SABIC SUSTAINABILITY REPORT 2017: TECHNICAL SUPPLEMENT

About This Supplement

The 2017 Technical Supplement contains additional information, facts, and explanations relevant to the material topics in our 2017 Sustainability Report. Our approach to reporting focuses on providing concise, readable annual sustainability reports that summarize our program, material topics, and accomplishments for our stakeholders. We acknowledge, however, that experienced readers, sustainability professionals, and other stakeholders may wish to have access to additional information regarding specific topics found in the report. The Technical Supplement provides a starting point for exploring our sustainability program in greater detail, and includes links to additional information on our external website. This arrangement results in greater transparency and less environmental impact by reducing the number and length of printed hard copies of the report.

The supplement contains information from previous reports in addition to new content for readers interested in our sustainability history or details of programs. Annual and Sustainability Reports are available electronically at sabic.com, with previous Sustainability Reports found at https://www.sabic.com/corporate/en/sustainability/report-archive.
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About SABIC

Materiality

SABIC’s sustainability is guided by a materiality analysis to ensure that resources target the most important issues for our stakeholders and business success. In order to focus our resources on the elements of our business that are most important to sustainability and our stakeholders, we conducted a risk and opportunity analysis in 2011 and refreshed it in 2013. In conducting the examination of potential material aspects for our business, we defined a comprehensive set of 28 sustainability issues across environmental, social, and economic dimensions.

These 28 issues were selected based on several criteria, including:

• megatrends and their associated risks and opportunities for SABIC
• critical issues in the chemical and basic materials industries
• interaction and guidance with external entities
• outcome of our 2013 Enterprise Risk Management analysis

200 SABIC leaders across all businesses, corporate functions, and regions then used their knowledge and experience to rank these issues on the basis of their importance to the company’s success and to the creation or preservation of value for all stakeholders.

Many factors were included in the prioritization of specific issues, including:

• SABIC’s ability to have an influence and impact on individual issues
• impact on SABIC’s strategy and plans
• ability to create or enhance value to SABIC’s stakeholders
• regional needs and differences

On the basis of this analysis, we selected the materiality issues that were most important for the success of SABIC and for our stakeholders. Accordingly, we focused our resources and reporting efforts on these issues. Our approach and results for each material issue have, in previous reports, been placed according to the capital management (financial, natural, social, and human capitals) section most affected by that issue, while still recognizing that most materiality issues impact all aspects of value creation. Our 2015 Report was the first to be arranged according to our material issues rather than capital management, and we reported about the same priorities in 2017.

SABIC’s five most material sustainability issues are: 1) innovation and sustainability solutions; 2) resource and energy efficiency; 3) EHSS (environment, health, safety, and security) and product safety; 4) human capital development; and 5) supply chain.

In addition to these five issues, our Report includes a section on social impact and community relationships because we realize the importance of our actions in these
areas to many key stakeholders. This chapter illustrates the value that SABIC adds through engagement with and care for the communities in which we operate.

During the materiality assessment, we felt that some of the other important elements in our evaluation were directly linked to these central elements, while others were of less importance at the time. Because we are dedicated to continuous improvement in all aspects of our business, we will continue to refine our priorities and validate our conclusions through additional analysis, socialization of the conclusions across the business, and direct stakeholder input.

We also recognize that material issues change over time, and we continue to monitor their relative importance to our business and to our stakeholders using stakeholder engagement mechanisms. Any changes in our prioritization will be disclosed in future sustainability reports.

We will continue to strengthen our business governance of these material issues by
• refining our strategic objectives for each material issue
• developing new initiatives and robust management processes with clear metrics
• ensuring implementation through goals, milestones and communication

The performance table in the front section of the report contains results we were tracking before the materiality analysis process was finalized. Many of these indicators relate directly to central issues from our materiality assessment.

As we complete the steps described above, we will be updating our key performance indicators. We will keep seeking third-party expert feedback through our engagements with, for example, Business for Social Responsibility, World Business Council for Sustainable Development and KPMG. We invite readers of our Sustainability Report to provide feedback on our impacts through our sustainability site.

https://www.sabic.com/en/sustainability

SABIC Structure

SABIC is 70 percent-owned by the Saudi Arabian government; 30 percent is publicly traded on the Saudi stock exchange, Tadawul, to local and global institutional investors and in 2018 trading opened on the MSCI as part of emerging markets. The company did not receive direct financial assistance from the government in 2017

Report Boundaries

Unless noted otherwise, the Sustainability Report includes company performance information for all the SABIC units and operations that are financially consolidated in our 2017 Annual Report, which is available at: www.sabic.com/corporate/en/investorrelations/
For ethics and integrity compliance data, we have applied a more limited scope. Compliance data are reported for the employees of Saudi Basic Industries Corporation and its wholly owned affiliates, but not for employees of SABIC’s non-wholly owned manufacturing joint ventures (or affiliates) in the Kingdom of Saudi Arabia.

Supply chain includes interactions outside SABIC fenceline. The reporting boundary for supply chain upstream of SABIC includes the supply chain for purchased feedstock and materials or services that are procured for the financially consolidated sites.

Downstream product impacts (transport, product stewardship) are reported for all products sold by SABIC (including from JV partners if SABIC is responsible for selling).

**Stakeholder Analysis and Engagement**

As one of the largest chemical companies in the world, with operations in 50 countries, SABIC has many stakeholders to consider, with respect to the impact our business has on them and the impact their expectations have on our strategy. Our objective in stakeholder engagement is to understand

- our primary stakeholders and to whom we are accountable
- our effect on stakeholders and their priorities
- how we can collaborate and create value
- the primary mechanisms at our disposal for stakeholder engagement

The SABIC leadership team, guided by the functional and business expertise across our company, is responsible for our overall stakeholder engagement. A summary of our stakeholder assessment is shown in the table below. It was developed through the combined input of the Corporate Sustainability Department (CSD), the Corporate Social Responsibility (CSR) Department, the Sustainability Report Committee and the insights of SABIC employees directly responsible for engaging specific stakeholder groups.

In our 2012 report, we provided a summary of the expectations we received through stakeholder channels. This feedback is still relevant today and is reflected in the content of the current report. Additionally, we sought input from over 100 internal leaders and third-party external experts on how to improve stakeholder satisfaction in our reporting. This feedback was reviewed at SABIC Sustainability Council meetings in 2013 and was taken into account in preparing this report. This report is a critical mechanism for communicating with our stakeholders.

In 2017, more than 45,500 readers have viewed our report, and we continue to take steps to improve the visibility of our Sustainability Report.

Globally SABIC maintains membership in a number of industry and trade associations, including the Gulf Petrochemicals and Chemicals Association (GPCA), the International Council of Chemical Associations (ICCA), the American Chemistry Council (ACC),
Plastics Europe, the European Chemical Industry Council (CEFIC) and World Plastics Council. For sustainability engagement, we participated in multiple working groups within the World Business Council for Sustainable Development (WBCSD) and we are signatories to the UN Global Compact. Finally, we participate in sustainability performance platforms such as EcoVadis, and the CDP Supply Chain Program (formerly Carbon Disclosure Project; private response).

We recognize that our stakeholder engagement strategy is in its formative stage—based on bilateral relationships with different individuals. We will continue to solicit input from a cross-section of stakeholders with respect to our effectiveness at communicating our sustainability performance and impacts.

<table>
<thead>
<tr>
<th>STAKEHOLDER CATEGORY</th>
<th>KEY CONCERNS AND PRIORITIES</th>
<th>PRINCIPAL MECHANISMS TO ENGAGE STAKEHOLDERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia and other governments</td>
<td>EHSS, financial and ethical performance</td>
<td>Leadership communications</td>
</tr>
<tr>
<td>Private shareholders and JV partners</td>
<td>Robust business processes, EHSS, governance and brand reputation</td>
<td>Annual General Meeting, Boards of Director meetings</td>
</tr>
<tr>
<td>Employees and their families</td>
<td>Safety, security, job satisfaction, and career development</td>
<td>Surveys, performance reviews, concern reporting process</td>
</tr>
<tr>
<td>Customers</td>
<td>Security of product supply and product safety</td>
<td>Conferences, forums, industry trade shows, compliance reporting, commercial contacts</td>
</tr>
<tr>
<td>Communities where we operate</td>
<td>Fair and ethical business practices, environmental impacts</td>
<td>Employee/leadership engagement with the community</td>
</tr>
<tr>
<td>Suppliers</td>
<td>Collaborations</td>
<td>Scheduled meetings, compliance reporting</td>
</tr>
<tr>
<td>Consumers</td>
<td>Transparency</td>
<td>Information posted to internet sites</td>
</tr>
<tr>
<td>Global society at large</td>
<td>Sustainable solutions to megatrends</td>
<td>Financial and non-financial reports</td>
</tr>
</tbody>
</table>

**Ethics and Compliance**

We are confident that our compliance program is a model for companies based in the Gulf region and meets the rigor and thoroughness of compliance programs at peer companies around the world.

**Code of Ethics.** In 2010, SABIC adopted a Code of Ethics that consists of 13 policies covering three broad areas: (a) Our Global Environment; (b) Our Workplace; and (c) Protecting our Assets. The SABIC Code of Ethics holds our employees to the highest
standards of ethical conduct every day, in every transaction and everywhere we do business. These policies reflect our commitment to integrity and corporate citizenship, including our commitments under Responsible Care®, the United Nations Global Compact, and the World Business Council for Sustainable Development (WBCSD). SABIC’s Code of Ethics, which provides the foundation for our business culture and underscores our commitment to performance with integrity, may be found here: www.sabic.com/en/about/sabic-codeof-ethics.

Our compliance review processes and reporting procedures are designed to ensure that all employees and other stakeholders follow the Code of Ethics and that employees may report compliance concerns without fear of retaliation. Information on our compliance culture, including training, is available on SABIC’s website here: www.sabic.com/en/about/Our-Compliance-Culture.

In addition to the above practices, we have a comprehensive supplier due diligence program to ensure that our suppliers adhere to ethical standards and comply with the principles of the SABIC Supplier Code of Conduct. These include fair employment practices such as: no underage or forced labor, reasonable hours of work and wages, no discrimination, freedom of association; and EHSS matters such as providing a safe work environment, pollution prevention, and safe and secure transportation of materials. We perform due diligence on all global suppliers at varied levels dependent on each suppliers’ risk profile. For more information on our Supplier Due Diligence program and Supplier Code of Conduct see: https://supplier.sabic.com.

**Compliance Helpline.** Should any of our stakeholders have questions, comments, or concerns, they may at any time contact one of our regional Compliance Helpline Leaders. Concerns may be reported anonymously and all reports will be treated confidentially.

KSA and Middle East: +966 (0) 13 345 2886 & +800 30 22220
Americas: +1 800 643 1614
Europe: +31 164 29 2256
Asia: +81 285 80 2535
See this link to the complete Helpline Leader list
http://intranet.sabic.com/sites/Legal%20Affairs/Functions/Compliance/Pages/ComplianceHelplineLeaders.aspx

To supplement the description in the report, the following chart provides a regional breakdown of where the compliance concerns originated:
Sustainability Governance

Report Governance

The SABIC Sustainability Report is governed by an Company’s Executive Committee, led by our CEO and Vice-Chairman. The committee is made up of the CEO and heads of several Strategic Business Unit (SBU) and Corporate Functions.

Sustainability Governance

We understand the importance of effective corporate governance and treat the governance of our sustainability processes in the same way as all other critical aspects of our business operations.

In 2018, sustainability was added to the scope of the Board of Directors Risk Committee, emphasizing its importance to our business. Sustainability routinely reports on sustainability progress to the newly named Risk and Sustainability Committee.

The Vice-Chairman and CEO of SABIC has direct oversight of all aspects of the business. He is supported by an Executive Committee made up of SBU and Corporate...
Function Executives. This Executive Committee meets monthly to cover standard governance aspects of the business and on a defined schedule for specific themes or sub-committee topics. The SABIC Sustainability Council is one of the Executive Committee sub-committees and will be discussed further below.

SABIC’s impact on the economic, environmental, and social dimensions of sustainability is also influenced and supported by the actions of all the other subcommittees. These include Environment, Health, Safety & Security (EHSS), Talent Development, Strategic Planning, Human Resources, Risk Management, Investment and Innovation. Executive Committees are accountable for achieving robust business processes and performance against goals. A percentage of executive compensation for some executives is allocated according to performance against sustainability goals set by the council.

**Sustainability Council**

Our Sustainability Council is chaired by the Vice-Chairman and CEO, and includes executives from our SBUs and several corporate functions. Together they ensure that sustainability is integrated throughout our business, and that we take a consistent approach to sustainability in the regions, businesses and functions. The Council is responsible for setting our sustainability vision, priorities and goals, as well as being accountable for performance against sustainability goals, and for approval of Corporate Sustainability Department (CSD) and Steering Committee recommendations.

The Sustainability Council meets twice a year to review SABIC’s sustainability strategy and to discuss progress against Key Performance Indicators (KPIs) and project milestones. The Vice-Chairman and CEO schedules reports on various aspects of sustainability to the SABIC Board of Directors, at his discretion, in addition to communication through the Sustainability and Risk Committee.

**Steering Committee**

The Steering Committee is led by the CSD General Manager, and includes high-level SBU and Corporate Function representatives. It meets periodically to develop strategic recommendations for the council, and to translate the council’s decisions into action within the SBUs or functions.

**Corporate Sustainability Department (CSD)**

The CSD includes employees who are dedicated full time to sustainability. As experienced leaders, they are responsible for designing and ensuring consistent processes and tools across all of SABIC. They also provide expertise in sustainability standards and trends, and lead opportunity and risk analysis across the value chain by internalizing strategic sustainability externalities. In addition, they represent SABIC in a
variety of business organizations focusing on sustainability issues, including the World Business Council for Sustainable Development (WBCSD), European Chemical Industry Council (CEFIC), Plastics Europe, Business for Social Responsibility (BSR), and United Nations Global Compact (UNGC). Some CSD personnel also act as our regional leaders, discovering and serving the different needs of stakeholders in Middle East and North Africa (MENA), the Americas, Europe, and Asia.

Other CSD leaders are responsible for specific skill areas, such as Life Cycle Assessments (LCAs). The CSD is led by a General Manager, who reports to the Executive Vice President, Corporate Affairs, who reports directly to the SABIC CEO.

**Topic Sub-Teams**

Topic sub-teams are formed by the Sustainability Council or by individual council members. Their task is to provide critical content for SABIC’s sustainability process and strategy. Sub-Teams include the Sustainability Report team, the Footprint Team, and the Sustainability Product Qualification team. Additional sub-teams are formed as needed for executing the sustainability strategy.

**Functional Accountability**

Our sustainability process is supported by many teams that are accountable for critical business processes, and also for particular aspects of this report. The players include Environment, Health, Safety and Security (EHSS), Corporate Communications, Corporate Social Responsibility, Product Stewardship, Finance, Enterprise Risk Management, Legal, Procurement, Supply Chain, Human Resources, Manufacturing, Innovation and Business Development. The structure for governance of sustainability is reviewed periodically, and is continually evolving to meet stakeholder needs and priorities. Any changes are proposed to the Sustainability Council and decided by its members. As we continue to analyze our priorities and develop new ones from our materiality assessment, we will implement structure and accountability changes to match them.

**Strategic Business Unit Accountability**

The individual SBUs are represented on the Sustainability Council and Steering Committee. Each one has a team responsible for its performance against the specific sustainability goals of operational footprint, sustainability product solutions, and project milestones. Steps are taken to measure SBU performance, based on their overall management of a portfolio of programs that influence the sustainability expectations of stakeholders.
Our Values

INSPiRE
GENERATING EXCITEMENT AND COMMITMENT
Display a clear and shared vision that inspires colleagues to contribute to solutions to major needs
Be energetic and passionate toward common goals and motivate others to contribute
Continuously develop personal knowledge, skills and expertise about global issues and inform others

ENGAGE
CONNECTING WITH OTHERS TO ACHIEVE MORE
Use internal and external networks to establish collaborations and leverage resources
Foster an environment where ideas are expressed, and supported; and silos are taken down
Invite colleagues to support volunteer efforts in our communities

CREATE
SEEKING NEW WAYS OF DOING THINGS
Champion changes that address risks and opportunities across a changing landscape
Constantly challenge the status quo and existing comfort zones to generate innovative solutions
Accept, adapt and translate ideas from anywhere to solve problems

DELIVER
TAKING RESPONSIBILITY TO MAKE THINGS HAPPEN
Focus on the sustainability priorities and the business processes in your area of impact
Take action to meet your commitments and support others to meet theirs
Apply ingenuity and persistence to overcome barriers to solutions

Sustainability Performance Summary Reporting Year (RY) 2017

The summary table on page 19 matches the report structure, in that it is organized according to materiality topic. This year, the Innovation project sustainability assessment metric was eliminated from the table. In addition, several new supply chain metrics were added.

Accountability for Goals RY2017

Throughout our Sustainability Reports, we indicated many opportunities for improvement and aspirations over the short- and long-term, and these are summarized in accountability table on pages 20-21.
Innovation and Sustainability Solutions

SABIC Sustainability Product Definition

1. A SABIC Sustainability Product provides beneficial sustainability features in the value chain that must (a) be measurably better than incumbent market features or (b) be equal to or exceed recognized external thresholds.

2. Positive features should clearly exceed any negative features in the eyes of the market.

Evaluating candidate products against this definition is the purpose of the Sustainability Product qualification process.

Sustainability Product Qualification Process

Our qualification process has four phases:

**Phase 1: Nomination.** During this phase, any SBU can nominate a product that appears to have positive environmental attributes compared to products currently on the market.

**Phase 2: Quantifying Benefits.** For every product, an expert team—including technical, functional, lifecycle, and stewardship experts, and specialists with knowledge of our customers’ application and manufacturing requirements—develops a competitive baseline, identifies the product’s sustainability features, quantifies the product’s benefits, and describes any real or perceived trade-offs. The team also develops a preliminary recommendation on further steps.

**Phase 3: Approval.** During the final stage, an advisory panel comprising of SABIC leaders from diverse functions reviews the results of the qualification process and makes a final recommendation on whether or not a product meets the criteria for inclusion in the SABIC sustainability product portfolio.

**Phase 4: Revisit.** Periodic reviews through re-qualification.
This process uses two core tools to evaluate products compared to incumbent solutions:

a. Lifecycle assessment (LCA): LCA and lifecycle inventory (LCI) methodologies, based on the ISO 14040 and ISO 14044 standards, are used to estimate the carbon, energy and other impacts of the products or applications across the lifecycle. All lifecycle impact categories are assessed and considered in the qualification process.

b. Product Stewardship Scorecard (Green Chemistry Screen): This scorecard guides the assessment of the chemical composition of the product, including impurities, byproducts, and catalysts, against well-established toxicological, regulatory, and industry-standard criteria.

For a significant number of products in our sustainability solutions portfolio, we use recognized external thresholds or third-party standards to define our sustainability features, such as halogen-free flame retardants or post-consumer recycled content.

Framework for Portfolio Sustainability Assessments (PSA)
Recent global initiatives such as the Paris Climate Agreement and the United Nations Sustainable Development Goals underpin the importance of sustainability products and solutions. In support of these and other global ambitions, companies increasingly use portfolio sustainability assessments (PSA) to understand and proactively steer their overall product portfolios towards improved sustainability performance. SABIC contributed to development of a common PSA framework as a member of the World Business Council for Sustainable Development’s chemical sector working group, published this year. The ambition of the framework is to create more sustainable product portfolios. Currently, two pilots are underway to validate PSA within our business.

Innovation Portfolio and Sustainability Impact

During 2017, we continued the use of our second-generation sustainability assessment methodology (launched in 2014) in our innovation pipeline project portfolio management process. We monitor our progress through the Innovation Project Sustainability Assessments metric, which measures the number of innovation projects assessed for sustainability risks and opportunities using the second-generation sustainability assessment methodology. However, In 2017, we discontinued this metric. This metric, started in 2013, was intended to drive the adoption of sustainability principles and thinking in SABIC’s innovation process. However, sustainability assessment is now fully
embedded and embraced by SABIC’s business units. We are now focusing on accelerating the integration of sustainability into our technology strategy and ideation process, starting with the initial stages of product development. We will revisit the tool and process to improve further its quality of assessment and ease of use. In 2018, we plan to collect feedback from our internal stakeholders.

Total Patent Portfolio Filings

Our total patent portfolio filings is defined as the total number of active cases in all countries and includes issued patents and pending patent applications. 2017 patent portfolio number (11,534) is lower due to SABIC’s decision to drop off more than 1,000 patents that no longer add strategic value, resulting in savings of around US$2 million in patent-maintenance fees. Further, the drop in new patent filings is primarily because of the strategic decision to file patents on projects that are business critical and at an advanced stage.

Embedding Life Cycle Concepts

A successful sustainability strategy requires a focus on all points in the lifecycle, including basic raw materials, manufacturing processes, distribution, customer conversion processes, consumer use, and end-of-life.

SABIC’s sustainability program is founded on Life Cycle Thinking—a concept that enables us to consider impacts to natural capital across multiple types of environmental impacts (global warming potential and cumulative energy demand, for example) as well as across the full product value chain. Using a Life Cycle Assessment (LCA) approach, we can identify which steps in a product lifecycle offer the best opportunity for improvement. Environmental impact changes are often outside SABIC process operations, such as in the use phase for lighter automotive materials or for building materials with better insulating properties. LCA is used to determine product stages at which environmental benefits or burdens occur and whether a change might cause burdens to shift between stages or between environmental impact categories. Understanding the potential impacts early in the development process allows for improved decision making, which helps SABIC to develop a more sustainable product portfolio.
Resource and Energy Efficiency

Avoided Emissions

Avoided emissions are the calculated difference of total lifecycle GHG emissions of two different product alternatives for achieving the same user benefit.

Example

The use of a lightweight plastic composite in an auto part instead of a conventional steel part contributes to avoidance of 50 kg of GHG emissions over the full life cycle of the vehicle.

For an individual part (functional unit in the LCA), the avoided emissions are calculated as follows:

**Quantitative Calculation**

\[
\text{Avoided Emissions (tons of CO}_2\text{ eq)} = \text{Life cycle GHG emissions of reference product in tons of CO}_2\text{ equivalents minus Life cycle GHG emissions of SABIC product in tons of CO}_2\text{ equivalents}
\]

When scaled up to product level, the AE per functional unit will be multiplied by the volume of SABIC product sold into the specified application in the LCA.
**GHG Emissions and Other Operational Footprint Details**

We track direct and indirect GHG emissions for all of our global manufacturing facilities within our financial consolidation boundary. Our reporting is based on

- World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) GHG Protocol
- WBCSD Chemical Sector Value Chain GHG Reporting and Accounting Guidance
- American Petroleum Industry Guidelines for Reporting GHG Emissions

Internal corporate and manufacturing reporting protocols define how we implement these measurement and reporting guidelines. As described in the “About this Report” section, our reporting boundary matches financial consolidation as documented in our Annual Report.

The RY2017 report did not include re-statement for GHG reporting for any previous years. Beginning in RY2013, the Sinopec SABIC Tianjin Petrochemical Company (SSTPC) joint venture was removed as a partially consolidated entity in SABIC’s financial report in order to align with international accounting rules for joint investment. Therefore, the SSTPC site data were not included in the SABIC operational footprint and intensity calculations. In the RY2013 report, historical footprint data back to the 2010 base year were adjusted to correct for this structural change as well as to correct any other accounting errors. These adjustments altered reported footprint performance results from RY2010-RY2012. Since our reporting base year (2010), SABIC has implemented systems to ensure the accuracy of our operational footprint data, the results of which have been verified and assured by a third party.
GHG Emission Details (WBCSD Chemical Sector GHG Reporting Guidance Format)

<table>
<thead>
<tr>
<th>Scope 1</th>
<th>GHG emissions (MT CO2e)</th>
<th>Offsets</th>
<th>Total including offsets</th>
<th>Biogenic Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>33,200,000</td>
<td>0</td>
<td>33,200,000</td>
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</tr>
<tr>
<td>Europe</td>
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<td>3,150,000</td>
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<tr>
<td>Americas</td>
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<td>Asia Pacific</td>
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<tr>
<td>Scope 1 Total</td>
<td>37,300,000</td>
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<td>37,300,000</td>
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</table>

<table>
<thead>
<tr>
<th>Scope 2</th>
<th>GHG emissions (MT CO2e)</th>
<th>Offsets</th>
<th>Total including offsets</th>
<th>Biogenic Emissions</th>
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<tbody>
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<td>Saudi Arabia</td>
<td>14,600,000</td>
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<td>Europe</td>
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<tr>
<td>Asia Pacific</td>
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<tr>
<td>Scope 2 Total</td>
<td>17,300,000</td>
<td>0</td>
<td>17,300,000</td>
<td>0</td>
</tr>
</tbody>
</table>

Energy Intensity and Energy Sold

Following the WBCSD chemical sector guidelines, energy sold from sites that sell energy, such as our Bergen op Zoom site, is subtracted from the total prior to calculating energy intensity. This is because intensity is based on product sales, and energy sold to customers outside of the site are not relevant to these sales.

Water management

The compliance priority of our water-management strategy aims to ensure that wastewater discharge streams are treated to comply with discharge limitations. Our sustainability priority is to minimize freshwater usage, especially in water-stressed areas. Most of the water used in our manufacturing operations is recycled multiple times to minimize water usage and the effluent is treated prior to discharge to minimize the overall environmental impact. We track water usage at all of our operating sites and also monitor discharge parameters such as effluent temperature and organic concentrations to help reduce impacts of our water discharge.
Our ambition is to reduce our freshwater use intensity by 25 percent from to 2010 levels by 2025. SABIC will need to take operational steps to reduce freshwater consumption and deploy the latest technologies to recover and recycle freshwater streams. The intensity goal includes only freshwater to focus on water of importance to the local communities and to enhance water availability in the areas where we operate.

Almost half of our sites are in regions with “extreme water scarcity” and more than 30 percent are in regions with “abundant water.” We operate manufacturing facilities in water-stressed regions—with our largest operations in the Middle East—and are cognizant of the need to use freshwater judiciously.

Our Saudi Arabia-based sites were designed to operate in the water-scarce region. The largest volume of water used in chemical plants is for cooling. Our Saudi process operations use sea water for the large majority of process cooling and other uses where non-salinated and potable water is required. The sea-water cooling systems incorporate process design and metallurgy to handle the saline water. The cooling systems include systems design for recycle of this water to minimize volumes used, and instrumentation is installed to monitor the flow of sea water that returns to the original source. The fresh (non-saline) water used for process and potable uses comes almost entirely from public utility desalination plants, minimizing any impact to the water table or availability of water in the community. The majority of community potable water used near our areas of operation also comes from the desalination plants.

**Material Efficiency and Waste Management**

Hazardous and non-hazardous wastes together accounted for approximately 13 percent of the material losses reported in 2017. The largest component of material loss is from flaring and venting. The material loss metric was designed to drive overall material efficiency, while allowing each facility to focus on their highest priority. SABIC set a material loss reduction target of 50 percent by 2025 from the 2010 baseline, and has already achieved a reduction of more than 30 percent. The 2017 Sustainability Report highlighted coal-ash elimination at the Mount Vernon, Indiana, site because coal usage was eliminated after start up of a gas powered cogeneration plant and a flaring reduction project at the Ibn Zahr plant in Jubail that involved turning flared material into product. Each site maintains a list of material loss reduction projects, and we track progress at multiple levels to maintain progress against our 2025 target.

**Resource Efficiency Definitions**

**CO₂ utilization:** the process of capturing and utilizing Carbon Dioxide (CO₂) emitted from SABIC facilities as a feedstock for other process units or into product. This not only helps in producing additional total product quantities per unit of raw feedstock but it also contributes in reducing greenhouse gas (GHG) emissions.
**Material loss:** One measure of our operational resource efficiency is our material loss KPI, which is the sum of process material losses to flaring, process vents, fugitive losses, hazardous and non-hazardous wastes, and process material lost to wastewater treatment. SABIC takes this comprehensive measurement approach to allow our various sites to focus on the most important aspects of material loss for each process. We also use this concept to reinforce the importance of optimizing material usage in our production operations. Improvements in material loss typically result in additional material availability for production or reduction in waste disposal, so improvements directly impact economic performance. Hazardous and non-hazardous wastes together accounted for approximately 13 percent of the material losses reported in 2017.

Flaring and venting are our two areas of biggest opportunity; they are where we have made the most overall progress. Flared material volumes have been reduced by more than one-half since 2010, which has provided the most significant improvement in material loss. Flaring reduction was added as a KPI to the Sustainability Performance Summary table in RY2014.

The CO₂ utilization projects described in the recent reports will very positively impact our material loss performance through reduction of process venting by diverting vented materials to be used as a feedstock for other processes. This is an excellent example of byproduct synergy—using relatively low-value byproducts from one process as a raw material for another. We continue to evaluate our byproducts and waste materials to identify potential cross-site synergies.

**Climate Change**

SABIC recognizes international concerns about climate change and set our 25 percent operational footprint target to reduce our emissions and reduce impact. Reducing GHG emissions requires energy efficiency and reduces potential future carbon pricing risks, so these efforts will have a positive financial impact to the company.

SABIC believes that the petrochemicals industry will be part of the solution when it comes to climate change because our products can help reduce CO₂ emissions in the use phase, and therefore help our customers to meet their sustainability goals—in this way, we benefit the environment and society.

We are working to shift our product portfolio to reduce emissions and to increase avoided emissions across our product value chains in areas, such as light weighting in mass transportation, down gauging in packaging, and smart fertilizers. We work to provide the materials needed to adapt to climate changes such as piping for water shortages and materials to save energy in buildings and transport.
EHSS and Product Safety

EHSS Performance and Metrics

SABIC is committed to maintaining the highest Environment, Health, Safety & Security (EHSS) standards throughout the organization, extending to all Entities, Divisions and partners. We aim to match best in class standards, to conduct all operations “Beyond Compliance,” and to inspire this mindset in everyone who works for or with SABIC. In keeping with this ambition, we also strive for full compliance with legal requirements and promptly addressing non-compliance with applicable EHSS laws and regulations.

Our EHSS Policy provides an overall direction to the whole organization and forms the basis which drives our efforts and journey towards EHSS improvement. Our policy may be viewed here: www.sabic.com/en/about/ehss/policy

Further, SABIC’s commitment to quality, including ISO 9001, OHSAS 18001 and Responsible Care® certificates may be found here: https://www.sabic.com/en/about/our-quality-standards

We measure our overall EHSS performance through a number of key performance indicators, including an internally developed EHSS metric called the EHSS Rate, formerly referred to as SHER. The EHSS rate incorporates a comprehensive range of EHSS incident types including environmental releases, process safety events, occupational health and safety injuries, illnesses and security incidents. Incidents are weighted according to severity to calculate their contribution to the metric, and the rate is normalized to 200,000 man-hours. All sites use the same matrix to define the EHSS incidents and the associated classification. The weighting for the EHSS Rate is 50 points for Class A (most severe) incidents, five for Class B incidents, and one for Class C incidents. We have a strategic goal to reduce our global EHSS Rate to no more than 0.25 by 2025.

Environmental emission performance is a key component of our integrated EHSS metric, and the EHSS Rate includes accidental releases, environmental contamination incidents, noncompliances with emissions limits, and incidents impacting human health outside facility boundaries.

Other EHSS Metrics

- All injury and illness related data and metrics are created and calculated using definitions and procedures analogous to those set forth in United States’ 29 CFR 1904 (the Occupational Safety and Health Act, OSHA).
All process safety related data and metrics are created and calculated as per the guidelines of the Center for Chemical Process Safety (CCPS®). [http://www.aiche.org/ccps/resources/tools/process-safety-metrics#indicators](http://www.aiche.org/ccps/resources/tools/process-safety-metrics#indicators)

### Improving Risk Discovery and Management

SABIC has developed and implemented formal procedures to assess and minimize environmental and human health risks from its operations and products. Environmental, Health, Safety, and Security (EHSS) risks from manufacturing operations are specifically addressed by our management standard, the SABIC Assurance Program for EHSS Risks (SAFER). SAFER applies to all SABIC manufacturing operations, and requires assessment of potential EHSS risks, including potential risks of chemical releases and environmental contamination. Upon identifying a risk, the SAFER process is applied to assess the seriousness of the risk and identify the risk-reduction actions necessary to continue safe operations and reduce the risk to an acceptable level.

In addition to our SAFER process, SABIC has developed a four-tiered system of leading and lagging risk indicators that aligns with the recommendations of the API 754 process safety practices (see below figure). We have already implemented Tier 1 and Tier 2 reporting, and we are currently at work developing reporting data and performance measures for Tier 3 and Tier 4.

![Risk Indicator Diagram](image-url)

**Precautionary Principle**
Consistent with the Precautionary Principle, the SABIC SAFER process does not require scientific certainty of risks before mitigation measures are implemented. Rather, SAFER requires consideration of the likelihood of a significant adverse impact and the potential magnitude in order to determine when risk mitigation is required. Accordingly, risk mitigation is required where there is a possibility of high potential impact, even if it is unlikely such impact may occur.

SABIC also has procedures to identify and address EHSS risks posed by our products. SABIC has a Product Stewardship department that works with manufacturing, commercial, and technology staff to assess and address potential risks from SABIC products, including potential environmental and health risks. The Product Stewardship department conducts periodic risk reviews of existing products. Similarly, SABIC’s process for development and commercialization of new products includes review of potential environmental and health risks and mitigation of any significant risks identified. Such risk reviews are consistent with the Precautionary Principle in that they consider threats of damage as well as proven damage. Mitigation measures considered for significant risks include substitution, hazard warnings to purchasers, or discontinuation of the product. As a Responsible Care® company, SABIC applies the risk assessment principles set forth in that program’s Product Safety Code.

**Product Stewardship Performance and Metrics**

Product safety is a key pillar of SABIC’s sustainability strategy. We strive to understand the environmental, health, and safety risks associated with our product portfolio so that we can minimize risks throughout our value chains. In 2016, our Product Stewardship department revised its five-year plan to develop and strengthen four program themes related to product safety: 1) Enhance product safety throughout the value chain; 2) Support SABIC growth and compliance initiatives; 3) Establish fully developed product-safety systems and tools; and 4) Ensure organizational excellence. We discuss each of these themes in the pages of our Sustainability Report.

Developing appropriate metrics to measure the performance of product safety processes is key to improving SABIC’s activities in this area. Transparency of SABIC’s product governance processes is increasingly an expectation of our stakeholders, and we continue to develop new and effective processes to bring proactive product safety measures to our employees, customers, and the global community.

**EU REACH Regulations**

Under the European Union’s Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulations, companies are responsible for providing information on the hazards, risks and safe use of chemical substances that they manufacture or
import. As a responsible manufacturer and importer of chemicals, SABIC cares for the safety and health of people and the environment, cooperates with co-producers, suppliers, and customers to achieve our REACH goals, and works to continuously improve their safety, health and environmental performance. To date, we have registered or pre-registered every chemical in SABIC’s portfolio that falls under REACH’s jurisdiction, allowing us to continue to manufacture, use and import our products into the EU. In 2017, we made our final preparations to meet the 2018 REACH registration deadline, updating our inventory of imported low-volume chemicals. We also extended our support network of external REACH consultants and optimized our internal processes for collaborating with the various consortiums that operate within the EU.

Product and Service Labeling

Product safety, regulatory compliance and transparency are critical to SABIC’s relationships across the value chain. We work continuously to provide accurate, compliant, and current product information and labeling to our customers across the globe, such as product safety data sheets that comply with the Globally Harmonized System (GHS) of classification and labeling for chemicals in each country and language where we operate or sell products. A safety data sheet is available for all SABIC products. Consistent with GHS and industry practices, SABIC’s safety data sheets include information on hazardous constituents, product hazards and safe use, and disposal considerations.

Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling

SABIC tracks all incidents of noncompliance with legal requirements and voluntary codes to which it subscribes relating to product safety and product stewardship.

Marketing Communications

Preventing Sale of banned or disputed products

SABIC’s Product Stewardship department is responsible for identifying all applicable legal requirements restricting or prohibiting the manufacture, use, and sale of chemical substances. SABIC’s Product Stewardship department continually monitors developing and new chemical substance requirements in all relevant countries and regions, including the European Union, China, Japan, and the Americas. It is SABIC’s policy to comply with all such restrictions and prohibitions and certain other restrictions agreed upon with key customers. SABIC’s Product Stewardship department provides customers with information on the constituents of our products so that our customers are able to comply with applicable chemical substance regulations and laws. This
information is provided through safety data sheets and direct communications with customers. SABIC also publishes Product Safety Summaries for select products and materials as part of our participation in the ICCA Global Product Strategy. These can be obtained at the following website: http://icca.cefic.org/en/Home/Global-Product-Strategy/global-product-strategy/chemical-information-search/. SABIC’s Product Stewardship group works closely with SABIC commercial staff to comply with each country’s chemical substance requirements.

Marketing and Communication Compliance

SABIC is an upstream company, not a consumer products company and therefore considers GRI G4 PR-07 and 08 to be not material. These include the total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications and the total number of substantiated complaints regarding breaches of customer privacy.

Compliance

Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services

SABIC’s Legal and EHSS departments track fines and penalties for non-compliance with laws and regulations concerning the provision and use of its products. The monetary value of fines paid by SABIC in 2017 for non-compliance with laws and regulations concerning the provision and use of its products was not significant.
Human Capital Development

Talent Development
SABIC uses different channels for talent development. In 2017, we grew human capital in multiple ways. We have developed more than 6,000 classroom and online courses to support learning at every professional level, including developing core business abilities in the areas of finance, sales and marketing, supply chain, and technical skills. SABIC worked with universities globally to provide the best resources for our employees, including an on-demand leadership and management skill-development tool from one of the world’s top business universities.

Talent is also developed through other efforts such as our Young SABIC Professionals (YSP) and Women’s Network (SWN) internal organizations, and through our Global Leadership Challenge program. In addition, our career lines help guide employees on their career journey and the SABIC Academy provided extensive training and educational opportunities.

SABIC Leadership Way
SABIC has embarked on a “Leadership Way” journey to help achieve our 2025 strategic goals, specifically in relation to talent development and transforming organization and culture.

The SABIC Leadership Way has four leadership priorities:

- **Talent Champion**: Bringing in the best people, and growing and developing them to fuel our growth and achieve our goals.

  SABIC leaders should seek growth opportunities for teams and take personal responsibility for championing development and career progression.

- **Collaboration Partner**: Working closely with colleagues and partners on smarter, more efficient, and higher-performing products is essential to our success. Communication is critical, and an area where we must improve.

  SABIC leaders should co-create for shared stakeholder success.

- **Innovation Pioneer**: The pace of change is only getting faster. We can only remain relevant and retain a leadership position through innovative ideas and ways of working.

  SABIC leaders should encourage new thinking at every level and drive innovative approaches that make an impact for our customers.

- **Excellence Driver**: Making an impact for customers, stakeholders, and communities requires continual improvement and a sense of urgency.

**Workers and Communities**

**Fair Employment Practices**

A pillar of our competitive strength is our global and diverse workforce that includes people from many different cultural backgrounds. We are committed to creating and fostering a culture of respect and fair employment practices that prohibits all forms of illegal discrimination. We observe all applicable labor and employment laws wherever we operate. That includes, wherever applicable, observing those laws that pertain to freedom of association, privacy, recognition of the right to engage in collective bargaining, the prohibition of forced, compulsory and child labor, and those laws that pertain to the elimination of any improper employment discrimination (including unlawful workplace harassment). This policy is laid out in our Code of Ethics.
Management-Worker Health and Safety Committees

SABIC’s management standards require the formation of EHSS committees at various levels to provide for involvement of employees in monitoring EHSS performance and implementing and improving EHSS programs. Specifically, each facility is required to hold shift and shop floor EHSS meetings to discuss EHSS incidents, concerns, and issues. The information from the shift and shop floor EHSS meetings is included in discussions of required departmental EHSS meetings. In addition, SABIC’s management standard requires the formation of EHSS committees in each region and in each entity or function to monitor EHSS performance and advise on EHSS programs.
Supply Chain and Procurement

Description of Supply Chain

Key supply chain activities include steps from procurement of direct and indirect materials, to product distribution. Direct materials include raw materials plus feedstock directly purchased to make our products. Indirect materials are all other products purchased. Supply chain responsibilities include, as well, the transportation of our products to our customers.

SABIC procures products and services from over 20,000 qualified suppliers. In addition to a financial and technical qualification process in which it is determined if the suppliers meet SABIC’s requirements, all of our global suppliers are also subject to the SABIC Supplier Due Diligence Program which was launched in 2016. All new suppliers are required to undergo the registration process to this program, and we are adding existing suppliers to the process as we renew contracts. Due diligence requires those suppliers that present a higher risk to SABIC to demonstrate their compliance practices in areas such as safe working conditions, anti-corruption, and environmental responsibility.

Our Supply Chain Performance Management (SCPM) program, which we launched in 2017, is the key tool we use to rapidly scale up our sustainability performance (carbon footprint associated to transport operations). The SCPM program provides allows a thorough validation and measure of our supply-chain performance data and quickly prototype new metrics.

We use an indirect methodology to calculate the greenhouse gas emissions associated to SABIC’s chartered tenders. The emission factors (EFs) database is DEFRA’s one and we review the EFs every year after DEFRA’s review.

As part of the restructuring of our Supply Chain organization, SABIC has changed the way we track and report some of our past sustainability metrics.

We continue to follow our Working Capital Efficiency metric closely across our Supply Chain organization. In 2017, we have aggregated it in our financial reporting.

We continued our Respectable Work Conditions (RWC) efforts in 2017, requiring that every supplier, including logistics service providers, agree to the Supplier Code of Conduct, and now report those numbers with our procurement data.

SABIC uses a Safety and Quality Assessment System (SQAS) to evaluate our logistics service providers based on their quality, safety, security, and environmental performance. Through questionnaires, independent inspection teams, and auditors using best practices tailored for the industry, SQAS helps us to identify any
performance gaps and areas for improvement among our logistics service providers, as well as identifying our highest-performing providers.

For many years, SABIC has reported, analyzed, and tracked incidents of all types across our supply chain. Our Supply Chain Incident Reporting (SCIR) key performance indicator measures the safety performance of our supply chain, with the goal of identifying improvement areas and creating a benchmarking platform and an improvement roadmap internally and externally.

In 2017, we began to fully roll out the Functional Competency Assessment to select groups in each region. The assessment has become a best practice in our company, continuously reviewing employees’ skills and performance. The Functional Competency Index is a key performance measure, indicating the skill gaps and need for training.

Social Impact and Community Relationships

Community Giving

SABIC has a strong culture of giving and volunteerism that complements our commitment to sustainability. This culture inspires our investments in corporate social responsibility (CSR) programs to create lasting, positive impacts for societies and environments throughout our global communities. In 2015, we began our global CSR strategy, RAISE, to guide our approach to charitable donations, sponsorships, partnerships, and employee-volunteer programs. We use RAISE – Reputation, Audience, Innovation, Strategy, and Endurance – to select programs that elevate SABIC’s brand, address community needs, and promote our values. RAISE prioritizes four socially responsible areas: Science and Technology Education, Environmental Protection, Health and Wellness, and Water and Sustainable Agriculture, supporting SABIC’s 2025 strategy and Saudi Arabia’s Vision 2030. The areas also promote the UN’s Sustainable Development Goals, which are designed to address society’s most pressing needs by 2030.

For RY2017 report, the Community Giving spending includes corporate and affiliate charitable giving. The community giving spending for RY2017 (totaled US$57.5 million, which brought SABIC’s total spending from the past 16 years to more than $850 million – a figure that does not even reflect the many hours SABIC employees volunteered for worthy projects.
About This Report

Last Report Launch Date
APRIL 11, 2016

Current Report Launch Date
APRIL 17, 2017

Main Countries of Operation
Please see our annual report (page 78)