary
Responsible Care® - re-confirmation	Varies by facility	Chile, Netherlands	The International Council of Chemical Associations (ICCA) and member associations Asiquim A.G., VNCI	Voluntary
VECAP™	2006	United States, Jordan	Albemarle Corporation and other brominated flame retardant companies	Voluntary
ISO 9001, ISO 14001	Varies by facility	United States, Chile, Jordan, China, Germany, Netherlands	International Organization for Standardization and is administered by accreditation and certification bodies	Voluntary
OHSAS 18001, ISO 45001	Varies by facility	China, Germany, Jordan	International Organization for Standardization and is administered by accreditation and certification bodies	Voluntary

## Significant Changes to the Organization

On October 31, 2019, we completed the acquisition of a 60% interest in Mineral Resources Limited's ("MRL") Wodgina hard rock lithium mine project ("Wodgina Project") in Western Australia. To complete the transaction, Albemarle paid MRL a cash purchase price of \$820 million and transferred to MRL a 40% interest in two of its Kemerton operating units. Additionally, Albemarle and MRL formed an unincorporated joint venture, MARBL Lithium Operations Pty. Ltd., whose purpose will be exploration, development, mining, processing and production of lithium and other minerals (other than iron ore and tantalum) from the Wodgina Project and for the operation of the Kemerton lithium hydroxide conversion facility.

## Precautionary Principle or Approach

Through the careful and scientific testing and development of our products we strive to ensure our products are safe for both humans and the wider environment. We spend considerable resources ensuring our compliance with both the letter and spirit of chemicals management and other relevant legislation/regulation, many of which are based upon the precautionary principle.

Albemarle complies with several procedures and programs which use the precautionary principle or approach. Examples of such procedures and programs are detailed on our website including [Responsible Care® 14001](#) (RC14001®) and [VECAP™](#) (Voluntary Emissions Control Action Program).

## Membership of associations

Active Pharmaceutical Ingredients Committee (APIC)	American Chemistry Council (ACC)
American Fuel and Petrochemical Manufacturers (AFPM)	AmCham Australia; AmCham EU; AmCham China; AMCHAM Chile
American Chemical Society (ACS)	Arkansas Environmental Federation
Association of Chemical Companies of Chile	Association of Mining and Exploration Companies (AMEC)
Association of the Dutch Chemical Industry (VNCI)	Association of the German Chemical Industry (VCI)
Australian Institute of Energy (AIE)	AICM- Association of International Chemical Manufacturers (AICM)
Battery Association of Japan	Belgian federation for the chemical industry and life sciences (Essencia)
Bromaid China; Bromaid Europe	Bromine Science and Environmental Forum (BSEF)
Bulk Pharma Taskforce	Catalysts Europe
Catalysts Manufacturers Association of Japan	CEFIC European Chemical Industry Council
Chamber of Minerals and Energy Western Australia (CME WA)	China Flame Retardant Society (CFRS)
China Non-Ferrous Metal Association - Li Branch	China Petroleum and Chemical Industry Federation (CPCIF)
China Plastics Processing Industry Association (CPPIA)	China RoHS Working Group
Cobalt Institute	ECETOC
Eurometaux	European Biocidal Products Platform (EBPF)
European Flame Retardant Association (EFRA)	Eurobatt
Flame Retardant Chemical Association of Japan	Group of Electro Mobility of Chile
International Antimony Association (i2A)	International Molybdenum Association
Japan Chemical Export and Import Association	Korea International Trade Association
MAVESZ-Hungarian Chemicals trade association	Minerals Council of Australia (MCA) National
North American Flame Retardant Association	National Society of Mining (Chile)
Nevada Mining Association	Nevada Water Resources Association
Recharge	Wildlife Habitat Council

## Governance

For more information on our corporate governance practices and other governance matters, please see our [annual proxy statement](#) or the [corporate governance](#) section of our investor website.

## Governance Structure

### Board of Directors

Members of Albemarle Corporation's board of directors (the "board") are elected annually by its shareholders to oversee management and to act in the best interests of Albemarle and its shareholders. To assist in its oversight responsibilities, the board maintains the following five committees: Audit & Finance, Capital Investment, Executive Compensation, Nominating & Governance and Health Safety & Environment.

### Ethical Business Principles

All Albemarle employees, officers and directors understand the importance of and our commitment to conducting business with integrity. Our board members are expected to set the standard for following the highest ethical conduct and sound business practices. The Audit & Finance Committee periodically reviews our Code of Conduct, as well as other related guiding policies. Management regularly reports to the Committee about implementation of and adherence to these guiding policies.

### Chief Executive Officer and Other Executive Officer Succession

The Corporate Governance Guidelines provide for succession planning sessions to be held annually at a

regular board meeting, with the succession planning meeting to focus on the development and succession of not only the Chief Executive Officer (in both ordinary course and emergency scenarios) but also the other senior executives.

## Effectiveness of risk management process

The Audit & Finance Committee reports to the full board on risk oversight, among other matters. Additionally, the board receives a copy of the annual ERM report presented by the Vice President, Audit and Risk Management to the Audit & Finance Committee in which the Company identifies its risk areas and oversight responsibility. The Board also engages in periodic risk discussions with the CFO, Chief Compliance Officer and other members of the ERM Committee, as appropriate.

The board oversees corporate strategy, business development, capital structure, market exposure, intellectual property, and legal and country-specific risks. While the Audit & Finance Committee is responsible for, among other matters, general ERM, the full board and each of the other standing board committees consider risks within their area of responsibility and regularly reports to the full board.

- The Executive Compensation Committee considers human resources risks and potential risks relating to our employee (including executive) compensation programs.
- The Nominating & Governance Committee considers governance risks.
- The Health, Safety & Environment Committee considers risks related to health, safety and environmental protection as well as risks to our global reputation and the sustainability of our products

and operations.

We believe the current leadership structure of the board supports the risk oversight functions described above by providing independent leadership at the committee level, with ultimate oversight by the full board.

## Nominating and selecting the highest governing body

The Nominating & Governance Committee assists the board on all matters relating to the selection, qualification (including determinations of "independence"), duties, and compensation of members of the board, as well as the annual evaluation of the board's performance and processes. The Nominating & Governance Committee also assists the board with oversight of corporate governance. Succession planning for the CEO and other senior executives is done by the full board.

The Nominating & Governance Committee identifies director candidates through recommendations made by members of the board, management, shareholders, and others, including professional search firms. The board as a whole is constituted to be strong in its diversity and collective knowledge of accounting and finance, management and leadership, vision and strategy, business operations, business judgment, crisis management, risk assessment, industry knowledge, corporate governance and global markets. The Nominating & Governance Committee reviews its effectiveness in balancing these considerations through its ongoing consideration of Directors and nominees, as well as the Nominating & Governance Committee's annual self-evaluation process.

The Nominating & Governance Committee evaluates a candidate's qualifications to serve as a member of the board based on the background and expertise of individual members of the board as well as the background and

expertise of the board as a whole. The Nominating & Governance Committee also considers such other relevant factors as it deems appropriate, including the current composition of the board; the balance of management and independent Directors; diversity in gender, ethnicity, background and experiences; the need for Audit & Finance Committee expertise, and the evaluation of other prospective nominees. The Nominating & Governance Committee is committed to including in each director search qualified candidates who reflect a diversity of backgrounds, including diversity of gender and ethnicity.

## Evaluating the highest governance body's performance

The Nominating & Governance Committee coordinates an annual evaluation process by the directors of the board's performance and processes. This self-evaluation leads to a full board discussion of the results.

The Lead Independent Director consults with each of the directors as part of the evaluation. The qualifications and performance of all board members are reviewed in connection with their re-nomination to the board.

The Audit & Finance Committee, Capital Investment Committee, Executive Compensation Committee, Health, Safety & Environment Committee and Nominating & Governance Committee each conduct an annual self-evaluation of their performance and procedures, including the adequacy of their charters and make recommendations, if any, to the board as to proposed changes to their charter resulting from such review.

## Communicating critical concerns

Shareholders and employees may communicate with the board by sending written correspondence to the Chair of the Nominating & Governance Committee c/o Albemarle

Corporation, 4250 Congress Street, Suite 900, Charlotte, North Carolina 28209 or by email at [governance@albemarle.com](mailto:governance@albemarle.com).

Communications regarding financial and accounting matters may also be sent directly to the Chair of the Audit & Finance Committee at [audit.chair@albemarle.com](mailto:audit.chair@albemarle.com)

## Stakeholder Engagement

### List of Stakeholder Groups

Stakeholder groups identified and engaged by Albemarle include:

- Customers
- Shareholders
- Employees
- Retirees
- Communities
- Consumers
- Suppliers
- NGO's
- Industry and trade associations
- Media
- Investment groups
- Governments and regulators



## Collective Bargaining Agreements

We respect the freedom of association and collective bargaining rights of our employees. As of December 31, 2019, the percentage of our employees covered by collective bargaining agreements was approximately 48%.

Region	Country	No. of Employees	No. of Employees covered by CBA	% of Employees covered by CBA
North America	USA	2,047	132	6%
Latin America	Chile	775	665	86%
Europe	Netherlands	456	425	93%
	Hungary	218	0	0%
	Germany	735	540	73%
	Belgium	41	0	0%
APAC	China	1,115	933	84%
	South-Korea	18	0	0%
	Singapore	15	0	0%
	Taiwan	60	0	0%
	Japan	20	0	0%
	Australia	61	0	0%

## ADDITIONAL ECONOMIC DISCLOSURES (GRI 200 SERIES)

### Financial assistance received from government

For the calendar year ended December 31, 2019

Program- /Project name	Funding received from	Funding for Albemarle
WBSO (tax incentive for R&D hours and R&D investments)	Netherlands Government	\$551,442
Subsidy Indirect emission costs ETS	Netherlands Government	\$137,588

Note: Exchange rate: 1 Euro = \$1.08918 (April 15, 2020)

### Ratios of standard entry level wage by gender compared to local minimum wage

We use the market median as our reference point for our compensation and benefits programs globally. The market median is specific for each country where we compete for talent and is used for all levels of employees. While using the median as our reference point, we differentiate pay based on performance, expertise, experience and the overall value to the organization.

Our employees have a living wage that is well above country specific minimum wage levels. Even measured by the lowest wage level we pay at each of our locations with more than 50 employees, we pay well above the local minimum wage, as illustrated in the graph below, in which 100% represents the local minimum wage.

As of December 31, 2019

Location Name	Lowest wage level	Country or State Minimum Wage	Wage period	Currency	Ratio of lowest wage to minimum wage*
Magnolia Plants	19	9.25	Hour	USD	205%
BRT - Baton Rouge Tower	39	7.25	Hour	USD	538%
PDC- Baton Rouge Process Development Center	25	7.25	Hour	USD	345%
South Haven Plant	21	9.45	Hour	USD	222%
Silver Peak	21	7.25	Hour	USD	290%
Charlotte - Corporate Head Quarters	25	7.25	Hour	USD	345%
Kings Mountain	21	7.25	Hour	USD	290%
Tyrone Plant	25	7.25	Hour	USD	345%
New Johnsonville	25	7.25	Hour	USD	345%
Bayport Plant	24	7.25	Hour	USD	331%
Clear Lake Office	31	7.25	Hour	USD	428%
Pasadena Plant	25	7.25	Hour	USD	345%
La Negra	614,000	301,000	Month	CLP	204%
El Salar	575,278	301,000	Month	CLP	191%
Santiago	742,487	301,000	Month	CLP	247%
Amsterdam	2,911	1,654	Month	EUR	176%
Frankfurt, Langelsheim	3,375	2,630	Month	EUR	128%
Budapest	304,050	149,000	Month	HUF	204%
LLN	3,035	1,855	Month	EUR	164%
Dalian	5,500	1,620	Month	CNY	340%
Shanghai	6,000	2,480	Month	CNY	242%
Meishan	2,999	1,749	Month	CNY	171%
Xinyu	3,234	1,470	Month	CNY	220%
Weifang	6,011	1,910	Month	CNY	315%
Beijing	16,359	2,200	Month	CNY	744%
Taipei	59,426	21,009	Month	TWD	283%
Taichung Plant	20,867	21,009	Month	TWD	99%

Note: We compare to the lowest wage for the total population rather than entry level.

## Communication and training about anti-corruption policies and procedures

We communicate our expectations of employees in a clear and accessible manner, using our Code of Conduct and related trainings to demonstrate how employees should act in accordance with our core values.

All employees are required to complete training with respect to our Code of Conduct (Albemarle's principal document and philosophy for the prevention of corruption). Before the launch of Code of Conduct training (which included a specific section addressing corruption issues), the CEO sent a communication to all employees about the importance of acting in accordance with our Core Values, understanding the requirements of the Code of Conduct, and completing Code of Conduct training. These messages were subsequently reinforced by the Chief Compliance Officer when communicating the mechanics of taking the training.

Our training on the Code of Conduct and anti-corruption specifically can be summarized as follows:

	Code of Conduct Training	Anti-Corruption Training
	2019 calendar year	2019-2020 training season
<b>Number of employees trained</b>	5364	1550
<b>Completion % of total employees</b>	97%	93%

## Confirmed incidents of corruption and actions taken

Violations of policy and law, including anti-corruption law, are taken seriously and any such infractions result in a variety of disciplinary measures, up to and including termination.

As indicated in Albemarle's Form 10-K Annual Report for FY2019, following receipt of information regarding potential improper payments being made by third party sales representatives of our Refining Solutions business, within our Catalysts segment, we promptly retained outside counsel and forensic accountants to investigate potential violations of the Company's Code of Conduct, the US Foreign Corrupt Practices Act, and other potentially applicable laws. Based on this internal investigation, we have voluntarily self-reported potential issues relating to the use of third party sales representatives in our Refining Solutions business, within our Catalysts segment, to the U.S. Department of Justice ("DOJ"), SEC, and Dutch Public Prosecutor ("DPP"), and are cooperating with the DOJ, SEC, and DPP in their review of these matters. In connection with our internal investigation, we have implemented, and are continuing to implement, appropriate remedial measures.

At this time, we are unable to predict the duration, scope, result or related costs associated with the investigations by the DOJ, SEC, or DPP. We also are unable to predict what, if any, action may be taken by the DOJ, SEC, or DPP, or what penalties or remedial actions they may seek. Any determination that our operations or activities are not in compliance with existing laws or regulations could result in the imposition of fines, penalties, disgorgement, equitable relief, or other losses.

## ADDITIONAL ENVIRONMENTAL DISCLOSURES (GRI 300 SERIES)

### Energy consumption within the organization

SASB code	Energy Management	2019
RT-CH-130a.1 (1) / EM-MM-130a.1 (1)	Total energy consumed (million GJ)	14.1
RT-CH-130a.1 (2) / EM-MM-130a.1 (2)	Percentage grid electricity	22%
RT-CH-130a.1 (3) / EM-MM-130a. (3)	Percentage renewable from primary energy sources	2%
RT-CH-130a.1 (4)	Self-generated energy (million GJ)	0.2

The data in this 2019 report are the result of a thorough analysis in close collaboration with all Albemarle sites using a standardized method of boundary setting, calculation and estimations. For reporting purposes, the boundaries of energy consumption and greenhouse gas emissions are set in line with the GHG Protocol and the SASB standards.

## Water withdrawal and consumption

Withdrawn water includes water from rivers and lakes, extracted groundwater, collected and stored rainwater, municipal water and water obtained from other utilities. Water from raw materials and brine (as source of lithium and bromine) are not included in this calculation because its extreme salinity makes it unsuitable as fresh water source. The use of brine for lithium and bromine production is deemed not to be in competition with the use as drinking water.

Consumed water is defined as water that evaporates during processing, is incorporated into our products, or does not otherwise return to the same catchment area from which it was withdrawn. In many locations a large fraction of the water withdrawn returns to the same catchment and is therefore not considered to be consumed.

SASB code	Water Management	2018	2019
RT-CH-140a.1 (1)	Total water withdrawn (millions of cubic meters)	n/a	26.1
EM-MM-140a.1 (1)	Total fresh water withdrawn (millions of cubic meters)	n/a	26.1
	Percentage of fresh water in regions with High or Extremely High Baseline Water Stress	n/a	10%
	Percentage of fresh water in regions with High Baseline Water Stress (category 3-4)*	n/a	4%
	Percentage of fresh water in regions with Extremely High Baseline Water Stress (category 4-5)*	n/a	6%
RT-CH-140.a.1 (2)	Total water consumed (millions of cubic meters)	12.1	13.6
EM-MM-140.a.1 (2)	Total fresh water consumed (millions of cubic meters)	12.1	13.6
	Percentage of fresh water in regions with High or Extremely High Baseline Water Stress	n/a	19%**
	Percentage of fresh water in regions with High Baseline Water Stress (category 3-4)*	n/a	9%**
	Percentage of fresh water in regions with Extremely High Baseline Water Stress (category 4-5)*	n/a	11%
RT-CH-140a.2 / EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	n/a	0
RT-CH-140a.1 (3)	Description of water management risks and discussion of strategies and practices to mitigate those risks		

\* Source: [WRI Aqueduct](#), accessed June 2020

\*\* rounding difference

n/a = Not available

## GHG emissions (Scope 1 & 2)

GHG-emissions are broken down by scope 1 and scope 2, as defined in the GHG protocol, WBCSD and SASB standards. Scope 1 comprises emissions from (1) combustion of fuels on our locations, (2) release of CO<sub>2</sub> in chemical reactions and (3) fugitives, such as, refrigerants. Scope 2 covers indirect emissions e.g. due to the use of purchased electricity or steam. In this stage, we do not have sufficient data to assess scope 3 emissions (emissions related to raw materials, services and the use of our products).

GHG-emissions are based on fuel and electricity consumption data and careful assessment of process and fugitive emissions. We used IPCC 2014 data for calculation of the scope 1 emissions. For calculation of scope 2 emissions (indirect from electricity consumption) we used the conversion factors related to the actual energy mix of the electricity suppliers (if available) or a national / state level average energy mix. In some cases, immaterial to the total numbers, we used estimations. Emissions derived from combustion represented 92% of the total scope 1, while process and fugitives were (7.6%) and (0.2%), respectively. More than 96% of combustible fuels is natural gas and none of the sites uses coal or coke.

SASB code	Greenhouse gas emissions	2018	2019
RT-CH-110a.1 / EM-MM-110a.1	Gross global Scope 1 emissions (Thousand Metric tons (t) CO <sub>2</sub> -e)	575	603
	Gross global Scope 2 emissions (Thousand Metric tons (t) CO <sub>2</sub> -e)	386	299
	Total GHG-emissions (Thousand Metric tons (t) CO <sub>2</sub> -e)	960	902
	GBU Lithium (Thousand Metric tons (t) CO <sub>2</sub> -e)	n/a	230
	GBU Bromine (Thousand Metric tons (t) CO <sub>2</sub> -e)	n/a	312
	GBU Catalysts (Thousand Metric tons (t) CO <sub>2</sub> -e)	n/a	330
RT-CH-110a.1 / EM-MM-130a.1	Other (FCS, offices) (Thousand Metric tons (t) CO <sub>2</sub> -e)	n/a	30
RT-CH-110a.1 / EM-MM-130a.1	Percentage covered under emissions-limiting regulations	n/a	11%*

\*Locations in countries falling under European Trading System

## Nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), and other significant air emissions

SASB code	Air Quality	2018	2019
RT-CH-120a.1 / EM-MM-120a.1	NO <sub>x</sub> (excluding N <sub>2</sub> O) (Metric tons (t))	639	710
	SO <sub>x</sub> (Metric tons (t))	3,056	1,458
	Volatile Organic compounds (VOCs) (Metric tons (t))	n/a	847
	Hazardous Air Polutants (HAPs) (Metric tons (t))	64	178

## Waste by type and disposal method

SASB code	Hazardous Waste Management	2018	2019
RT-CH-150a.1	Amount of hazardous waste generated	20	13
	Percentage recycled	n/a	19%

## Non-compliance with environmental laws and regulations

Albemarle maintains a very robust management system for environmental performance and compliance.

In 2019, penalties for environmental infractions were not material, and any required corrective measures had been implemented prior to the receipt of the final enforcement action.



# ADDITIONAL SOCIAL DISCLOSURES (GRI 400 SERIES)

## New employee hires and employee turnover

As of December 31, 2019:

	Category	Average Head- count	Terminations		% Turnover		New Hires		New Hires minus Terminations	
			Voluntary	Involuntary	Voluntary	Involuntary	Nr	%	Nr	%
Gender	Male	4,085	274	113	7%	3%	339	8%	-48	-1%
	Female	1,135	134	53	12%	5%	152	13%	-35	-3%
	Non-Disclosed	382	55	20	14%	5%	819	214%	744	195%
Age Group	Age <25	544	74	2	14%	0%	874	161%	798	147%
	Age 25-45	2,841	203	71	7%	2%	347	12%	73	3%
	Age >45	2,192	128	96	6%	4%	89	4%	-135	-6%
	Non-Disclosed	25	58	17	232%	68%	0	0%	-75	-300%
Region	North America	2,047	229	95	11%	5%	730	36%	406	20%
	Latin America	775	48	49	6%	6%	172	22%	75	10%
	EMEA	1,491	109	21	7%	1%	219	15%	89	6%
	APAC	1,289	77	21	6%	2%	189	15%	91	7%
<b>Total</b>		<b>5,602</b>	<b>463</b>	<b>186</b>	<b>8%</b>	<b>3%</b>	<b>1,310</b>	<b>23%</b>	<b>661</b>	<b>12%</b>
US Race	White	1,580	162	67	10%	4%	142	9%	-87	-6%
	Non-White	444	60	27	14%	6%	64	14%	-23	-5%
	Non-Dis-closed	23	2	0	9%	0%	9	39%	7	30%

Note: all data for employees only, excluding contractors

## Benefits provided to full-time employees that are not provided to temporary or part-time employees

We view our employee benefits as supplemental to statutory employee benefits, which in combination are geared to supporting our employees and their families in managing their physical and financial wellness, and in achieving an appropriate work/life balance. We offer part-time employees around the globe benefits that are comparable to full time employees.

## Worker participation, consultation, and communication on occupational health and safety

Almost all of Albemarle's US sites are ISO/RC 14001 certified. As part of the certification process, each site must have a Responsible Care Steering Committee (RCSC), led by the plant manager for overseeing the sites Responsible Care Management System. The RCSC will include a cross-sectional representation of the site (salary, wage and any nested contractor organization). The RCSC will work with the site management to set the site HSSE policies and procedures consistent with the Corporate HSSE policies and -procedures, to establish site specific significant HSSE aspects along with the operation controls for such aspects, to establish and monitor the HSSE objectives for the site, and to routinely evaluate HSSE programs for the site. The site RCSC's will meet at least four times per year (typically quarterly - some sites changed to monthly meetings) and they report annually to the Corporate RCSC on the status of their site-specific significant HSSE aspects and objectives.

Germany requires that there be a Safety Council

Region	Country	Major Locations	Benefits NOT provided to temporary or part-time employees
North America	USA	All Locations	Part-timers receive the same benefits as full timers, unless they work less than 30 hours a week. Part-timers that work less than 30 hours a week do not receive benefits, other than the Health and Dependent Care Accounts (we do not employ any part-timers in the US that work less than 30 hours a week). Temporary employees are not eligible for benefits.
Latin America	Chile	All Locations	Temporary employees only receive Life insurance. Sites does not employ part-time employees
EMEA	Netherlands	Amsterdam	Part-timers receive the same benefits as full timers.
	Hungary	Budapest	Part-timers receive the same benefits as full timers. Temporary employees are not eligible for benefits
	Germany	All locations	Part-timers receive the same benefits as full timers. Temporary employees are not eligible for benefits
	Belgium	Louvain-La-Neuve	Part-timers receive the same benefits as full timers. Temporary employees are not eligible for benefits
APAC	China	All locations	Part-timers receive the same benefits as full timers. Temporary employees are only eligible for statutory social security benefits and supplemental insurance.
	Taiwan	All locations	Part-timers receive the same benefits as full timers. Temporary employees are only eligible for statutory social security benefits and supplemental insurance.

(Arbeitsschutzausschuss - ASA) for the German sites, which meets at least four times a year. Representatives of the workforce in this Safety Council are members of the works council (Betriebsrat) and the Speaker of the safety advocates (Sicherheits-beauftragte). The ASA Safety Council represents the total workforce on the German sites.

At the Amsterdam site, two special Works Council Commissions (Safety, Health & Environment Commission and Personnel Commission) meet with management to discuss the Safety, Health, Environment and Wellbeing

respectively, on a monthly basis. These commissions represent the total workforce on the site.

The location in Louvain-la-Neuve in Belgium has a 'Comité de Prévention et de Protection au travail'. The committee meets on a regular basis to discuss Health and Safety issues.

In Chile, both production sites have worker participation committees, which are required by the Chilean government.



## Prevention and mitigation of occupational health and safety impacts directly linked by business relationships

Albemarle provides training, counseling, prevention, risk-control programs and training for handling of diseases. These programs vary by region. Albemarle does not have a high incidence or risk of specific occupational diseases. We have proactive wellness programs that provide information and resources for good nutrition, exercise and stress management.

## Programs for upgrading employee skills and transition assistance programs

We invest in our employees through many different channels. At all locations, we use internal training programs for skill development. Programs range from broad leadership programs to specific skill development such as welding. The internal training programs are supplemented with external programs that provide for new skill development or skill refresher. Additionally, for those eligible individuals willing to make the commitment, we support employees' continuing education aspirations by funding university tuition and allowing the necessary time for classroom attendance.

In addition to our education and training programs, we also offer outplacement services to employees who leave the organization due to a significant reduction-in-force.

## Work-related injuries

SASB code	Workforce Health & Safety			
	<b>Direct employees</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
RT-CH-320a.1.(1)(a)	Total Recordable Injury Rate (TRIR)	0.64	0.55	0.36
RT-CH-320a.1.(2)(a)	Fatality rate	0	0	0
	<b>Contract employees</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
RT-CH-320a.1. (1)(b)	Total Recordable Injury Rate (TRIR)	0.53	0.75	0.22
RT-CH-320a.1. (2)(b)	Fatality rate	0	0	0
	<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
	Total Recordable Injury Rate (TRIR)	0.61	0.59	0.33

## Average hours of training per year per employee

For the year ended December 31, 2019:

Significant Location(s)	Location Name	Average Hours of Training/Employee per year
<b>Americas - USA</b>		
Arkansas	Magnolia Plants	87.1
Louisiana	BRT - Baton Rouge Tower	27
Louisiana	PDC- Baton Rouge Process Development Center	37
Michigan	South Haven Plant	359
Nevada	Silver Peak	47.5
North Carolina	Charlotte - Corporate Head Quarters	14.9
North Carolina	Kings Mountain	12.8
Pennsylvania	Tyrone Plant	40
Tennessee	New Johnsonville	25
Texas	Bayport Plant	90.9
Texas	Clear Lake Office	20
Texas	Pasadena Plant	7
<b>Americas-Chile</b>		
Antofagasta	La Negra	43.8
Salar de Atacama	El Salar	50.7
Santiago	Santiago	31.6
<b>Europe, Middle East and Africa</b>		
Amsterdam the Netherlands	Amsterdam	23
Albemarle Germany	Frankfurt, Langelsheim	20
Budapest Hungary	Budapest	73
Louvain-la-Neuve Belgium	LLN	14
<b>Asia Pacific</b>		
Dalian, China	Dalian	42.4
Shanghai, China	Shanghai	35.5
Chengdu (Meishan)	Meishan	64.4
Xinyu	Xinyu	65.8
Taiwan	Taiwan	15.8

## Ratio of basic salary and remuneration of women to men

As an organization, we have a philosophy as well as a practice of paying equitably for the same job across genders. As discussed above, using our annual pay review process and other tools, we are actively identifying and eliminating pay gaps between individuals who work in the same role at the same location.

Significant Location(s)	Location Name	Average Rate Female
Illustration Only		
<b>Americas - USA</b>		
Arkansas	Magnolia Plants	139%
Louisiana	BRT - Baton Rouge Tower	72%
Louisiana	PDC- Baton Rouge Process Development Center	86%
Michigan	South Haven Plant	150%
Nevada	Silver Peak	47%
North Carolina	Charlotte - Corporate Head Quarters	74%
North Carolina	Kings Mountain	85%
Pennsylvania	Tyrone Plant	148%
Tennessee	New Johnsonville	89%
Texas	Bayport Plant	141%
Texas	Clear Lake Office	68%
Texas	Pasadena Plant	159%
<b>Americas-Chile</b>		
Antofagasta	La Negra	98%
Salar de Atacama	El Salar	121%
Santiago	Santiago	63%
<b>Europe, Middle East and Africa</b>		
Amsterdam the Netherlands	Amsterdam	86%
Albemarle Germany	Frankfurt, Langelsheim	87%
Budapest Hungary	Budapest	82%
Louvain-la-Neuve Belgium	LLN	78%
<b>Asia Pacific</b>		
Dalian, China	Dalian	70%
Shanghai, China	Shanghai	59%
Chengdu (Meishan)	Meishan	98%
Xinyu	Xinyu	96%
Taiwan	Taichung Plant	66%

## Incidents of discrimination and corrective actions taken

In 2019, three allegations of discrimination were reported. These allegations were either fully or partially substantiated during an internal investigation and appropriate disciplinary action taken.

## Employee training on human rights policies or procedures

Our global employees were provided with one hour of employee training on the Code of Conduct (including human rights). This is a mandatory annual update for all employees. New employees receive Code of Conduct training as part of New Hire On boarding. Employees that are on leave will receive this required training upon returning to work.

## Operations with local community engagement, impact assessments, and development programs

We view the community in which we operate as our partner and key stakeholders. We realize that they provide us with the license to operate. We value the trust this entails and strive to always remain worthy of it through our commitment to the highest standards of stewardship.

Our sites with certified Wildlife Habitats - Magnolia, Tyrone and Baton Rouge (PDC) - are great examples of this commitment. Albemarle's U.S. operating sites typically have a Community Advisory Panel (CAP) as discussed above. In Jordan, the JBC site created a CAP in 2011. A CAP serves as the conduit for open communication between the site and the community in which it operates. In Chile, a similar initiative is called the Environmental

Monitoring Committee (EMC). A CAP/EMC provides the plant with open perspective regarding the priorities and issues of concern of the community and an outlet for communications from Albemarle about the state of the company and HSSE related initiatives.

## Political contributions

Albemarle is committed to participating constructively in the political process with the ultimate goal of advancing and protecting the best interests of Albemarle and our stakeholders. The political process significantly impacts Albemarle through government policies, legislation and regulatory decisions. Through our participation, we promote legislative and regulatory actions that further Albemarle's business objectives and work to protect the company from unreasonable, unnecessary or burdensome legislative or regulatory actions at all levels of government. We are fully committed to conducting our political activities in compliance with all applicable campaign finance laws and reporting requirements and in accordance with the Albemarle Corporation Political Contribution Policy (the "Policy"). A summary of the Policy is available on our website at <https://albemarle.com/investors/corporate-governance>

Albemarle supports transparency in the political process and has on an annual basis commencing in 2014 publicly disclosed its corporate political contributions and political contributions by the Albemarle Corporation Political Action Committee (the "Albemarle PAC"), which is registered with the U.S. Federal Election Commission and permitted to make contributions at the federal level. The Albemarle PAC provides eligible employees with the opportunity to support candidates who have demonstrated support for the principles to which we are dedicated. The political contributions made by the Albemarle PAC are funded entirely by the voluntary contributions from eligible employees. A committee

composed of Albemarle's Chairman, President & Chief Executive Officer; Executive Vice President, Chief Administrative Officer & General Counsel; Executive Vice President & Chief Financial Officer; and other senior officers of Albemarle, with the advice and assistance of Albemarle's Government Relations Office, is responsible for overseeing the contributions and activities of the Albemarle PAC. We do not make political contributions at the federal level using corporate funds.

Albemarle's contributions at the state and local level are based on advancing the best interests of Albemarle and our stakeholders, including consideration of Albemarle's interests in a particular state, legislative activity in that state, Albemarle facilities and employees in that state and local political factors. Albemarle's Chairman, President & Chief Executive Officer; Executive Vice President, Chief Administrative Officer & General Counsel; Executive Vice President & Chief Financial Officer; and other senior officers of Albemarle, with the advice and assistance of Albemarle's Government Relations Office, are responsible for overseeing Albemarle's contributions at the state and local level.

Neither Albemarle nor the Albemarle PAC intends to make "independent expenditures" or contributions to political committees that make such independent expenditures ("Super PACs") in connection with any federal or state election. If Albemarle or the Albemarle PAC changes its general guidelines to allow independent expenditures or contributions to Super PACs, we expect that any such expenditures or contributions would be disclosed in Albemarle's Annual Report on Form 10-K setting forth its political contributions.

Our Health, Safety & Environment Committee is responsible for overseeing Albemarle's political contributions. The Health, Safety & Environment Committee receives periodic updates regarding

Albemarle's political activities, including corporate contributions and contributions by the Albemarle PAC.

No political contributions were made by Albemarle Corporation nor the Albemarle PAC in 2019.

### Incidents of non-compliance concerning the health and safety impacts of products and services

During 2019, there were no material monetary fines or non-monetary sanctions for non-compliance concerning the health and safety impacts of products and services.

### Non-compliance with laws and regulations in the social and economic area

During 2019, there were no material monetary fines or non-monetary sanctions for non-compliance with laws and regulations.



## GRI STANDARDS REFERENCE TABLE

Disclosure number	Disclosure title	Reporting	Page number(s)	URL(s)
GRI 102: General disclosures 2016				
<b>1. Organizational profile</b>				
102-1	Name of the organization	"Albemarle Corporation. Unless the context otherwise indicates, the term 'Albemarle', 'we', 'us', 'the company' and 'our' mean Albemarle Corporation and our consolidated subsidiaries."		
102-2	Activities, brands, products, and services	"How We Create Value"	Page 13	
102-3	Location of headquarters	"4250 Congress Street, Suite 900 Charlotte, North Carolina 28209 United States of America "		
102-4	Location of operations	2019 Annual Report Form 10-K	Page 23-25	<a href="https://investors.albemarle.com/static-files/37d4e140-eb0-4e7b-8d9f-7b995197ae08">https://investors.albemarle.com/static-files/37d4e140-eb0-4e7b-8d9f-7b995197ae08</a>
102-5	Ownership and legal form	2019 Annual Report Form 10-K	Page 58	<a href="https://investors.albemarle.com/static-files/37d4e140-eb0-4e7b-8d9f-7b995197ae08">https://investors.albemarle.com/static-files/37d4e140-eb0-4e7b-8d9f-7b995197ae08</a>
102-6	Markets served	"Albemarle at a Glance / Our Businesses: How We Create Value"	Page 10/ Page 13	
102-7	Scale of the organization	About Albemarle	Page 10-12	
102-8	"1. Total number of employees by employment contract (permanent and temporary), by region. 2. Whether a significant portion of the organization's activities are performed by workers who are not employees. "	Appendix: Information on Employees and Other Workers	Page 68	
102-9	Supply chain	---		
102-10	1. Changes in the location of, or changes in, operations, including facility openings, closings, and expansions;	Appendix: Significant Changes to the Organization	Page 69	
102-11	Precautionary Principle or approach	Appendix: Precautionary Principle or Approach	Page 69	

Disclosure number	Disclosure title	Reporting	Page number(s)	URL(s)
GRI 102: General disclosures 2016				
102-12	External initiatives	Appendix: External Initiatives	Page 68	
102-13	Membership of associations	Appendix: Membership of associations	Page 69	
<b>2. Strategy</b>				
102-14	Statement from senior decision-maker	Letter from the CEO	Page 6	
102-15	Key impacts, risks, and opportunities	2019 Annual Report Form 10-K	Page 9-22	<a href="https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08">https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08</a>
<b>3. Ethics and integrity</b>				
102-16	Values, principles, standards, and norms of behavior	Purpose and Values / Sustainable Business Model: Business Ethics	Page 22 / Page 62	
102-17	Mechanisms for advice and concerns about ethics	Sustainable Business Model: Business Ethics	Page 63	
<b>4. Governance</b>				
102-18	Governance structure	Corporate Governance / Appendix: Governance structure	Page 20 / Page 70	
102-19	Delegating authority	Albemarle Corporation Health, Safety & Environment Committee Charter	page 1, Section III, Article A	<a href="https://www.albemarle.com/storage/wysiwyg/health_safety_environment_committee_charter_-_november_3_2017.pdf">https://www.albemarle.com/storage/wysiwyg/health_safety_environment_committee_charter_-_november_3_2017.pdf</a>
102-20	Executive-level responsibility for economic, environmental, and social topics	Message from the Sustainability Steering Team	Page 28	
102-21	Consulting stakeholders on economic, environmental, and social topics	2019 Materiality assessment	Page 30	
102-22	Composition of the highest governance body and its committees	Board of Directors	Page 21	
102-23	Chair of the highest governance body	Form 8K, filed April 20, 2020	Total document	<a href="http://investors.albemarle.com/static-files/6059c97c-42e5-496b-a7e8-a6695319e6bc">http://investors.albemarle.com/static-files/6059c97c-42e5-496b-a7e8-a6695319e6bc</a>
102-24	Nominating and selecting the highest governance body	Appendix: Nominating and selecting the highest governing body	Page 70	

Disclosure number	Disclosure title	Reporting	Page number(s)	URL(s)
GRI 102: General disclosures 2016				
102-25	Conflicts of interest	Corporate Governance Guidelines	Page 5, 8	<a href="https://www.albemarle.com/storage/wysiwyg/2019_07_23_corporate_governance_guidelines_-_final_1.pdf">https://www.albemarle.com/storage/wysiwyg/2019_07_23_corporate_governance_guidelines_-_final_1.pdf</a>
102-26	Role of highest governance body in setting purpose, values, and strategy	Corporate Governance Guidelines	Total document	<a href="https://www.albemarle.com/storage/wysiwyg/2019_07_23_corporate_governance_guidelines_-_final_1.pdf">https://www.albemarle.com/storage/wysiwyg/2019_07_23_corporate_governance_guidelines_-_final_1.pdf</a>
102-27	Collective knowledge of highest governance body	2020 Proxy Statement	Page 56	<a href="https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac">https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac</a>
102-28	Evaluating the highest governance body's performance	Appendix: Evaluating the highest governance body's performance	Page 71	
102-29	Identifying and managing economic, environmental, and social impacts	2020 Proxy Statement	Page 43 (Risk Oversight)	<a href="https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac">https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac</a>
102-30	Effectiveness of risk management processes	Appendix: Effectiveness of risk management process	Page 70	
102-31	Review of economic, environmental, and social topics	"Albemarle Corporation Health, Safety & Environment Committee Charter as amended and restated effective November 3, 201"	Total document	<a href="https://www.albemarle.com/storage/wysiwyg/health_safety_environment_committee_charter_-_november_3_2017.pdf">https://www.albemarle.com/storage/wysiwyg/health_safety_environment_committee_charter_-_november_3_2017.pdf</a>
102-32	Highest governance body's role in sustainability Reporting	Our CEO Kent Masters		
102-33	Communicating critical concerns	Appendix: Communicating critical concerns	Page 71	
102-34	Nature and total number of critical concerns	2019 Annual Report Form 10-K	Page 53	<a href="https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08">https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08</a>
102-35	Remuneration policies	2020 Proxy Statement	Page 3-21	<a href="https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac">https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac</a>
102-36	Process for determining remuneration	"2020 Proxy Statement / Albemarle Corporation Executive Compensation Committee Charter as amended and restated effective October 28, 2019"	Page 3-21 / Total document	<a href="https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac">https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac</a> <a href="https://www.albemarle.com/storage/wysiwyg/executive_compensation_committee_charter_-_oct_29_2020.pdf">https://www.albemarle.com/storage/wysiwyg/executive_compensation_committee_charter_-_oct_29_2020.pdf</a>

Disclosure number	Disclosure title	Reporting	Page number(s)	URL(s)
GRI 102: General disclosures 2016				
102-37	Stakeholders' involvement in remuneration	2020 Proxy Statement / Form 8-K (Date of report May 4, 2020)	Page 4	<a href="https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac">https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac</a> <a href="http://investors.albemarle.com/static-files/6059c97c-42e5-496b-a7e8-a6695319e6bc">http://investors.albemarle.com/static-files/6059c97c-42e5-496b-a7e8-a6695319e6bc</a>
102-38	Annual total compensation ratio	2020 Proxy Statement	Page 40	<a href="https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac">https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac</a>
102-39	Percentage increase in annual total compensation ratio	2019 Proxy statement / 2020 Proxy statement	Page 41 / Page 40	<a href="http://investors.albemarle.com/static-files/6f0b013b-1909-4065-a9a6-26fb3df7d36f%20/">http://investors.albemarle.com/static-files/6f0b013b-1909-4065-a9a6-26fb3df7d36f%20/</a> <a href="https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac">https://investors.albemarle.com/static-files/744ec70a-385a-4640-bb3e-d88ea7cb60ac</a>
<b>5. Stakeholder engagement</b>				
102-40	List of stakeholder groups	"Appendix: Stakeholder Engagement: List of Stakeholder Groups"	Page 71	
102-41	Collective bargaining agreements	Appendix: Collective Bargaining Agreements	Page 72	
102-42	Identifying and selecting stakeholders	"Community & Stakeholder Engagement"	Page 56	
102-43	Approach to stakeholder engagement	Community Engagement / Operations with local community engagement, impact assessments, and development programs	Page 54-59 / Page 83	
102-44	Key topics and concerns raised	Community & Stakeholder Engagement	Page 57	
<b>6. Reporting practice</b>				
102-45	Entities included in the consolidated financial statements	2019 Annual Report Form 10-K	Page 60	<a href="https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08">https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08</a>
102-46	Defining Report content and topic Boundaries	About this report	Page 32	
102-47	List of material topics	2019 Materiality Assessment	Page 30	
102-48	Restatements of information	---		
102-49	Changes in Reporting	About this report	Page 32	

Disclosure number	Disclosure title	Reporting	Page number(s)	URL(s)
GRI 102: General disclosures 2016				
102-50	Reporting period	About this report	Page 32	
102-51	Date of most recent Report	This Report is released in August 2020		
102-52	Reporting cycle	Since calendar year 2007, Albemarle Corporation has produced a Sustainability Report annually.		
102-53	Contact point for questions regarding the Report	Contact Information	Page 97	
102-54	Claims of Reporting in accordance with the GRI Standards	---		
102-55	GRI content index	Appendix: GRI Standards Reference Table	Page 85	
102-56	External assurance	This Sustainability Report is not subjected to a comprehensive external assurance process. Financial, safety and environmental information are subject to both national regulatory requirements as well as international and external audit such as ISO 14001 and similar systems. This sustainability Report contains a consolidation of this information.		
GRI 103: Management approach 2016				
103-1	Explanation of the material topic and its Boundary	All material subjects		
103-2	The management approach and its components	All material subjects		
103-3	Evaluation of the management approach	All material subjects		
Material Topics - 200 series (Economic topics)				
GRI 201: Economic Performance 2016				
201-1	Direct economic value generated and distributed	2019 Annual Report Form 10-K	Page 57	<a href="https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08">https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08</a>
201-2	Financial implications and other risks and opportunities due to climate change	2019 Annual Report Form 10-K	Page 17-18	<a href="https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08">https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08</a>

Disclosure number	Disclosure title	Reporting	Page number(s)	URL(s)
GRI 201: Economic Performance 2016				
201-3	Defined benefit plan obligations and other retirement plans	2019 Annual Report Form 10-K	Page 79	<a href="https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08">https://investors.albemarle.com/static-files/37d4e140-ebe0-4e7b-8d9f-7b995197ae08</a>
201-4	Financial assistance received from government	Appendix: Financial assistance received from government	Page 72	
GRI 202: Market Presence 2016				
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Appendix: Ratios of standard entry level wage by gender compared to local minimum wage	Page 72	
GRI 205: Anti-corruption 2016				
205-1	Operations assessed for risks related to corruption	Sustainable Business Model: Business Ethics	Page 62	
205-2	Communication and training about anti-corruption policies and procedures	Appendix: Communication and training about anti-corruption policies and procedures	Page 74	
205-3	Confirmed incidents of corruption and actions taken	Appendix: Confirmed incidents of corruption and actions taken	Page 74	
Material Topics - 300 series (Environmental topics)				
GRI 302: Energy 2016				
302-1	Energy consumption within the organization	"Natural Resource Management - Energy and Greenhouse Gases / Appendix: Energy consumption within the organization"	Page 44 / Page 74	
GRI 303: Water and Effluents 2018				
303-1	Interactions with water as a shared resource	"Natural Resource Management - Water Management"	Page 46	
303-3	Water withdrawal	Appendix: Water withdrawal and consumption	Page 75	
303-5	Water consumption	Appendix: Water withdrawal and consumption	Page 75	
GRI 305: Emissions 2016				
305-1	Direct (Scope 1) GHG emissions	Appendix: GHG emissions (Scope 1 & 2)	Page 76	
305-2	Energy indirect (Scope 2) GHG emissions	Appendix: GHG emissions (Scope 1 & 2)	Page 76	

Disclosure number	Disclosure title	Reporting	Page number(s)	URL(s)
GRI 305: Emissions 2016				
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	"Appendix: Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions "	Page 76	
GRI 306: Effluents and Waste 2016				
306-2	Waste by type and disposal method	Appendix: Waste by type and disposal method	Page 77	
GRI 307: Environmental Compliance 2016				
307-1	Non-compliance with environmental laws and regulations	Appendix: Non-compliance with environmental laws and regulations	Page 77	
Material Topics - 400 series (Social topics)				
GRI 401: Employment 2016				
401-1	New employee hires and employee turnover	Appendix: New employee hires and employee turnover	Page 78	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Appendix: Benefits provided to full-time employees that are not provided to temporary or part-time employees	Page 79	
GRI 403: Occupational Health and Safety 2018				
403-1	Occupational health and safety management system	"Our People and Workplace: Safety"	Page 36	
403-2	Hazard identification, risk assessment, and incident investigation	Our People and Workplace: Safety	Page 37	
403-4	Worker participation, consultation, and communication on occupational health and safety	Appendix: Worker participation, consultation, and communication on occupational health and safety	Page 79	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Appendix: Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Page 80	
403-9	Work-related injuries	Our people and Workplace - Safety / Appendix: Work-related injuries	Page 38 / Page 80	
GRI 404: Training and Education 2016				
404-1	Average hours of training per year per employee	Appendix: Average hours of training per year per employee	Page 81	
404-2	Programs for upgrading employee skills and transition assistance programs	Our people and workplace - Investment in Talent / Appendix: Programs for upgrading employee skills and transition assistance programs	Page 40 / Page 80	
404-3	Percentage of employees receiving regular performance and career development reviews	Our people and workplace - Investment in Talent	Page 41	

Disclosure number	Disclosure title	Reporting	Page number(s)	URL(s)
GRI 405: Diversity and Equal Opportunity 2016				
405-1	Diversity of governance bodies and employees	Governance / Our people and workplace - Inclusive and Diverse Workplace	Page 20 / Page 39	
405-2	Ratio of basic salary and remuneration of women to men	Our people and workplace - Inclusive and Diverse Workplace / Appendix: Ratio of basic salary and remuneration of women to men	Page 40 / Page 82	
GRI 406: Non-discrimination 2016				
406-1	Incidents of discrimination and corrective actions taken	Appendix: Incidents of discrimination and corrective actions taken	Page 83	
GRI 412: Human Rights Assessment 2016				
412-2	Employee training on human rights policies or procedures	Appendix: Employee training on human rights policies or procedures	Page 83	
GRI 413: Local Communities 2016				
413-1	Operations with local community engagement, impact assessments, and development programs	Community Engagement / Appendix: Operations with local community engagement, impact assessments, and development programs	Page 54-49 / Page 83	
GRI 415: Public Policy 2016				
415-1	Political contributions	Appendix: Political contributions	Page 83	
GRI 416: Customer Health and Safety 2016				
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Appendix: Incidents of non-compliance concerning the health and safety impacts of products and services	Page 84	
GRI 419: Socioeconomic Compliance 2016				
419-1	Non-compliance with laws and regulations in the social and economic area	Appendix: Non-compliance with laws and regulations in the social and economic area	Page 84	

## SASB INDEX

Disclosure number	Disclosure title	Disclosure year(s)		Reporting	Page number(s)
		2018	2019		
<b>Greenhouse gas emissions</b>					
RT-CH-110a.1 / EM-MM-110a.1	Gross global Scope 1 emissions (Thousand Metric tons (t) CO <sub>2</sub> -e)	575	603	Appendix: Direct (Scope 1) GHG emissions / Energy indirect (Scope 2) GHG emissions	Page 76
	Gross global Scope 2 emissions (Thousand Metric tons (t) CO <sub>2</sub> -e)	386	299		
	Total GHG-emissions (Thousand Metric tons (t) CO <sub>2</sub> -e)	960	902		
	GBU Lithium (Thousand Metric tons (t) CO <sub>2</sub> -e)	n/a	230		
	GBU Bromine (Thousand Metric tons (t) CO <sub>2</sub> -e)	n/a	312		
	GBU Catalysts (Thousand Metric tons (t) CO <sub>2</sub> -e)	n/a	330		
	Other (FCS, offices) (Thousand Metric tons (t) CO <sub>2</sub> -e)	n/a	30		
RT-CH-110a.1 / EM-MM-130a.1	Percentage covered under emissions-limiting regulations	n/a	11%*		
RT-CH-110a.2 / EM-MM-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets			Natural Resource Management - Energy and Greenhouse Gases	Page 44
*Locations in countries falling under European Trading System					
<b>Air Quality</b>					
RT-CH-120a.1 / EM-MM-120a.1	NOx (excluding N <sub>2</sub> O) (Metric tons (t))	639	710	Appendix - Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Page 76
	SOx (Metric tons (t))	3,056	1,458		
	Volatile Organic compounds (VOCs) (Metric tons (t))	n/a	847		
	Hazardous Air Polutants (HAPs) (Metric tons (t))	64	178		

Disclosure number	Disclosure title	Disclosure year(s)	Reporting	Page number(s)
	<b>Energy Management</b>	<b>2019</b>		
RT-CH-130a.1 (1) / EM-MM-130a.1 (1)	Total energy consumed (million GJ)	14.1	Natural Resource Management: Energy and Greenhouse Gases / Appendix: Energy consumption within the organization	Page 44 / Page 74
RT-CH-130a.1 (2) / EM-MM-130a.1 (2)	Percentage grid electricity	22%		
RT-CH-130a.1 (3) / EM-MM-130a. (3)	Percentage renewable from primary energy sources	2%		
RT-CH-130a.1 (4)	Self generated energy (million GJ)	0.2		

	<b>Water Management</b>	<b>2018</b>	<b>2019</b>		
RT-CH-140a.1 (1)	Total water withdrawn (millions of cubic meters)	n/a	26.1	Appendix: Water withdrawal and consumption	Page 75
EM-MM-140a.1 (1)	Total fresh water withdrawn (millions of cubic meters)	n/a	26.1		
	Percentage of fresh water in regions with High or Extremely High Baseline Water Stress	n/a	10%		
	Percentage of fresh water in regions with High Baseline Water Stress (category 3-4)*	n/a	4%		
	Percentage of fresh water in regions with Extremely High Baseline Water Stress (category 4-5)*	n/a	6%		
RT-CH-140.a.1 (2)	Total water consumed (millions of cubic meters)	12.1	13.6		
EM-MM-140.a.1 (2)	Total fresh water consumed (millions of cubic meters)	12.1	13.6		
	Percentage of fresh water in regions with High or Extremely High Baseline Water Stress	n/a	19%**		
	Percentage of fresh water in regions with High Baseline Water Stress (category 3-4)*	n/a	9%**		
	Percentage of fresh water in regions with Extremely High Baseline Water Stress (category 4-5)*	n/a	11%		
RT-CH-140a.2 / EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	n/a	0		
RT-CH-140a.1 (3)	Description of water management risks and discussion of strategies and practices to mitigate those risks			Natural Resource Management: Water management	Page 46

\* [www.wri.org/applications/aqueduct/water-risk-atlas](http://www.wri.org/applications/aqueduct/water-risk-atlas)

\*\* rounding difference

Disclosure number	Disclosure title	Disclosure year(s)		Reporting	Page number(s)
	<b>Hazardous Waste Management</b>	<b>2018</b>	<b>2019</b>		
RT-CH-150a.1	Amount of hazardous waste generated	20	13	Appendix: Waste by type and disposal method	Page 77
	Percentage recycled	n/a	19%		

	<b>Security, Human Rights &amp; Rights of indigenous Peoples</b>	<b>2019</b>		
EM-MM-210a.3	Discussion of engagement process and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict		Community Engagement - Community & Stakeholder Engagement	Page 56

	<b>Labor relations</b>	<b>2019</b>		
EM-MM-310.a.1	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	US: 6% - Chile: 86% - China: 84% - Germany: 73% - Netherlands: 93%	Appendix: Collective bargaining agreements	Page 72



Disclosure number	Disclosure title	Disclosure year(s)			Reporting	Page number(s)
		2017	2018	2019		
<b>Workforce Health &amp; Safety</b>						
<b>Direct employees</b>						
RT-CH-320a.1.(1)(a)	Total Recordable Injury Rate (TRIR)	0.64	0.55	0.36	Our people and Workplace: Safety / Appendix: Work-related injuries	Page 38 / Page 80
RT-CH-320a.1.(2)(a)	Fatality rate	0	0	0	Appendix: Work-related injuries	Page 80
<b>Contract employees</b>						
RT-CH-320a.1. (1)(b)	Total Recordable Injury Rate (TRIR)	0.53	0.75	0.22	Appendix: Work-related injuries	Page 80
RT-CH-320a.1. (2)(b)	Fatality rate	0	0	0		
<b>Total</b>						
	Total Recordable Injury Rate (TRIR)	0.61	0.59	0.33	Appendix: Work-related injuries	Page 80
<b>Product Design for use-phase Efficiency</b>						
RT-CH-410.a.1.	Revenue from products designed for use-phase resource efficiency	2019			Sustainable Business Model: Innovation	Page 64
		\$1.7 - 2.0 billion				
		50-60 % of total revenue				
<b>Business Ethics &amp; Transparency</b>						
EM-MM-510a.1.	Description of the management system for prevention of corruption and bribery throughout the value chain	2019			Sustainable Business Model: Business Ethics	Page 62

## CONTACT US

### Meredith H. Bandy, CFA

**VP Investor Relations & Sustainability**  
4250 Congress St, Charlotte, NC 28209  
Email: [sustainability@albemarle.com](mailto:sustainability@albemarle.com)

### Tosca M. Langereis

**Sustainability Reporting Specialist**  
Nieuwendammerkade 1-3, 1022AB Amsterdam,  
The Netherlands  
Email: [sustainability@albemarle.com](mailto:sustainability@albemarle.com)

### Mark de Boer

**Director Sustainability**  
Nieuwendammerkade 1-3, 1022 AB  
Amsterdam, The Netherlands  
Email: [sustainability@albemarle.com](mailto:sustainability@albemarle.com)



