

DELIVERING
RESULTS
GENERATING
VALUE



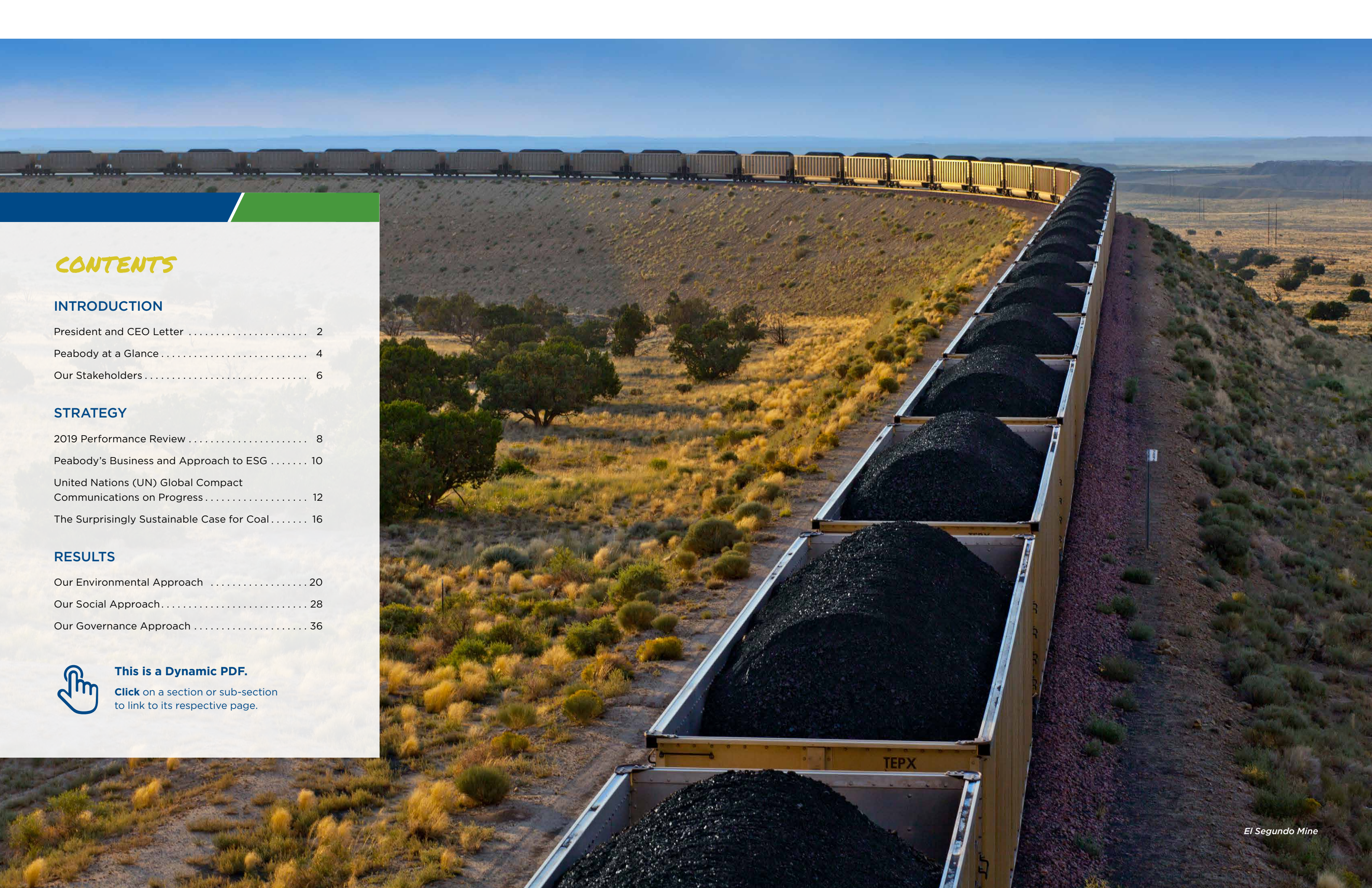
**Environmental, Social,
and Governance Report
2019**



Peabody

Peabody
Peabody Plaza
701 Market Street
St. Louis, MO 63101-1826
PeabodyEnergy.com

Peabody



CONTENTS

INTRODUCTION

President and CEO Letter 2

Peabody at a Glance 4

Our Stakeholders 6

STRATEGY

2019 Performance Review 8

Peabody's Business and Approach to ESG 10

United Nations (UN) Global Compact
Communications on Progress 12

The Surprisingly Sustainable Case for Coal 16

RESULTS

Our Environmental Approach 20

Our Social Approach 28

Our Governance Approach 36



This is a Dynamic PDF.
Click on a section or sub-section
to link to its respective page.



Peabody’s commitment to sustainability underpins our activities today and shapes our strategy for the future.

We operate under a simple premise that we have a significant role to play in the global energy mix. Our thermal products are essential to affordable, reliable energy for developed and emerging countries. Our metallurgical coal creates the steel needed to build foundational infrastructure, support industrialization and drive urbanization. Together, these products fuel powerful economies and a better quality of life.

Our mission is our purpose, and we believe this purpose is only beneficial if it is paired with meaningful action across all environmental, social and governance dimensions.

For Peabody, this action includes concern for the environment by minimizing our greenhouse gas intensity where possible, conserving water, and applying progressive land reclamation across our global operations. It is supporting the transition to a low-carbon economy by participating in focused research and projects and serving as a vocal proponent for advanced coal technologies.

For Peabody, continuous improvement is more than a mindset — it is a relentless pursuit to do better. This pursuit frames how we approach our operational performance, financial priorities and sustainability initiatives to best position our company for the many decades ahead.

Socially, we integrate safety into all aspects of the business and are enriching our culture through enhanced training and development as well as opportunities for improved work-life balance. We also serve as a good corporate citizen through philanthropic giving, employee volunteerism and community engagement.

Within governance, the company promotes best practices and emphasizes personal accountability and integrity. We are also focused on risk management as well as strong disclosure and transparency.

In 2019, we were recognized with substantial environmental, social and governance (ESG) achievements that are a testament to our team as well as an inspiration for continued improvement. The company led its peers in combined ESG disclosure by Institutional Shareholder Services, and Institutional Investor Magazine named Peabody number one for small and mid-cap companies in the metals and mining sector for ESG metrics and corporate governance.

In addition, the company received a prestigious Sentinels of Safety Award from the National Mining Association and had a number of strong finishes in mine rescue competitions in both the U.S. and Australia. Our environmental teams were also recognized with national awards from the Office of Surface Mining Reclamation and Enforcement for reclamation work completed at several mines.

While we can cite many accomplishments, our industry and company are not without its challenges, including heightened divestment pressures. Certain institutional investors and socially responsible funds are enforcing limitations on fossil fuel investments, and an increasing number of pension funds, insurance companies, surety providers and commercial banks are electing to divest from fossil fuels or coal. We believe broad divestment that fails to differentiate among coal companies with sound ESG practices is not the answer.

We instead advocate for constructive engagement and support of responsible miners, who will be needed as long as there is a meaningful market for our products. As such, we have committed to outreach initiatives to help us determine areas that are most important to our stakeholders and strive to incorporate feedback into our longer-term objectives.

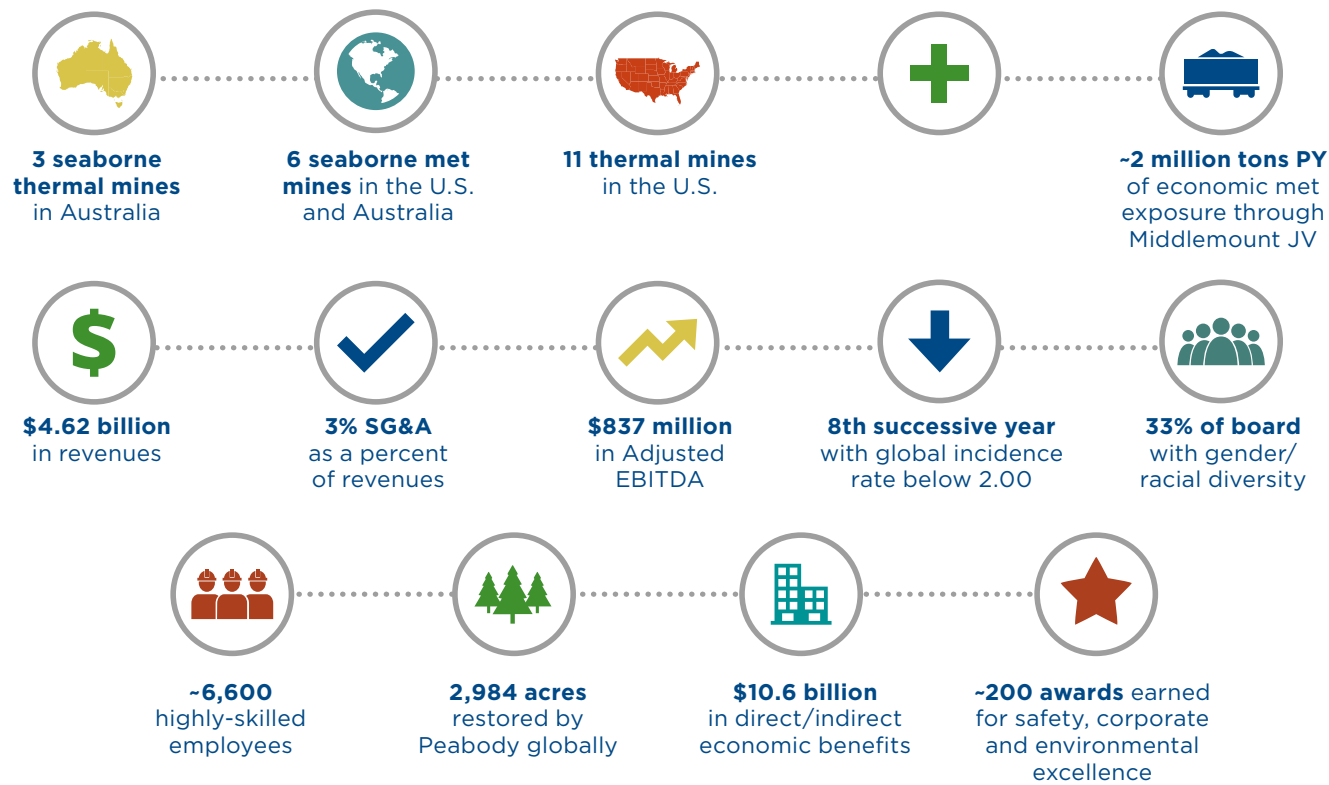
We have made much progress in the areas of ESG and believe our differentiation is a strength. We are continuing to manage our risks and identify opportunities for greater disclosure. This includes evaluating appropriate ESG frameworks and working to match resources with growing demands. In fact, we are aligning with international initiatives and have just completed our first full year as a member of the UN Global Compact. Our inaugural Communications on Progress can be found within this report.

For Peabody, continuous improvement is more than a mindset — it is a relentless pursuit to do better. This pursuit frames how we approach our operational performance, financial priorities, and sustainability initiatives to best position our company for the many decades ahead.

To all our stakeholders — from the customers and communities that depend on our products, to our investors that recognize our potential to create long-term value, to our employees that ultimately drive our success — we thank you for your support as we continue our essential work.

Glenn Kellow
President and
Chief Executive Officer

PEABODY AT A GLANCE



Adjusted EBITDA is a non-GAAP measure. Refer to Peabody's 2019 Form 10-K for a reconciliation to the nearest GAAP measure.
Note: All metrics for calendar-year 2019. Global incidence rate per 200,000 hours worked for years 2012 -2019. Awards received cover past decade.
Mine count includes announced closures of Millennium, Somerville Central, and Wildcat Hills Underground.



Note: The company attributes revenue to individual regions based on the location of the physical delivery of the coal.

OUR MISSION

To create superior value for shareholders as the leading global supplier of coal, which enables economic prosperity and a better quality of life.

OUR VALUES

- Safety**
We commit to safety and health as a way of life.

Customer Focus
We provide customers with quality products and excellent service.

Leadership
We have the courage to lead, and do so through inspiration, innovation, collaboration and execution.

People
We offer an inclusive work environment and engage, recognize and develop employees.
- Excellence**
We are accountable for our own success. We operate cost-competitive mines by applying continuous improvement and technology-driven solutions.

Integrity
We act in an honest and ethical manner.

Sustainability
We take responsibility for the environment, benefit our communities and restore the land for generations that follow.

OUR STRATEGY

- Continuing to reweight our investments toward greater seaborne thermal and seaborne metallurgical coal access to capture higher-growth Asian demand
- Optimizing our lowest-cost and highest-margin U.S. thermal coal assets to maximize cash generation
- Executing our financial approach of generating cash, maintaining financial strength, investing wisely and returning cash to shareholders







OUR STAKEHOLDERS

Peabody believes that stakeholder engagement is a key part of the way we operate, manage risk and apply continuous improvement across our business.

Our outreach initiatives help to identify those areas that are most important to our stakeholders and allow us to better align our organization with diverse interests and support our long-term objectives.

While our means of engagement differ among stakeholder groups, our goal is consistent — we strive to actively listen, incorporate feedback and build stronger relationships for a better business.

Peabody’s stakeholder engagement occurs at multiple levels of the organization, and our Board of Directors also actively engages with shareholders as part of the company’s outreach on matters of governance and other ESG topics.

STAKEHOLDER	HOW WE ENGAGE, LISTEN AND INFORM	STAKEHOLDER GENERAL AREAS OF INTEREST
 Investors and Financial Community	<ul style="list-style-type: none">• Active outreach to investors and sell-side analysts through conferences, non-deal roadshows, office meetings, and video/phone calls and emails• ESG-specific investor presentations, calls and meetings• Quarterly earnings release and management calls• Periodic updates via SEC filings, press releases, website and email• Access to board members and executive management• Annual meeting of stockholders	<ul style="list-style-type: none">• Corporate strategy• Operational performance• Debt and liquidity levels• Capital allocation• ESG matters• Disclosures• Macro and industry factors• Targets and priorities
 Employees	<ul style="list-style-type: none">• Communications of company standards, policies/procedures, including “Safety a Way of Life” management system• Goal setting, performance reviews and development plan discussion with supervisor• Learning and leadership development programs• Town hall meetings with executives• Internal website, emails, meetings and other communications• Open participation in employee-led inclusion and diversity advisory board (IDAB) and events• “Tell Peabody” hotline for confidential and anonymous reporting of concerns	<ul style="list-style-type: none">• Competitive wages and benefits• Work-life balance• Inclusion and diversity• Ability to be challenged and develop• Corporate strategy• Safety and operational performance• Financial position
 Customers	<ul style="list-style-type: none">• Proactive communications regarding product availability/mix• On-site customer visits• Accessibility through global trading and business offices located in Australia, China and U.S.	<ul style="list-style-type: none">• Product quality• Product pricing• Reliability of supply
 Suppliers	<ul style="list-style-type: none">• Supplier relationship management for key suppliers• Alliance agreements with largest suppliers• Periodic continuous improvement discussions	<ul style="list-style-type: none">• Continued/expanded supply opportunities• Peabody safety culture• Impacts of operations on community• ESG across the value chain
 Community	<ul style="list-style-type: none">• Ongoing engagement with land owners and other community members near operations before, during and post-mining• Substantial interaction informally and through community advisory boards at multiple locations• Executive participation on community boards• Targeted charitable giving and opportunities for employee volunteerism• Matching Gifts and Dollars for Doers programming	<ul style="list-style-type: none">• Opportunity to engage and provide feedback• Local employment opportunities• Economic benefits and philanthropic support• Environmental performance
 Federal, State and Local Governments	<ul style="list-style-type: none">• Advocate for advanced coal technologies• Leadership in multiple industry groups and trade associations• Environmental reporting to federal and state governments• Ongoing discussions with government agencies and regulators in U.S. and Australia• Active outreach to U.S. Congress, state and local legislators on policies related to energy, safety and environmental issues• Disclosures of U.S. political contributions and lobbying expenses	<ul style="list-style-type: none">• Economic development and job creation• Environmental performance• Social benefit• Regulatory compliance• Transparency in disclosure

2019 PERFORMANCE REVIEW

✓ Achieved ✓ Partially Achieved ✗ Not Achieved

2019 TARGET	STATUS	PERFORMANCE OVERVIEW
Reclaim at least one graded acre for each acre of land disturbed due to mining activity.	✓	Peabody graded 3,386 acres compared to 3,182 acres disturbed in 2019, or 1.06 acres for every acre disturbed. Graded means returning the land to the final contour grading prior to soil replacement. In total, the company restored 2,984 acres of mined lands.
Conserve energy and reduce greenhouse gas intensity at operations where possible through energy efficiency and other leading practices.	✓	In 2019, Peabody reduced its global greenhouse gas intensity by 7.5 percent, driven by a 34 percent reduction in emission intensity in Australia.
Continue support for low-emissions projects and partnerships.	✓	Peabody continued to serve in leadership or membership positions in more than a half dozen organizations that emphasize the development and deployment of advanced technologies. In addition, the company made a \$3 million investment in Arq technology in 2019 to advance a novel approach to coal-to-oil products that creates a very low sulfur transportation fuel.
Protect against work-related fatalities.	✓	Peabody had no fatalities at any of its operated mines in 2019. Tragically, a fatality did occur at the independently operated Middlemount Mine joint venture, which Peabody has a 50 percent equity interest.
Improve the company's global Total Recordable Injury Frequency Rate (TRIFR).	✗	Peabody reported a TRIFR of 1.64 per 200,000 hours worked. The result is a 13 percent increase in the company's TRIFR versus 2018, reflecting the integration of the Shoal Creek Mine following the December 2018 acquisition by Peabody.
Successfully integrate Shoal Creek Mine into portfolio, including aligning the operation with Peabody's safety standards.	✓	Under Peabody's ownership, Shoal Creek's 2019 TRIFR improved approximately 47 percent from 2018 levels, though still exceeded the 2019 average for Peabody's underground operations. The company's safety leaders continue to work alongside our Shoal Creek team members with an emphasis on high-hazard activities, enhanced personal protective equipment and vehicle safety modifications.
Actively support inclusion and diversity initiatives.	✓	Initiatives included implementing inclusive leader and unconscious bias education to enable the workforce to begin recognizing, acknowledging and minimizing any potential blind spots in interactions with others, while managing more effectively in today's workplace. In 2019, training sessions were held for all people leaders in the U.S. and Australia, totaling more than 500 participants. Of those participants who completed the post-training evaluation, 92 percent reported a deeper understanding of unconscious bias and 85 percent agreed the activities and exercises aided in their development.

2019 TARGET	STATUS	PERFORMANCE OVERVIEW
Advance employee capabilities through leader development programs and other opportunities.	✓	Peabody offers a variety of learning events, including mentoring and development programs to aid our employees in their career growth. The Leader Development Program for directors and above focuses on areas such as increasing strategic leadership skills, building business acumen, improving communication skills and putting the Peabody values into action. All participants of the 2019 program who responded to the post-program survey reported the session increased cross-functional knowledge. Peabody also offers a formal mentoring program to allow employees to gain knowledge and perspectives outside of individual areas of expertise. In total, approximately 89 percent of participant responders indicated that they were satisfied with the experience.
Expand company and employee engagement in the communities in which we operate.	✓	Peabody distributed \$1.2 million in philanthropic cash contributions globally in 2019 through corporate giving and our charitable match program. In addition, our workforce volunteered some 800 hours equating to more than \$20,000 of in-kind value. While cash contributions were approximately 17 percent below prior year levels, the team continued robust engagement with those communities near our operations, including informational outreach to local stakeholders regarding the proposed PRB/Colorado joint venture with Arch.
Report on Peabody's continuous improvement plan as part of our actions to support the UN Global Compact.	✓	Peabody submitted its inaugural Communications on Progress to the UN Global Compact and included a copy within this ESG Report.
Achieve a safe return to operations at the North Goonyella Mine.	✓	Safety remains priority one, and no incidents have occurred in relation to the fire or subsequent recovery activities. Peabody is currently commencing a commercial process in tandem with the ongoing mine development plan for North Goonyella.
Engage with governments, academia, community and other stakeholders to support constructive and informed dialogue.	✓	Robust engagement included advocating for the sustainable case for coal in a keynote session at CERAWEEK; discussing improved alternatives to fossil fuel divestment with key stakeholders; sharing learnings of the North Goonyella incident with industry, government and community leaders; recognizing key academic, advocacy and industry leaders through the Peabody Clean Coal Leadership Awards; and engaging on a broad level with shareholders representing the vast majority of holdings on Peabody's approach to ESG.



PEABODY'S BUSINESS AND APPROACH TO ESG

Peabody provides valuable products within an essential industry.

Our Business

We are focused on three core portfolios — seaborne thermal, seaborne metallurgical and U.S. thermal. Our seaborne thermal coal platform delivers exceptional margins and is supported by high-quality, low-cost mines in Australia. Our seaborne metallurgical coal business provides an essential ingredient for steelmaking to customers in Asia and Europe. And within U.S. thermal, we benefit from low-cost Powder River Basin operations and a strong committed position.

We continue to execute on our longstanding financial approach with an emphasis on financial strength. During this time of great global concern and economic uncertainty, we are continually working to safeguard our people, communities and business. This includes taking aggressive action to create our own catalysts for change and pursuing structural improvements across the enterprise. With every positive near-term action, we believe we are best positioning Peabody for longer-term success.

Approach to ESG

We recognize that the long-term success of our company goes beyond the income statement and balance sheet. As such, we take a holistic approach to ESG to deliver results and generate value across the cycles. Our approach is centered on three core beliefs, that we should:

- Minimize the environmental footprint of our operations and products;
- Provide substantial benefits to society; and
- Ensure our business strategies and activities best serve the interests of our stakeholders.

ESG Oversight

ESG is integrated into all areas of our business with support and execution from the top down. Our board of directors has ultimate oversight for ESG initiatives, progress and risk assessments, specifically through our Health, Safety, Security and Environmental and our Nominating and Corporate Governance committees. The executive leadership team and senior management champion our practices, and our global workforce turns those good practices into meaningful changes.

Reporting Process

Management believes that a collection of external communication vehicles, including environmental regulatory filings and public notices, U.S. Securities and Exchange Commission filings, the company website, publications and the ESG Report (formerly known as the Corporate and Social Responsibility Report) provide stakeholders a full portrayal of the company's commitments and progress.

The ESG Report is reviewed by Peabody's Board of Directors and Executive Leadership Team.

All figures in this report are stated in U.S. dollars unless otherwise noted.

2020 ESG TARGETS

As part of our commitment to continuous improvement, we have set public targets in key areas of our business related to ESG components. These targets include both quantitative and qualitative metrics and are not inclusive of all internal targets established for the company.

- 1 Achieve a 1:1 average ratio of reclaimed graded acres versus acres disturbed over a three-year period.
- 2 Integrate environmental standards for land reclamation, water management, coal waste/water containment, among others, into established risk management system.
- 3 Improve the company's strong safety performance by reducing our global Total Recordable Injury Frequency Rate (TRIFR) and achieving zero fatalities.
- 4 Continue journey toward greater awareness and actions in support of workforce diversity.
- 5 Apply an expanded supplier screening process and develop a formal supplier code of conduct.
- 6 Evaluate alignment with applicable ESG disclosure platforms.

Our ESG targets can be found throughout this report.

UN GLOBAL COMPACT COMMUNICATIONS ON PROGRESS

Peabody and our products — thermal coal for electricity generation and metallurgical coal for steelmaking — contribute to and support the UN Sustainable Development Goals. In 2019, Peabody became a signatory to the UN Global Compact, the world’s largest global corporate sustainability initiative. The UN Global Compact provides a universal framework for sustainability in the areas of human rights, labour, environment and anti-corruption.

PRINCIPLES OF UN GLOBAL COMPACT

Human Rights

- PRINCIPLE 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
- PRINCIPLE 2: Make sure that they are not complicit in human rights abuses.

Labour

- PRINCIPLE 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- PRINCIPLE 4: The elimination of all forms of forced and compulsory labour;
- PRINCIPLE 5: The effective abolition of child labour; and
- PRINCIPLE 6: The elimination of discrimination in respect of employment and occupation.

Environment

- PRINCIPLE 7: Businesses should support a precautionary approach to environmental challenges;
- PRINCIPLE 8: Undertake initiatives to promote greater environmental responsibility; and
- PRINCIPLE 9: Encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

- PRINCIPLE 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Statement of Continued Support by CEO

I am pleased to confirm that Peabody reaffirms its support of the Ten Principles of the United Nations Global Compact in the areas of human rights, labour, environment and anti-corruption. In our first annual Communication on Progress, we describe our actions to integrate the Global Compact and its principles into our business strategy, culture and operations. We are committed to sharing this information with our stakeholders using our primary channels of communication, including our annual ESG Report.

Sincerely,



Glenn Kellow
President and Chief Executive Officer
Peabody



OUR PROGRESS

HUMAN RIGHTS

ASSESSMENT

Peabody strives to create a safe and healthy work environment where all employees are treated with fairness and respect. Among our core values, we emphasize people and strive to offer an inclusive work environment that engages, recognizes and develops our employees. The Company is committed to acting ethically and with integrity in all our business dealings and relationships and to implementing and enforcing effective systems and controls designed to ensure modern slavery is not taking place anywhere in our own business or in any of our supply chains. Our policies and practices concerning human rights are supported by Peabody’s Code of Business Conduct and Ethics and are in line with the Universal Declaration of Human Rights.

IMPLEMENTATION

Peabody encourages and informs employees of their ability and obligation to report concerns of misconduct, which would include human rights violations, through a strong program of workplace communications and online training tools. Our board of directors has established procedures for receiving, retaining and investigating reported violations. Retaliation in any form against an individual who exercises his or her right to make a complaint in good faith is strictly prohibited.

The company recently expanded its supplier screening process, and in 2020, will work to develop a formal supplier code of conduct.

MEASUREMENT OF OUTCOMES

In 2019, all claims submitted through Peabody’s confidential reporting hotline were reviewed by the ethics and compliance team and others, as appropriate, based on topic and geography.

LABOUR

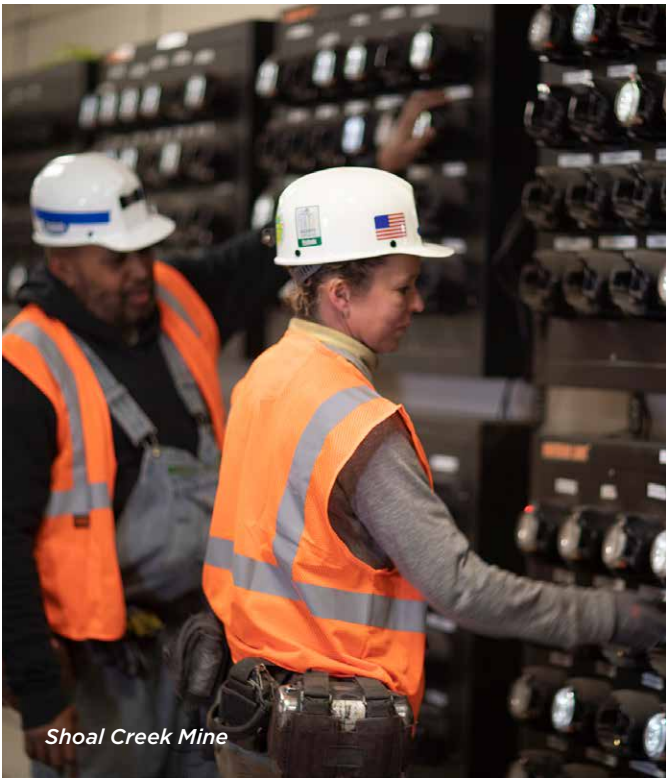
ASSESSMENT

Safety is Peabody’s first value and integrated into all areas of our business, and all individuals at our sites must comply with Peabody’s established safety and health rules, along with applicable laws and regulations. Our governing Safety Principles apply to our employees, contractors, visitors and vendors at all our sites. We believe Equal Employment Opportunity is good business and maximizes our opportunity to attract and retain a qualified and high-performance workforce. As stated in our Code of Business Conduct and Ethics, it is our commitment to comply with all Equal Employment Opportunity laws and our Equal Opportunity Policy Statement, which require recruiting, hiring, placing, promoting, training, compensating, transferring and terminating employees based on job-related qualifications and performance without regard to race, color, religion, national origin, sex, sexual orientation, age, or status as a special disabled veteran or veteran of the Vietnam era. Our affirmative action programs are intended to enhance this legal protection.

We are committed to complying with all applicable labor laws and support the protections afforded under such laws and related election processes. In our employment practices, we adhere to the following principles: (1) that workers have the right to freely choose whether or not to form and join trade unions and bargain collectively; (2) that employment shall be freely chosen; and (3) that there shall be no use of forced labor, including bonded or voluntary prison labor.

IMPLEMENTATION

Management has overall accountability for safety and health and sharing of learnings across the organization. Peabody’s Safety a Way of Life (SAWOL) management system sets out a risk-based framework that is the basis for continuous safety and health improvement. SAWOL is independently certified under the U.S. National Mining Association’s CoreSafety® framework, sets clear expectations for work activity at operations and is designed to foster a safety culture that promotes participation. Safety incidents are thoroughly investigated to identify root causes and key findings are passed across global operations.



Peabody encourages and informs employees of their obligation to report concerns of misconduct, including labor violations, through workplace communications and online training tools. Our board of directors has established procedures for receiving, retaining and investigating reported violations. Retaliation in any form against an individual who exercises his or her right to make a complaint in good faith is strictly prohibited.

For 2020, Peabody is targeting to improve its strong safety performance by reducing its global Total Recordable Injury Frequency Rate (TRIFR) and achieving zero fatalities.

MEASUREMENT OF OUTCOMES

In 2019, Peabody did not have any fatalities at its operated mines. The company reported a global TRIFR of 1.64, which includes the Middlesbrough Mine and contractors across all Peabody locations.

ENVIRONMENTAL

ASSESSMENT

Peabody takes responsibility for the environment throughout the life cycle of our operations and works to comply with all applicable environmental standards, rules and procedures, and relevant jurisdictional laws and regulations. Our governing principles for our sites are outlined in our Environmental Policy, which applies to our employees, contractors, visitors and vendors at all our operations and support Peabody’s alignment with Sustainable Development goals.

The company’s commitment to the environment extends beyond our operations. As noted in our Statement on Climate Change, Peabody promotes the development and deployment of high-efficiency, low-emissions and carbon, capture, use and storage technologies to achieve goals of substantial reductions in greenhouse gas and other emissions.

IMPLEMENTATION

Management has overall accountability for environmental management and for regular review of environmental performance. We strive to conserve water, advance recycling and waste management programs and apply efficient mining practices, which in turn, can reduce greenhouse gas intensity at our operations. Peabody is also committed to progressively restoring areas disturbed by mining to ensure post-mined land use, landform and environmental outcomes are achieved.

In 2020, Peabody intends to integrate environmental standards for land reclamation, water management, coal waste/water containment, among others, into its established risk management system.

MEASUREMENT OF OUTCOMES

In 2019, Peabody restored nearly one acre for every acre disturbed during mining. Approximately 20 percent of the water withdrawn by our operations in 2019 was recycled or reused. In addition, recycling, reuse and energy recovery programs accounted for 60 percent of the company’s waste disposal activities.

ANTI-CORRUPTION

ASSESSMENT

Integrity is among our core values, and Peabody strictly prohibits giving, offering or promising anything of value to a government official to influence any official act or otherwise violate the law. Peabody also prohibits commercial bribery of any kind. Any knowledge of such conduct must be reported immediately to the appropriate supervisor and our Chief Legal Officer. Employees must comply with all laws and regulations of the countries which have jurisdiction over our operations and activities including, without limitation, the U.S. Foreign Corrupt Practices Act, the UK Bribery Act and the OECD Anti-Bribery Convention.

IMPLEMENTATION

Peabody informs employees of their obligation to act in a responsible, ethical and constructive manner through workplace communications and online tools. Our board of directors has established procedures for receiving, retaining and investigating reported violations. In addition to Peabody’s Code of Business Conduct and Ethics training, the company provides targeted education based on employee business function to mitigate key risks, including anti-bribery and corruption as well as fraud detection and prevention.

Peabody’s political and lobbying activities are directed by the executive leadership team with oversight from the company’s board of directors. All financial contributions adhere to federal, state and local laws regarding contribution limits on amount and source criteria, and reporting requirements.

MEASUREMENT OF OUTCOMES

In 2019, Peabody achieved a 100 percent completion rate for all active, continuing employees assigned the company’s formalized annual Code of Business Conduct and Ethics training.



THE SURPRISINGLY SUSTAINABLE CASE FOR COAL

Coal as a sustainable energy source. It's at once a straightforward statement of fact — and a provocative, even controversial, assertion. Let's review three pillars of what we would call the Surprisingly Sustainable Case for Coal.

1 The first pillar is the market. Even amid headlines that question coal's future, trends reveal that global coal demand will be substantial for many decades to come.

2 The second pillar is technology. The ability of advanced coal technologies to continue to drive down emissions from coal is extraordinary — and essential.

3 The third pillar is financial. While multiple factors will still lead to winners and losers, some industry challenges may paradoxically enable greater financial strength for those that remain and invest.

1 PILLAR ONE: The Market

The world uses more than 7.5 billion tons of coal per year.¹ A bit more than one out of every four units of energy in the world comes from coal — and that share has actually edged up in the past four decades — off of a much larger base.²

For the first time ever in 2018, global coal-fueled generating capacity topped 2,000 gigawatts (GW). That's a massive 62 percent increase since the year 2000³... and each GW can use about 3 million tons of coal per year. More than 100 GW of new coal-fueled generation are under construction around the world and expected to come online between 2020 and 2022.⁴ Some 50 countries have added coal-fueled generation since 2010.⁵

Within the U.S., past years of regulatory burden, financial incentives to switch fuels, and a country-specific shale play have created a secular decline, but coal still fuels nearly a quarter of electricity generation.⁶ Also, during peak days of usage during weather extremes in recent years, coal has fueled more than any other source.⁷

Coal is also essential to original steel-making, which consumes a billion tonnes of coal each year globally. And coal provides about 70 percent of the energy to create cement.^{8,9} Electrification of the transportation sector is already having stunning results, with coal again returning as a major fuel of transportation in places such as China which uses coal-fueled electricity for high-speed trains and electric buses, cars and scooters.

Life expectancy, educational attainment and income all correlate with per capita electricity use and more of the world's electricity is fueled by coal than any other source.¹⁰ Notably, between 1990 and 2010, about 1.7 billion people gained access to electricity.¹¹ Over the period, for every 1 person who gained access owing to solar and wind energy, 13 gained access thanks to coal.¹²

The seaborne coal trade, in which Peabody is a significant participant, has grown substantially in the past decade. For the decade between 2009 and 2019, seaborne thermal coal demand soared by 59 percent and topped 1 billion tonnes for the first time in 2019, according to data from Wood Mackenzie.¹³ During that same decade, global seaborne metallurgical coal

Global seaborne metallurgical coal demand grew an impressive 47 percent, reaching 315 million tonnes between 2009 and 2019.

demand grew an impressive 47 percent, reaching 315 million tonnes in 2019. Combined, the seaborne coal trade increased by nearly half a billion tonnes during a 10-year period when many were predicting a decline in coal demand. Also in 2019, the Asia-Pacific region reached 83 percent of the total global seaborne coal trade. While many of the headlines about preferred energy sources come from the U.S. and Europe, those regions are increasingly irrelevant in the seaborne coal trade.

Simply put, the world plans, and needs, to use substantial amounts of coal for the foreseeable future.

2 PILLAR TWO: Technology

Peabody believes that technology has been the proven answer, and we have the opportunity to continue to use technology to drive down emissions.

Step one is to allow the world to access electricity, something lacked by nearly 1 billion people — nearly 15 percent of the world's population.¹⁴ In 2018, more than 2.6 billion people relied on primitive biomass, which would be some 1,000 times cleaner using coal by electrification.^{15,16}

Steps can also be taken to improve emissions from existing fossil fuel generation — and the track record there is excellent through low-emissions technologies. Since 1970, U.S. SO₂ and NO_x have been reduced by some 80% — and that is even while coal consumption has risen.¹⁷ The first step of reducing carbon emissions begins with higher efficiency. Globally, the average efficiency of coal-fueled power plants today is 35 percent. Raising that average by 5 points, to 40 percent, would reduce global emissions by 2 gigatonnes — or the equivalent of India's annual total.¹⁸ Positive steps are already being taken. In China, high-efficiency low-emissions plants comprise 66 percent of the installed capacity.¹⁹

In 2018, more than 2.6 billion people relied on primitive biomass, which would be some 1,000 times cleaner using coal by electrification.

It is notable that China, India and Japan, along with other countries accounting for 70 percent of global coal consumption, have included advanced coal technologies in their nationally determined contributions under the Paris Agreement.²⁰ Many of the largest coal-consuming countries in the world continue to see a role for coal in a carbon-constrained world.

The final “grand prize” for advanced coal technologies comes through widespread deployment of carbon capture, use and storage (CCUS). The Intergovernmental Panel on Climate Change has said not only would the cost of achieving the 2°C goal be 138 percent more expensive (median estimate), it may well not be possible without widespread deployment of carbon capture.²¹

The coal fleet in Asia is less than 15 years old and many of these plants can be retrofitted with CCUS. Over 300 GW of the existing coal-fueled power capacity in China alone already meets the basic criteria for being suitable for CCUS retrofit.²²

In the U.S., we are already seeing a reason for renewed optimism in this field with the passage in recent years of the FUTURE Act legislation advancing the 45Q tax credit — a widespread incentive for large-scale CCUS projects. Peabody was pleased to be part of a bipartisan effort supporting its passage.

In reality, the world needs greater regulatory clarity around CO₂ storage and greater deployment of plants. The technology exists today, though it is only through learning by doing that we optimize project costs to deploy at scale. In addition, there are transformational technologies in the innovation pipeline that promise to reduce costs even further with continued research and development.

3PILLAR THREE:Financial

In a world where some are calling for divestment of coal companies and other fossil fuel producers, Peabody believes that investment and engagement are far preferable approaches, as opposed to symbolic but misguided divestment actions by a minority of those in the financial community.

So long as the world uses substantial amounts of coal, society also needs responsible coal producers. Divestment activities do nothing to halt coal demand, but push away responsible public coal producers, and drive production to less accountable operators. Divestment also shuts down the value of coal companies engaging in continuous improvement activities in ESG and transparency in disclosures. Divestment forces subjective value judgements and creates far greater administrative hurdles and ambiguous fiduciary practices.

On the other hand, Peabody believes that engagement with a company regarding its ESG practices and accomplishments:

- Allows for productive engagement and gives investors a seat at the table;
- Recognizes differentiation between responsible producers and others within the space;
- Offers an incentive for fossil fuel companies to manage ESG and transparency;
- Allows companies to incorporate stakeholder feedback into long-term strategies;
- Helps organizations fulfill their broad social purpose and what we might call a “Corporate License to Operate.”

Ultimately, to the extent that “keep it in the ground” is advocated by some as an actionable phrase, Peabody believes that the principle should apply to those who don’t use strong practices in disclosure and application of ESG principles.



In addition, while both market and company-specific factors will still lead to winners and losers, recent industry challenges may paradoxically enable greater financial strength for those that take a contrarian position and remain. Several major dynamics are at play:

The first is environmental activism. Permitting of a mine or a port is likely to bring substantial pushback and delays in production that limits sourcing.

The second dynamic is the turning away from coal by certain global diversified miners and some investors through fossil fuel divestment. This, too, limits sourcing opportunities. The world’s largest mining company’s divestment of much of its thermal coal while still retaining the largest export portfolio of met coal; the world’s second largest mining company’s complete exit from coal; the world’s largest seaborne thermal coal supplier’s rapid surge then announced capping of coal; and the Euro-American divestment movement of fossil fuels all point to an industry not receiving investments in new supply to the extent it would have as recently as the beginning of this decade.

Ironically, though, very little of this impacts the underlying demand of our product, particularly in the busy ports of dozens of Asia-Pacific nations. Again, demand has edged up and supply may remain tight.

A world that will use coal for many decades more into the future... also needs sustainable coal companies more than ever. If you drive first-tier, sustainable

companies from coal, then the resulting effects will be negative for multiple stakeholder groups and society as a whole.

The third dynamic is a capex-light world that so many major companies in extractive industries find themselves in... where capital investments run well below both historic levels and current depletion.

Shareholders in a cyclical industry were tired of cash often being wasted on marginal returns in the good times and losses in the bad times. They are calling for far greater discipline in capital allocation. A quick analysis of capital investments in the coal industry since the early part of this decade reveals that capex is running less than half its peak level. In addition, technical elements are also discouraging investments. The move to spot markets and short-term contracts create the potential for greater volatility and shorter-term decision making.

To complete the thought, the coal industry of course faces multiple challenges. The twist here is that within our challenges may be embedded opportunities.

Those opportunities present themselves for those of us with the wherewithal to remain financially sound, to manage well, to insist on responsible mining, and to encourage advanced technologies to continually reduce emissions.

OUR ENVIRONMENTAL APPROACH

Our environmental approach is two-fold with a focus on responsible coal mining and advanced coal use.

Responsible Coal Mining

We begin with a deep appreciation and understanding for the land and communities where we operate. Before any mining activity starts, we complete comprehensive baseline studies of local ecosystems, geology surface water, groundwater, land uses and other relevant site-specific resources to support detailed assessments, which inform our mine plans and mitigation measures to reduce potential impacts from our operations.

At our sites, we attempt to maximize resource recovery and conserve energy, which brings about the co-benefits of reducing costs and minimizing our environmental footprint through lower emissions. We also work to reduce our water use and waste and apply recycling programs. In addition, we are committed to progressively restoring, monitoring and maintaining areas disturbed by mining to ensure that post-land use, landform and environmental outcomes are achieved.

Our governing principles for all sites are outlined in our [Environmental Policy](#), which applies to employees, contractors, visitors and vendors at all our sites.

Advanced Coal Use

Our commitment to the environment does not end with our operations. Society has a growing need for energy and a desire to meet climate goals, and we believe both goals can be achieved — not by moving away from coal — but by embracing technology.

As outlined in our [Statement on Climate Change](#), Peabody recognizes that climate change is occurring and that human activity, including the use of fossil fuels, contributes to greenhouse gas emissions. We also recognize that coal is essential to affordable, reliable energy and will continue to play a significant role in the global energy mix for the foreseeable future. Peabody views technology as vital to advancing global climate change solutions, and the company supports advanced coal technologies to drive continuous improvement toward the ultimate goal of near-zero emissions from coal.

Peabody’s continuing actions to address climate change include participation in focused research, projects and partnerships to advance low-emissions technologies. In addition, we engage with governments, academia, communities and other stakeholders to support constructive dialogue and encourage a true all-of-the-above energy strategy that recognizes the benefits and limitations of each fuel to meet society’s growing demand.



Reclamation at former
Somerville Central Mine

Land Restoration

Peabody views land restoration as a vital part of the mining life cycle and aims to commence restoration of the landscape as soon as land becomes available to create a safe, stable and sustainable landform that benefits generations to follow. Reclamation is undertaken on a progressive basis with consultation between the environmental, technical services and production teams. In any given year, land reclamation activities can vary due to production needs, mine development, weather conditions, or other unforeseen factors.

In 2019, Peabody continued to advance restoration activities, reclaiming nearly one acre of land for every acre disturbed. In total, we restored 2,984 acres of mined land, which will now serve as wildlife habitat, rangeland, forests, prime farmland, grazing land and wetlands. In addition, the company constructed approximately 18 miles of streams using natural design techniques and planted some 411,000 trees.

Over the past three years, Peabody has restored more than 1.2 acres of mined land for every acre disturbed during mining. Successful land restoration is also a recurring metric within Peabody’s executive compensation program.

Land and Bond Release

Peabody remains focused on restoring the land and providing assurance for future obligations. The company fully accounts for the projected financial impact of our final coal mine reclamation requirements through our asset retirement obligation (ARO) on our balance sheet in accordance with U.S. Generally Accepted Accounting Principles. As of December 2019, Peabody’s ARO liability was \$752 million.

In the U.S. and Australia, Peabody provides third-party bonding facilities to meet reclamation liabilities. Reclamation liabilities are calculated based on each mine’s maximum disturbance area for a specified period. Peabody practices progressive reclamation and continues to emphasize submittal of phased releases as early as possible. For instance, in the U.S., Peabody has approximately 20,000 acres approved or pending approval for final phase bond release, including the first final phase bond releases at our

sites in the Powder River Basin. These final releases verify significant reclamation success at both active and closed mines where standards were met or far exceeded in many cases.

In addition to funding every dollar of our coal mine restoration, Peabody pays tens of millions of dollars each year to the Abandoned Mine Land (AML) Reclamation Program for the reclamation of lands mined before the U.S. Surface Mining and Control Reclamation Act of 1977. As the largest U.S. coal producer, we contribute more annually to the AML fund than any other coal producer. Over the past three years, Peabody has recognized expense related to AML fees of nearly \$120 million.

Environmental Accomplishments

Peabody’s leading environmental and land reclamation practices have been awarded more than 130 honors over the past two decades. In 2019, two of Peabody’s closed mines – Kayenta and Vermillion Grove – received prestigious National Awards from the U.S. Office of Surface Mining Reclamation and Enforcement for reclamation work completed at the sites.

Recognition also extended to our workforce, with Peabody Environmental Engineer Derek Launius of the Cottage Grove Mine named Reclamationist of the Year by the American Society of Mining and Reclamation for his accomplishments in the evaluation and application of technology used in land restoration. In addition, Peabody’s Monty Parke was recognized by the Indiana Department of Natural Resources – Division of Reclamation for his reclamation efforts at several Indiana mines.

Target #1

Achieve a 1:1 average ratio of reclaimed graded acres versus acres disturbed over a three-year period.



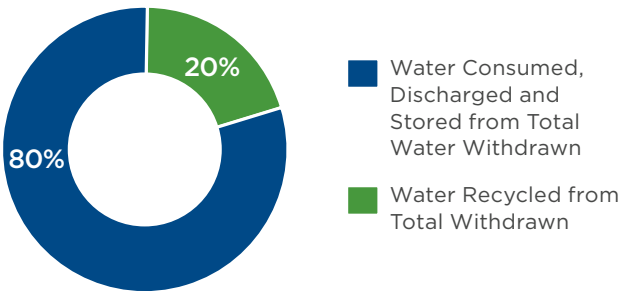
North Antelope Rochelle Mine

SUCCESSFUL VEGETATION ANALYSIS TO RESULT IN FINAL U.S. BOND RELEASE

Bond release in the U.S. is a multi-phased process with verification criteria and performance standards required at each step. The process includes regrading of the mined area, establishing vegetation, and demonstrating statistical stability of that vegetation over time. In fact, final bond approval is often only granted after revegetation has been retained for at least 10 years after completion of post-mining seeding.

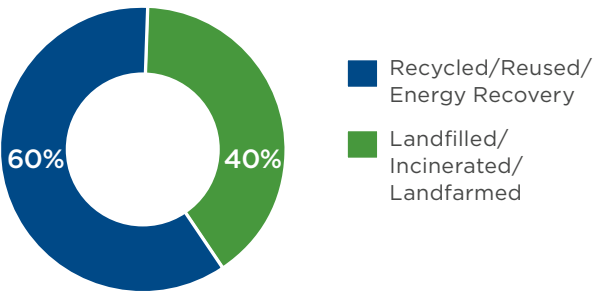
At Peabody’s North Antelope Rochelle Mine in Wyoming, nearly 3,800 acres – equivalent to approximately six square miles – of former mined land is now eligible for final bond release following successful analysis of vegetation seeded over several decades. The approved area includes an estimated 5.7 million shrubs and more than 3,300 trees. In addition, the vegetation production of the reclaimed land is almost twice that of the native area. Final approval for bond release is expected in 2020.

Percent Water Recycled of Total Withdrawn Globally



*Does not include Middlemount JV. CMJV included at 100%.

Recycled/Reused/Energy Recovery vs. Landfilled/Incinerated/Landfarmed



Approximately 20 percent of the water withdrawn by our operations in 2019 was recycled and reused totaling 13,701 megaliters. Peabody’s total water withdrawn in 2019 was 68,587 megaliters compared to 47,251 megaliters in the prior year due primarily to the addition of the Shoal Creek Mine, which calls for increased water pumping due to operational and regulatory requirements.

We believe that access to safe, clean water is a human right and work to minimize our impact on water resources where we operate through conservation, reuse and recycling.

Recycling and Waste Management

Peabody is not a large-scale generator of hazardous waste, and the company employs waste management practices that minimizes overall waste products and maximizes recycling and reuse opportunities before proper disposal. In 2019, recycling, reuse and energy recovery programs accounted for 60 percent of the company’s waste disposal activities. In total, 13,825,858 kilograms of materials were recycled and reused, or were used for energy recovery.

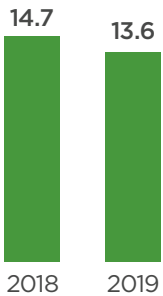
Water Use and Management

We believe that access to safe, clean water is a human right and work to minimize our impact on water resources where we operate through conservation, reuse and recycling.

Each of our mines aligns its water management strategy with the specific challenges of its region and continuously monitors for any impacts. Our operations in more arid environments focus on conservation, while mines in humid climates routinely manage surplus water from storms or groundwater and mitigate flood risk. In Australia, our operations must manage excess water during wet cycles and plan for water shortages during dry cycles. All management and use of water at Peabody mines follow the regulatory frameworks specific to the countries and regions where they are located. Baseline water depletion, or the ratio of consumed water to renewable surface and groundwater supplies, for all Peabody operations is in the low or low-to medium range of less than 25 percent.²³

Peabody primarily uses water for dust control and coal processing at preparation plants. Water is also used for exploration, coal extraction and land reclamation activities, with minor amounts used for mine location drinking water, showers and equipment maintenance. Water sources for Peabody mines include surface water, such as precipitation and runoff; rivers and lakes; ground water; and municipal or purchased water.

Pounds of GHG Emitted per Unit Produced (Includes mine methane emissions)



*Does not include Middlemount JV. CMJV included at 100%.

Coal Waste Impoundments

Peabody maintains five active, above-ground, coal waste impoundments, four of which are of upstream construction, and has additional impoundments in various stages of the reclamation process. Our impoundments contain a mix of coarse and fine coal waste materials, which have a relatively lower flowability as compared to finer materials typically found in non-coal tailings dams. The average holdings of our above-ground impoundments are approximately 9.9 million cubic meters, with variation between approximately 2.8 million cubic meters and 17 million cubic meters. An analysis by the company also indicates there are no employee facilities or major population centers in the path of an unlikely breach of Peabody’s active coal waste impoundments.

Peabody constructs impoundments to comply with best practices and strict regulatory performance criteria in both the U.S. and Australia. The company has also developed its own rigorous standards that require mandatory risk assessments and periodic inspections by independent third-party experts in addition to annual regulatory inspections. All active Peabody’s impoundments have been inspected by an independent third-party expert within the past 12 months.

Greenhouse Gas Intensity and Energy Efficiency

In order to extract the fuel needed for energy, we must use energy, and strive to do so in a responsible manner.

Peabody has traditionally calculated our greenhouse gas emissions intensity across all operations in pounds of carbon dioxide equivalent or CO₂e (CO₂, CH₄ and N₂O) per unit of production (raw tons of coal mined and cubic yards of overburden and rehandle). In 2019, our global greenhouse gas emissions intensity totaled 13.6, approximately 7.5 percent less than the prior year.

Peabody’s Scope 1 direct emissions include consumed diesel fuel and fugitive emissions from our operations, and our Scope 2 emissions relate to the consumption of purchased electricity.

During 2019, we emitted 7.3 million tonnes CO₂e of Scope 1 emissions, approximately 17 percent less than 2018 levels. Our Scope 2 emissions totaled 815,500 tonnes of CO₂e, about 16 percent less than the prior year.

Improvement in the company’s greenhouse gas intensity was driven by a 34 percent reduction in Australia. Greenhouse gas intensity in the U.S. increased 11 percent, largely due to the addition of the Shoal Creek Mine.

Target #2

Integrate environmental standards into risk management system.

Support for Advanced Coal Technology

Beyond responsible coal mining, Peabody strongly supports responsible coal use through greater research, development and deployment of advanced technologies. This includes a focus on high-efficiency, low-emissions (HELE) technologies that are commercially available now, and when deployed, can achieve higher efficiencies and significant reductions in CO₂ and other key emissions than conventional coal-fueled power plants.²⁴ In addition, carbon capture, use and storage (CCUS) represents an integrated suite of both known and emerging technologies that is essential to the pathway toward ultimate zero emissions from coal.²⁵

Since early 2000, we have invested approximately \$315 million in global partnerships and projects to advance HELE and CCUS technologies in the U.S., Australia and China. We also serve in leadership positions and are members of organizations that are focused on technology research, development and deployment, and the appropriate policies to advance these technologies.

Carbon Capture Coalition

Peabody is a participant in the Carbon Capture Coalition, which brings together coal, oil and gas, electric power, ethanol, chemical and energy technology companies, labor unions and national environmental and energy policy organizations in an effort to make CCUS a widely available, cost effective and rapidly scalable technology solution in the U.S. The coalition was a leader in successfully advocating for the 45Q tax credit in the U.S. as pivotal legislation to support global environmental goals. This bipartisan bill aims to reduce costs and barriers to deploy CCUS at scale.

Carbon Utilization Research Council

Peabody serves as co-chair of the Carbon Utilization Research Council (CURC), a coalition of fossil fuel producers, electric utilities, equipment manufacturers, technology innovators, and national associations working to identify ways for the U.S. to use low-cost fossil fuels while meeting societal energy needs and goals.



ARQ TECHNOLOGY

Peabody is a strategic partner in the technology-based startup Arq to advance a novel approach that targets to use coal waste in oil products. The partnership represents an opportunity to simultaneously improve costs and efficiencies by increasing coal recovery; advance sustainability by reducing coal’s environmental footprint; and expand the markets for coal.

COAL21 Fund

Peabody is a founding member and current board chair of Australia’s A\$1 billion COAL21 Fund, an industry initiative to pursue a collection of low-carbon technologies. To date, the COAL21 Fund has committed A\$377 million to the development of low-emissions technologies.

Consortium for Clean Coal Utilization

Peabody is a founding member and board member of the Consortium for Clean Coal Utilization (CCCU), which is a cutting-edge research program focused on advanced coal utilization and carbon capture technologies at the prestigious Washington University in St. Louis. Peabody has renewed its funding commitment to the CCCU through 2021.

Global Carbon Capture and Storage Institute

Peabody is a founding member of the Global Carbon Capture and Storage Institute (GCCSI), which was launched in Australia and now serves as an internationally recognized advocate for CCS. GCCSI aims to provide relevant information on the status of CCS and other practical policy advice regarding CCS to government and other key stakeholders.

Peabody Global Clean Coal Awards

Peabody believes in recognizing the distinguished work of organizations and individuals to advance clean coal technologies. As such, 2019 marked the sixth year for the Peabody Global Clean Coal Leadership Awards, which named top performers in the categories of HELE Innovator; CCUS Innovator; Clean Coal Advocate and Clean Coal Educator. The award honorees included:

- **Electric Power Research Institute (EPRI) —** Honored as HELE Innovator. EPRI has long been a leader in the evaluation and development of HELE coal-fueled generation, among its many research areas. EPRI’s leadership includes being the technical lead on the U.S. Department of Energy-funded advanced materials program, which has focused on developing, testing and validating novel metals needed to make advanced ultra-supercritical coal-fueled power plants a commercial reality. EPRI has also focused on numerous other HELE topics including advanced, high-efficiency coal power cycles and carbon capture and storage.

- **Mitsubishi Heavy Industries (MHI) —** Honored as CCUS Innovator. MHI served an integral role in the completion of the world’s largest carbon capture project on a coal-fueled power plant. MHI’s dedication to carbon capture includes participation in broad stakeholder groups such as the Carbon Utilization Research Council, Carbon Capture Coalition and Energy Advance Center, as well as collaboration on Front-End Engineering Design studies to identify the next large-scale carbon capture project.
- **Carbon Utilization Research Council (CURC) —** Honored as Clean Coal Advocate. CURC has long been a leader in advocacy efforts with policymakers, NGOs and other stakeholders to ensure development of advanced fossil energy technologies is an integral part of the larger U.S. national energy strategy. CURC has provided technology development roadmaps, offered Congressional education on technologies, participated in Congressional hearings and played a critical role in the reform of the 45Q tax credit.
- **Professor Richard Axelbaum, Washington University in St. Louis —** Honored as Clean Coal Educator. Professor Axelbaum has provided significant contributions to the field of combustion and the development of a novel coal-fueled pressurized oxy-combustion power plant concept and possesses a vast understanding of both the fundamental and commercial aspects of advanced coal technologies. As Director of the Consortium for Clean Coal Utilization, Professor Axelbaum oversees the distribution of seed grants to early-stage researchers globally and regularly educates an array of stakeholder groups on the value of coal and progress in minimizing its environmental footprint.

The 2019 recipients reinforced the major environmental benefits that can be achieved using today’s advanced coal-fueled generation technologies as well as the tremendous possibilities for technology in the future.

OUR SOCIAL APPROACH

Our social approach is grounded in our belief that not only our products, but our people, are key to a better business and a better society.

Energy is essential to modern living, reduced poverty, longer lives and powerful economies. Within the energy mix, fossil fuels satisfy approximately 80 percent of the world's primary energy demand. Thermal coal fuels more of the world's electricity than any other source with advantages in cost, scale and reliability. Thermal coal is also an important source of energy for the global production of cement used in concrete, and metallurgical coal is a required component in new steel production. Together, steel and concrete provide key construction materials for building resilient infrastructure including skyscrapers and communications and transportation systems that support industrialization and urbanization. Simply put, we believe our product is beneficial to society, and our company is valuable to our many stakeholders.

At Peabody, we begin by creating a strong, united workforce with a commitment to safety as a way of life. Safety is our first value and leading measure of excellence, and our governing [Safety Principles](#) apply to our employees, contractors, visitors and vendors at our sites, and to any location where an employee is engaged in work activities. We approach safety with both vigilance and humility, understanding that incident-free workplaces can be achieved only by accountability and continuous improvement at all levels of our organization.

We seek a workforce that is comprised of diverse backgrounds, thoughts and experiences. Our company strives to attract and retain the best people, develop their potential and align their skills to important initiatives and activities. We believe in fostering an inclusive work environment built on mutual trust, respect and engagement. And we invest in our employees through health and wellness programs, competitive total rewards and development opportunities. The company's inclusion programs are formalized in policy and practice and are embedded in our Equal Employment Opportunity policy and our [Code of Business Conduct and Ethics](#).

Empowered employees have the ability to empower others. Across our global platform, we work to improve lives through economic benefits, targeted corporate giving and valuable volunteer hours in support of energy, the environment and those causes most significant to the communities in which we operate.

Peabody's policies and practices concerning human rights are also supported by our Code of Business Conduct and Ethics, are in line with the Universal Declaration of Human Rights and apply to all employees, visitors and contractors at our operations globally. The company encourages and informs employees of their ability and obligation to report concerns of misconduct, which would include human rights violations, through a strong program of workplace communications and online training tools. Our board of directors has established procedures for receiving, retaining and investigating reported violations.



Global Safety Results

In 2019, Peabody reported a global Total Recordable Injury Frequency Rate (TRIFR) of 1.64 per 200,000 hours worked compared to 1.45 in the prior year. This marked the eighth successive year with an incident rate below 2.00 and compares favorably to coal mining industry averages in both the U.S. and Australia, which have among the most rigorous mining safety procedures, health and safety standards, and education and training programs in the world.

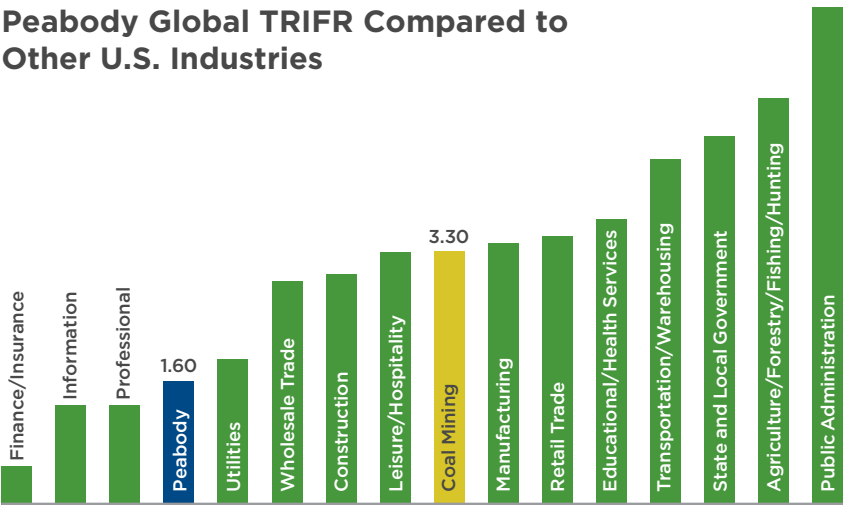
Peabody’s global TRIFR includes employee and contractor injuries that require medical treatment, not only those resulting in lost work time. Incident reporting mechanisms in the U.S. and Australia are refined and tend to have lower thresholds for severity than those in developing nations.

The company’s TRIFR for surface operations totaled 0.91, an 8 percent increase over 2018 results. Peabody’s global underground incidence rate was 3.69 versus 3.35 in 2018, and reflects the integration of the Shoal Creek Mine following the December 2018 acquisition by Peabody.

Peabody’s safety leaders continue to work alongside our Shoal Creek team members to bring the mine’s operations into alignment with Peabody’s standards for safety. Activities include an emphasis on high-hazard activities, enhanced personal protective equipment and vehicle safety modifications. As a result, Shoal Creek’s 2019 TRIFR improved approximately 47 percent from 2018 levels.

The TRIFR for our U.S.-based operations, including Shoal Creek, was 1.75 compared to 1.42 in the prior year, while our Australian operations reported a 2019 incidence rate in line with the prior year. Several mines delivered strong safety performance

Peabody Global TRIFR Compared to Other U.S. Industries



including the Twentymile Mine in Colorado with an incidence rate of 1.39 in 2019. In addition, the Somerville Complex in Indiana achieved an incidence rate of 0.24 with just one reportable injury. Also of note, Peabody’s Wilpinjong Mine in New South Wales recorded an incidence rate of 0.55 in 2019.

Peabody did not have any fatalities at its operated mines in 2019. Tragically, following a highwall failure, a fatality did occur at the independently operated Middlemount Mine joint venture, which Peabody has a 50 percent equity interest, and this fatality is reflected in Peabody’s 2019 safety results.

We continue to take actions across the enterprise to ensure the safety of all individuals at our operations with an emphasis on injury severity rates and preventing significant near misses. All employees, contractors and visitors at our operations receive a safety briefing prior to entering the mine, including safety procedures and emergency protocols specific to the operation. In addition, group meetings at sites and offices begin with a safety share to help embed safety as a way of life.

Target #3

Improve the company’s strong safety performance.

Peabody Way: Safety and Sustainability Management System Standard

Peabody believes all team members must be empowered with the resources, skills and authority to perform their jobs safely. Peabody’s Safety and Sustainability Management System sets out a risk-based framework that is the basis for continuous health, safety and environmental stewardship improvement. The Safety and Sustainability management system is aligned with the U.S. National Mining Association’s CORESafety® framework and is independently audited. The management system sets clear expectations for work activity at operations and is designed to foster a culture that promotes participation and accountability among employees, contractors, visitors and vendors at sites.

The Safety and Sustainability Management System outlines the requirements to safely manage potential hazards and covers topics ranging from training and emergency management to work procedures and permits. Ultimately, the management system details the requirements that Peabody holds itself accountable to as validated through external audits and assurance programs. The program includes performance expectations and timelines to ensure steady progress toward the goal of achieving incident-free workplaces.

Safety Accomplishments

Peabody’s operations illustrate safety practices that continue to earn global and national recognition in both the U.S. and Australia. In 2019, Peabody’s Rawhide Mine was honored with the prestigious Sentinels of Safety Award from the U.S. National Mining Association for recording the most hours worked without a lost-time incident in the small coal processing category.

Peabody also recognizes top safety performance across our mines with our annual [President’s Awards](#), which honor operations with the lowest TRIFR. We also encourage our employees to develop creative ideas to improve safety practices through our annual [Safety and Health Innovation Awards](#).

Now in its ninth year, these awards recognize smart inventions, big and small, that improve safety and often introduce cost and time efficiencies, increase productivity and may be mirrored across the company — and potentially across the industry. The program is another example of Peabody’s commitment to safety and to fostering the sharing of best practices.

PEABODY TAKES PRECAUTIONS TO SUPPORT TEAMS DURING COVID-19

As part of our critical energy and supply infrastructure, Peabody mines continue to support coal-fueled electric power generation and essential steelmaking. We are monitoring the situation daily and are working to keep our teams and broader communities healthy by reducing potential risks and continuing to implement and enhance robust safety protocols in compliance with federal, state and local requirements. While our operations have been designated as essential, our mines will only continue to operate in instances where it is safe and economic to do so.

We are taking strong precautions to support all of those who continue to work in roles across our platform, including temperature checks and health screens; paid COVID-19 leave; enhanced cleaning and sterilization practices; expanded use of personal protective equipment; social distancing boundaries and staggered shifts wherever possible; routine communication to employees on worksite protocols and notification of confirmed or suspected cases; and guidance on incorporating sound safety measures both at work and when away.

Employee assistance channels are also available to our people and include confidential counseling and support to employees and their families, at no cost to the employee. Peabody has also extended aid to our local communities with teams at several sites donating protective masks and other needed equipment to local healthcare providers.

Employee Value Proposition

At Peabody, we offer meaningful and rewarding work. We encourage an environment that is inclusive, collaborative and engaging, and our people work together to support each other to achieve business outcomes. We promote two-way communication that is open and transparent, and fosters mutual trust and respect. The company routinely gathers feedback from team members to identify opportunities to further enhance employee satisfaction and improve alignment with the business strategy.

Creating this type of environment is at the heart of our Employee Value Proposition, or EVP, which helps define why talented, accomplished individuals are attracted to Peabody and why our employees continue to stay with the company. Employees have identified challenge, safety and teamwork as among the key elements of Peabody’s EVP.

We believe retaining a high-quality workforce brings continuity and sustainability to our operations. The typical Peabody employee has approximately 9 years of experience with the company, and more than 60 percent of all Peabody employees remain employed with the company for more than five years.

About 92 percent of our team members work for mine operations in the U.S. or Australia, while the remaining are employed at our global headquarters in St. Louis or other regional offices.

Inclusion and Diversity

Our people are at the core of Peabody’s ability to deliver business results and benefit our communities. We recognize that we must leverage the power of inclusion and diversity (I&D) to continue to attract and retain the best people.

In 2019, about 12 percent of Peabody’s U.S. workforce was racially or ethnically diverse. This is a number that reflects the demographic nature of the largely remote locations of our mining operations — and one that we are continually working to improve. At Peabody’s headquarters in St. Louis, approximately one-quarter of the workforce is racially or ethnically diverse. Racial and ethnic diversity statistics are not available for Peabody’s workforce in Australia due to regulatory restrictions on employee disclosure.

Recruiting and retaining women to roles in mining, an industry that has predominantly and historically employed men, is also a focus across the global organization. As of year-end 2019, women comprised approximately 15 percent of VP and above roles and 18 percent of director and above roles. At our St. Louis headquarters and Brisbane regional office, women totaled 45 percent and 35 percent of the employee base, respectively. In addition, women currently represent 25 percent of our board of directors.

Women currently represent 25 percent of our board of directors.

Peabody has outlined a number of strategic initiatives to further guide the company in key I&D focus areas. In the coming years, we look to identify gaps, challenges and opportunities; define key metrics for success; and establish training and implementation plans with the ultimate goal of full systemic integration of I&D strategic initiatives across all aspects of our company.

In support of these actions, 2019 marked the first full year of implementation following Peabody’s President and Chief Executive Officer Glenn Kellow’s prior-year signing of the CEO Action for Diversity & Inclusion™ pledge. This pledge has been recognized as the largest CEO-driven business commitment for inclusive workplaces, with participation from more than 600 executives globally.

As part of this pledge, Peabody focused on implementing inclusive leader and unconscious bias education to enable our workforce to begin recognizing, acknowledging, and minimizing any potential blind spots in interactions with others, while managing more effectively in today’s workplace.



Target #4
Continue journey toward greater awareness and actions in support of workforce diversity.

In 2019, training sessions were held for all people leaders in the U.S. and Australia totaling more than 500 participants. Of those participants who completed the post-training evaluation, 92 percent reported a deeper understanding of unconscious bias and 85 percent agreed the activities and exercises aided in their development.

In addition, employees at Peabody’s St. Louis headquarters participated in the CEO Action Check Your Blind Spots unconscious bias bus tour. The interactive bus featured innovative activities with virtual reality and gaming technology to allow employees to better understand and recognize unconscious biases that may influence behavior.

These development programs are in addition to the ongoing initiatives led by the three Inclusion and Diversity Advisory Boards (IDAB) at Peabody. These boards — representing the U.S. operations, Australia operations and St. Louis corporate headquarters — champion inclusion and diversity efforts and introduce culture-enhancing activities across the company.

PEABODY NAMES FIRST FEMALE OPERATIONS GENERAL MANAGER

.....

In 2019, Peabody named Rae O’Brien as the general manager of the Metropolitan Mine in New South Wales. O’Brien has served in various senior roles across the mining industry over the past 25 years, and her experience leading teams, improving on-site processes and implementing best practice analysis is an asset to the Metropolitan operation.

Prior to joining Peabody, Rae developed the technical framework for Glencore Coal Assets Australia, including governance of principal standards for geology, strata management, mine planning/design, ventilation, gas, drill and blast, and surveying functions. As a longwall production superintendent with Centennial’s Springvale mine, she implemented the first 305 meter longwall in Australia – the widest in the country at that time – and managed the introduction of longwall automation with longwall crews.

Rae is a strong advocate for inclusion and diversity. She has paved the way as the first female in New South Wales to gain the 2nd Class Mine Manager’s certificate, the first Underground Female Production Superintendent, and the first female to gain her Underground Coal Mine Manager’s certificate.

Total Rewards and Workplace Flexibility

Peabody employees are rewarded through a variety of programs, including a competitive salary, benefits package and results-based incentives. For 2019, the median Peabody employee earned \$113,592, which is more than double the national U.S. average wage.²⁶ The company also offers savings and retirement benefits and paid time off.

Peabody recognizes the importance of work/life balance and strives to provide employees flexibility to manage their work and personal demands. Available options include, part-time employment, modified work schedules, redistributed summer hours and telecommuting. Options vary by location and are dependent on business needs.

In 2019, the company added a paid parental leave program for full-time U.S. employees. While the company previously offered birth mothers paid time off through a short-term disability benefit, the new paid parental leave program allows for additional time off, beyond the short-term disability benefit, to both parents after the birth or adoption of a child.


With this new benefit, U.S. employees may receive six weeks of paid parental leave at 100 percent base pay as the primary caregiver or two weeks of paid parental leave at 100 percent base pay as a secondary caregiver. When combined with a standard short-term disability/recovery benefit, birth mothers now receive 12 to 14 weeks of paid leave.

Employees in Australia are eligible for the national Paid Parental Leave program, which provides eligible working parents up to 18 weeks of paid time off from work to care for a newborn or recently adopted child.

Health and Wellness

Peabody's emphasis on healthy living is a natural complement to our safety culture. We provide our employees with health care benefits that are competitive within the industry and among the majority of large employers.

In the U.S., we offer a medical plan that can be paired with a health savings account to more fully engage employees in their own health and wellness decisions. Peabody also provides advocacy services and tools to help employees navigate their health care choices and become educated healthcare consumers.



**AWARD-WINNING
EMPLOYER**

Peabody was named “Employer of the Year — Energy and Natural Resources” in the 2019 Innovation and Excellence Awards by United Kingdom-based Corporate LiveWire. The award recognizes employers for their use of technology, sustainable development and ethical practices.

Telemedicine services are also available for employees enrolled in our medical plans. In Australia, employees’ universal health care coverage is supplemented with Peabody’s “whole approach” remuneration package.

Globally, Peabody provides a variety of health and wellness programs including annual preventive care incentives, on-site flu vaccinations, mammography screenings, tobacco cessation coaching, weight loss support, nutritional counseling and a wide variety of tools for other life management issues through our Employee Assistance Program.

Learning and Development

Peabody offers a variety of learning events, including mentoring and development programs to aid our employees in their career growth. During the past five years, approximately 32 percent of open positions and 72 percent of director and above positions have been filled by internal candidates through promotions and lateral career development opportunities.

Peabody has offered development programs for managers and supervisors since 2012. These programs are sponsored and facilitated by company leaders, and participants are trained on skills and tools that can be applied immediately in the workplace.

The Leader Development Program for directors and above focuses on areas such as increasing strategic leadership skills, building business acumen,

improving communication skills and putting the Peabody values into action. The program also helps leaders create cross-functional relationships with team members from across Peabody’s operations, which promotes diversity of thought, increases knowledge sharing and collaboration across boundaries and enhances innovation.

Peabody also offers a formal cross-functional mentoring program to allow employees to gain knowledge and perspectives outside of individual areas of expertise. The program helps to build a strong peer network, gain a better understanding of business needs and establish individual development plans with feedback and support from company leaders.

To provide additional development support for all employees, Peabody launched an employee-focused initiative, called #DevelopYou, to encourage team members to take advantage of the development resources available to them as Peabody employees. This online learning and development platform offers a range of tools and resources, including workshops and webinars on creating meaningful development plans.

Benefiting our Communities

At Peabody, we provide an essential product that enables economic prosperity and a better quality of life for individuals and communities worldwide. We also are providing employment opportunities, payroll taxes, coal royalties and charitable contributions for the local communities where our employees live and work. Together, with economic activity generated throughout the value chain, we injected \$10.7 billion in indirect economic benefits into the communities where we operated in 2019. This consists of \$4.1 billion in direct contributions that create jobs and strengthen communities, including wages, taxes, capital investments and vendor contracts.

In 2019, we distributed \$1.2 million in philanthropic cash contributions globally through corporate giving and our charitable match program, which allows us to support the organizations and causes important to our employees. In addition, our workforce generously volunteered some 800 hours equating to more than \$20,000 of in-kind value.²⁷

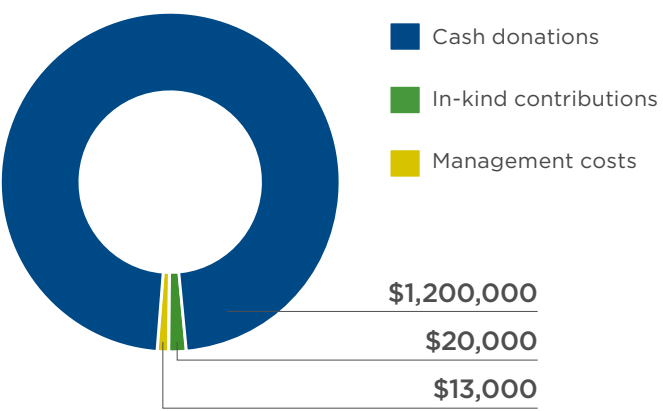
Supporting Indigenous Communities

Peabody has respect for the indigenous people where we operate and maintains strong relationships and communication with those communities throughout the mining process.

In the U.S., Peabody is moving toward final reclamation of the Black Mesa/Kayenta Mine complex in Arizona that previously served as a large employer and economic engine for the Navajo and Hopi Tribes for decades. Progressive reclamation has resulted in restoration of more than 75 percent of lands disturbed across the complex. In coming years, all lands will be restored for highly productive use in line with a comprehensive sustainability plan and ongoing involvement from the landowners – the Navajo and Hopi Tribes.

In Australia, we have developed programs in consultation with traditional owners to give back to those communities and support economic and community development. We believe the best way we can make a difference is through start-up business development support, traineeships and job placements, apprenticeships and work experience.

Peabody 2019 Charitable Contributions
(in U.S. Dollars)



OUR GOVERNANCE APPROACH

Our governance approach provides the framework for how we drive performance and reaches far beyond what we are required to do — to what is right to do. Integrity is a value embedded in our corporate culture and facilitates ethical decision making, allows us to build trust among stakeholders and supports stability within the business.

Our **Code of Business Conduct and Ethics** guides policies and procedures that in turn shape how we work. These policies and procedures support compliance with local, state, federal and national laws and regulations, including securities requirements to promote the best interest of the enterprise and enhance our reputation as a world-class responsible mining company. The Code of Business Conduct and Ethics provides support for ethical decision-making and covers key areas including conflicts of interest, antitrust and unfair competition, fraud, commercial relationships, financial reporting and harassment, among others.

In addition, key governance practices are outlined in our **Corporate Governance Guidelines**. Our practices include an independent non-executive chairman, annual election of all directors, majority voting in director elections, annual board and committee evaluations, independent board committees, annual “Say-on-Pay” advisory voting, proxy access rights and robust stock ownership guidelines, among others. In addition, our executive compensation program is consistent with best practices, aligns

management with shareholders, and incorporates safety and environmental reclamation metrics.

Our approach to corporate governance also focuses on identifying, managing and mitigating risk. Our board of directors oversees an enterprise-wide assessment of risks to appropriately manage and achieve organizational objectives to drive long-term shareholder value.

At Peabody, we routinely engage in open and constructive dialogue with stakeholders, including shareholders, governments and industry groups. We believe it is essential for us to participate constructively in the political process and provide recommendations to policymakers on global energy, environmental and economic matters.

Peabody seeks areas of alignment, utilizing a ‘common ground’ approach that advances the use of coal as part of a balanced energy mix, while working to achieve environmental goals through the use of technology.

Target #5
Apply an expanded supplier screening process and develop a formal supplier code of conduct.



North Antelope Rochelle Mine

Board of Directors

Peabody is governed by a board of directors that offers experience across multiple global tier-one mining, energy, utilities, equipment and capital markets companies, and eleven of our twelve directors are independent.

Each board member serves on one or more of five standing committees: Audit; Compensation; Executive; Health, Safety, Security and Environmental; and Nominating and Corporate Governance. Each committee has adopted a formal charter that describes in detail its purpose, organizational structure and responsibilities. The board conducts an annual self-evaluation to determine whether it and its committees are functioning effectively. In addition, the full board is present for all regular committee meetings.

The board operates under a set of governance principles covering such issues as board and management roles and responsibilities, board

composition and director qualifications, election procedures, meeting procedures, committee functions, director orientation and continuing education, management evaluation and succession, and overall corporate compliance and safety standards.

Committee charters for Peabody’s Board of Directors can be found at [PeabodyEnergy.com](https://www.peabodyenergy.com)

Peabody’s corporate ethics and compliance and safety programs are subject to ongoing evaluation and oversight. The board of directors ensures appropriate corporate governance practices through a dotted-line reporting relationship between management’s compliance function and the board’s Nominating and Corporate Governance Committee.

Risk Management

At Peabody, we believe it is fundamental to understand the risks we face, how those risks may evolve over time, and what steps we can take to manage and mitigate those risks relative to our risk tolerance.

Peabody has a robust Enterprise Risk Management (ERM) process applied at all key levels of the organization. We have developed a standard framework for evaluating risk consequences and likelihood to ensure consistent application and appropriate escalation across the platform.

Our global functions evaluate the risks specific to their respective area. Each function develops escalation and action plans for these risks, then monitors any material changes over time and documents results on area-specific risk registers.

The findings from each area are reported to our executive level ERM Committee, which evaluates the completeness of assessments and the adequacy of action plans and ensures consistency with public disclosures. In addition, the board of directors is provided an update each quarter on major risks and changes. Each board member is also interviewed on an annual basis to share thoughts and concerns on key risks.

Employee Responsibility

Peabody informs employees of their obligation to act in a responsible, ethical and constructive manner through workplace communications, online tools and in-person training sessions. The company also provides targeted education based on employee business function to mitigate key risks, including fraud detection and prevention, anti-bribery and corruption.

Employees are encouraged to report concerns of misconduct directly to their managers, Human Resources representatives, the Chief Legal Officer, Compliance Officer, or to contact the company’s confidential and anonymous Tell Peabody hotline.

Reports to the hotline are managed by the company’s Compliance Officer who determines, in consultation with management and others, the appropriate action, including investigation. Report summaries are regularly distributed to senior management and discussed with the Nominating and Corporate Governance Committee.

Political and Lobbying Activities

In 2019, Peabody made \$236,142 in U.S. corporate political contributions. In addition, \$63,000 in political contributions were made by the Peabody’s Political Action Committee (Peabody PAC), a nonpartisan political fund that provides financial support to candidates and is funded entirely through voluntary contributions, primarily from Peabody employees who meet certain eligibility requirements.

Peabody’s total U.S. federal lobbying expense for 2019 was approximately \$1.33 million, as determined using the Lobbying Disclosure Act method for reporting such expenditures.

Peabody political contributions, Peabody PAC and U.S. lobbying expenditures are a matter of public record, and the most current information is available through the Federal Election Commission, state campaign finance report, and the U.S. Senate and U.S. House of Representatives. Peabody publicly reports U.S. federal lobbying expenses on a quarterly basis, including the issues lobbied. Our reports are filed under the name of Peabody Investments Corp.

Where required, Peabody files similar periodic reports with state agencies, reflecting state lobbying activities. Unlike other states, Indiana requires that lobbyist compensation be publicly disclosed, and we reported \$60,000 in expenses for fiscal year 2019. No lobbying expense was reported in any other state.

PEABODY APPOINTS NEW MEMBERS TO BOARD OF DIRECTORS

.....

In February 2020, Peabody welcomed three new members to the company’s board of directors. The board was expanded to include Elliott Management Equity Partner **Dave Miller** (left), Elliott Management Portfolio Manager **Samantha Algaze** (center) and tenured coal industry executive **Darren Yeates** (right). Together, these individuals bring a broad range of financial, portfolio and operational expertise that complements the strong skill sets and diverse perspectives already presented in the company’s board of directors.



Industry Groups, Trade Associations and Other Organizations

Peabody is a member of numerous industry groups and trade associations, as well as nonprofit organizations that represent the mining industry and business community in discussions led by governments and other stakeholders. These groups help the industry reach consensus on policy issues.

Peabody has been advised by the organizations to which it belongs that approximately \$270,539 of the annual dues and other company payments to U.S. industry groups and trade associations in 2019 were used for lobbying expenditures and/or political activities.

Oversight of Political and Lobbying Activities

For the past several years, Peabody has actively worked to expand our support to candidates on both sides of the political aisle. Peabody recognizes that political candidates, office holders, industry groups and trade associations may support positions that align with some of our interests but conflict with other interests. In these instances, the company bases involvement on those areas of agreement that it believes will bring about good public policy.

Peabody political and lobbying activities are directed by members of the executive leadership team with oversight from the company’s board of directors and are conducted in accordance with applicable law and corporate policies as well as our Code of Business Conduct and Ethics.

The Nominating and Corporate Governance Committee of the board of directors annually reviews recipients and amounts of political contributions made by Peabody and the Peabody PAC (to the extent permitted by law), as well as information regarding lobbying expenditures, industry group and trade association participation and grassroots lobbying expenditures.

Stakeholder Engagement

As part of our commitment to transparency and disclosure, we participate in ongoing communication with our stakeholders, including investors, employees, customers, suppliers, governments and industry groups. We seek to strengthen our relationship with these stakeholders through discussions around topics such as our business strategy and priorities, operational updates and our holistic approach to ESG, including executive compensation, among other topics.

We appreciate feedback from all stakeholders and have established communication channels, including key relationship contacts and direct lines to Peabody’s corporate headquarters. Communications are elevated to the executive leadership team and are forwarded and reviewed by the full board as appropriate.

Target #6

Evaluate alignment with applicable ESG disclosure platforms.

For additional details on [Peabody’s 2019 political contributions, PAC contributions, lobbying activities](#) and [industry groups and trade associations](#), please visit [PeabodyEnergy.com](#). Peabody’s [Corporate Policy on Political Contributions](#) and [Corporate Policy on Lobbying Activities](#) can also be found on our website.

ENDNOTES

1

International Energy Agency Coal Outlook 2018, table 1.1.

2

International Energy Agency 2018 World Energy Outlook, page 528; 2018 BP Statistical Review data tables.

3

International Energy Agency 2018 World Energy Outlook, page 528.

4

Platts World Electric Powerplant Database.

5

Platts World Electric Powerplant Database.

6

Energy Information Administration.

7

Woodmac 2019 Polar Vortex Performance Review, page 24.

8

International Energy Agency Coal Outlook 2018, table A4.

9

World Coal Association Proof Points, January 2019, page 2.

10

United Nation’s Human Development Index.

11

Center for Energy Policy and the Environment at the Manhattan Institute: Not Beyond Coal, How the Global Thirst for Low-Cost Electricity Continues Driving Coal Demand, page 9.

12

Center for Energy Policy and the Environment at the Manhattan Institute: Not Beyond Coal, How the Global Thirst for Low-Cost Electricity Continues Driving Coal Demand, page 3.

13

Wood Mackenzie Coal Market Trade, Long-Term Outlook H2 2019, Dec. 2019.

14

International Energy Agency 2019 World Energy Outlook, page 23.

15

World Health Organization: <https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health>.

16

Gradient Study, 2014. Literature based Analysis of the Relative Airborne Exposure Impacts of Emissions from Coal fueled Power Plants versus Traditional Household Solid Fuel Combustion, page 9.

17

World Coal Association Q1 2019 Presentation, page 27.

18

World Coal Association Proof Points, January 2019, page 7.

19

Wood Mackenzie: Outlook and Benefits of an Efficient U.S. Coal Fleet, page 5.

20

UNFCCC: <https://www4.unfccc.int/sites/submissions/indc/Submission%20Pages/submissions.aspx>

21

IPCC, 5th Assessment Report, 2014; Included in WCA Proof Points, January 2019, page 9.

22

International Energy Agency, Ready for CCS Retrofit: The potential for equipping China’s existing coal fleet with carbon capture and storage 2016.

23

World Resources Instituted, Water Resource Atlas.

24

World Coal Association: <https://www.worldcoal.org/reducing-co2-emissions/high-efficiency-low-emission-coal>.

25

World Coal Association: <https://www.worldcoal.org/reducing-co2-emissions/carbon-capture-use-storage>.

26

Social Security Administration National Average Wage Index: <https://www.ssa.gov/oact/cola/AWI.html>

27

Value of Volunteer Time: <https://independentsector.org/value-of-volunteer-time-2018/>