# **2012 Corporate and Social Responsibility Report**





Peabody Energy's mission is to be a leading worldwide producer and supplier of sustainable energy solutions that enable economic prosperity and a better quality of life.

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*Cover: Peabody Energy (NYSE: BTU) empowers economic prosperity, stronger societies and a better quality of life around the world. Our 8,500-strong workforce delivers more than 680,000 tons of coal a day to fuel electricity and enable steelmaking in 30 nations across six continents. We are a global leader in sustainable mining and clean coal solutions.* 

Documents posted at *PeabodyEnergy.com* include the company's mission statement, safety vision and policies that support the company's goals of social responsibility and sustainable development.

### Values

- Peabody Energy's culture is driven by strong corporate governance and a continuous focus on safety, stewardship, sustainability and best-in-class performance.
- Safety is core to the company's mission, and all employees commit to a vision of an incident-free workplace.
- Peabody believes clean, affordable electricity improves quality of life and longevity.
- Peabody believes greater use of clean coal drives energy security, economic growth and environmental solutions.
- Peabody is the global leader in advancing low-carbon and near-zero emissions technologies.

# 2012 Results

- Delivered the best safety performance in Peabody's history for the fifth consecutive year, including record results in Australia and a U.S. incidence rate that is more than 66 percent better than the industry average.
- Achieved record revenues, record U.S. Mining Adjusted EBITDA and record Australian sales volumes; completed a series of critical late-stage expansion projects; and integrated a major acquisition.
- Earned more than 35 awards for safety, corporate, environmental and social responsibility globally.
- Invested \$7.2 million in charitable giving to strengthen communities around the world.
- Generated more than \$21.5 billion in total economic benefits worldwide, including \$5.375 billion in direct contributions such as wages, taxes, royalty payments, capital investments and vendor contracts.
- Marked another year of environmental excellence, restoring more than 4,000 acres of mined lands and recycling more than 18,000 tons of materials.
- Pursued the ambitious objective to become first producer to rehabilitate 90 percent of available land owned by Peabody in Australia by 2017, restoring 332 acres in 2012 and 2,545 acres since the effort began.
- Operated the world's largest and most productive mine the North Antelope Rochelle Mine in the U.S. Southern Powder River Basin.

The use of the words "Peabody," "the company," and "our" relate to Peabody, our subsidiaries and our majority-owned affiliates.

#### CORPORATE AND SOCIAL RESPONSIBILITY

# **Peabody Energy's Reporting Process**

Management believes the company's external communications vehicles, including the annual report, Securities and Exchange Commission (SEC) filings, website, employee communications and the corporate and social responsibility report, give stakeholders a full portrayal of the company's commitments and progress.

This report provides information regarding responsibilities that, by design, are not as thoroughly discussed in other communication vehicles.

In compiling this report, Peabody reviewed Global Reporting Initiative guidelines for sustainability and incorporated appropriate reporting data. This report is reviewed by the Health, Safety, Security and Environmental Committee and Nominating and Corporate Governance Committee of the Peabody Energy board of directors. The board and the company's executive team are invested in advancing best practices in corporate and social responsibility.



Peabody Energy Chairman and Chief Executive Officer Gregory H. Boyce

All of us share the same basic desire to make the world cleaner, healthier and more energy secure. Peabody delivers, 24 hours a day, seven days a week, in 30 nations on six continents.

# To Our Stakeholders:

Economic turmoil, resource scarcity and rising energy costs in recent years remind us of the essential role that reliable, affordable, accessible energy from coal plays in human health and welfare.

At Peabody Energy, we believe energy poverty is the greatest crisis the world confronts and increasing access to all forms of affordable energy – including coal – is the only response.

For half of the global population, the productive day finishes when the sun sets. No refrigeration is available to keep food and medicines fresh. Most students must study by candlelight. Hundreds of millions can rely only on traditional biomass stoves for light and heat, deforesting landscapes and breathing fumes in the process. Such energy deprivation causes severe and direct environmental harm, and the challenge is expected to grow. By mid-century, five out of every 10 people could lack adequate access to energy if global population and energy demand growth continues at the projected pace. In its most recent study on energy poverty, the International Energy Agency called on nations to invest \$41 billion annually or risk failure in the global effort to eradicate energy poverty.

Coal is the only fuel with the large scale and low cost to meet this challenge. For hundreds of millions of people, access to affordable energy from coal is closely linked with greater longevity, literacy and a better standard of living. Peabody is the world's largest private-sector coal company and a global leader in clean coal solutions. We participate in multiple advanced clean coal technology projects and partnerships that are described in detail in this report. These 21st Century technologies prove that our energy and environmental objectives are compatible and achievable. Every day, we come closer to our ultimate goal of near-zero emissions from coal.

As we grow this technology foundation, Peabody also is minimizing its carbon footprint. Robust conservation efforts in 2012 have enabled Peabody to reduce greenhouse gas intensity 10 percent below 2011 levels. In the past year, we earned multiple honors for environmental excellence and community care, restoring thousands of acres of thriving forests, farms, fields and prairies and investing millions of dollars in communities through strategic philanthropic partnerships.

Peabody is globally recognized for a world-class, well-trained workforce. The people at Peabody offices and operations ended 2012 with the best safety results in the company's 130-year history and have made working at a Peabody mine safer than working at a shopping mall based on the rate of incidents. With these achievements

in 2012, Peabody continued to live its mission to be the "leading worldwide producer and supplier of sustainable energy solutions that enable economic prosperity and a better quality of life."

I'm more convinced than ever of the power of Peabody to help build a better and more sustainable world by providing a path for the future. This way forward – the Peabody Plan – would achieve universal energy access by 2050 in a way that puts people first and advances society's important goals of energy security, economic growth and environmental solutions. The plan is achievable, it's humane, and it's working right now through increased coal use and deployment of advanced clean coal technologies.

At Peabody Energy, we believe energy poverty is the greatest crisis the world confronts and increasing access to all forms of affordable energy – including coal – is the only response. I am optimistic about the future because I know that coal – and Peabody – will shape it. In some parts of the world we operate in a tailwind and in others we face a headwind. But all of us share the same basic desire to make the world cleaner, healthier and more energy secure. Peabody delivers, 24 hours a day, seven days a week, in 30 nations on six continents. We thank our board of directors for its support; our employees, who make Peabody strong; and this report's readers, for your interest in sustainability. Simply put, Peabody is coal. And coal is life. Empowered.

Greg Bonce

Gregory H. Boyce Chairman and Chief Executive Officer

Young Guineans study beneath the glare of airport parking lot lights because only one fifth of the African nation's 10 million people have access to electricity. Affordable energy is closely correlated with literacy, longevity and quality of life.

#### **CORPORATE AND SOCIAL** RESPONSIBILITY

# EMPOWERING



Added \$21.5+ billion in total global economic benefits.



Reduced greenhouse gas intensity

10% worldwide.



Contributed \$7.2 million to charitable organizations.



Marked safest year in **130-year** history.

Working at a Peabody U.S. mine is safer than in a mall and 66% safer than at other U.S. mines.



Provided 139,000 hours of training to 7,900+ employees and vendors.

# THE WORLD in 2012



Increased number of minority business partners by 50%.



# Restored +4,000acres,

including pristine wildlife habitat, 130 acres of lakes and 488 acres of prime farmland.

honors

for safety, financial and environmental excellence.

Earned

35+

**Delivered more than** 680,000 tons

of coal every day to power nearly 30 nations across six continents.



# PUBLIC RESPONSIBILITY I

# Every day in 2012, 300,000 people flipped a switch for the first time... and 1,300 million more were left in the dark.

Every day, nations are turning to coal to lift citizens out of energy poverty.

Global coal use reached 7 billion tonnes and is expected to grow another 4 billion tonnes in 25 years even as technologies deliver environmental progress.

Every day, Peabody Energy advocates for energy security, economic growth and environmental solutions through greater use of coal.

> American Electric Power (AEP)'s Turk Power Plant in Southwest Arkansas is one of the cleanest, most efficient coal-fueled plants ever constructed, with major emissions 80 percent below the existing fleet. The plant utilizes Powder River Basin coal and reached peak construction employment with 2,200 workers. The project and associated economic development will produce an estimated annual payroll of \$9 million and about \$4 million in annual tax revenues.



# Peabody believes affordable energy from coal is the foundation of our global economy and a fuel for social progress.

Global coal use has soared 300 percent since 1970; this rapid rise is closely correlated with growth in gross domestic product and higher standards of living. Such an economic transformation has profound implications for energy policy and human development. The United Nations links life expectancy, educational attainment and income with per capita energy use. Studies show that each tenfold increase in electricity is linked to a 10-year increase in life.

The world's strongest economies continue to turn to coal as the only sustainable fuel, at scale, that can meet growing energy needs. One new, 500 megawatt coalfueled power plant is expected to start up somewhere in the world every three days for the next five years. And in five years, 20 percent more steel will be required to build the world's rising megacities, requiring an additional 200 million tons of metallurgical coal. Coal makes up 60 percent of global energy resources. It is widely dispersed, broadly available, easily transported, energy-dense and accessible. This section highlights:

- The Peabody Plan
- Near-Zero Emissions and Carbon Management
- Near-Zero Emissions and Low-Carbon Projects
- Btu Conversion Technologies
- Broadening Support for Coal

# The Peabody Plan

Peabody believes the greatest crisis the world confronts in the 21st Century is not an environmental crisis predicted by manmade computer models but a human crisis fully within our power to solve: global energy poverty.

Hundreds of millions of people are moving to cities, entering the middle class and achieving an improved quality of life. Still, energy demand is expanding at a time when one of every two people lacks access to adequate electric power to meet the most basic needs such as electric heat and light, refrigerated food and medicine; 1.3 billion people have no electricity access at all. Without action, this gap will only grow. By midcentury, the global population is expected to reach 9 billion people, putting the world on course to have 5 billion to 6 billion people requiring energy access based on forecast population growth. Over the same time, developing nations will continue to urbanize and industrialize at an unprecedented pace. Global gross domestic product is projected to increase by more than 280 percent, electricity demand to rise an estimated 130 percent, and steel production to double.



Sources: International Energy Agency World Energy Outlook 2011 and The World Bank World Development Indicators 2012.

More than half the world's population – 3.6 billion people – lack energy access and 1.3 billion have no electricity access at all.

The Peabody Plan is the company's five-point initiative to provide universal energy access by 2050 while advancing society's important goals of energy security, economic growth and environmental solutions through greater use of advanced coal technology. The plan calls on nations to:

- 1. Work to eliminate energy poverty by ensuring that at least half of all new electric generation capacity is fueled by coal.
- 2. Replace older traditional coal plants with advanced coal technologies.
- 3. Develop at least 100 major carbon capture, utilization and storage projects around the world in 10 years.
- 4. Deploy significant coal-to-gas, coal-to-chemicals and coal-to-liquids projects globally in the next decade.
- 5. Commercialize next-generation clean coal technologies to achieve near-zero emissions.



#### Electricity Enables People To Live Longer And Better

United Nations Links Affordable Energy to Quality of Life

Source: CIA World Fact Book. United Nations Development Program's Human Development Report.

People need electricity for the most basic needs, such as fresh water, heat, and sanitation, to reach the upper levels of the United Nations Human Development Index. Even at a minimum threshold of 4,000 kWh per capita per year, this usage is 50 percent lower than the per capita average used in the European Union.

#### **Near-Zero Emissions and Carbon Management**

Clean coal technologies have powered a major environmental success story. As new advances have come on line, the United States has made significant strides in reducing sulfur dioxide, nitrogen oxides and other emissions. Use of coal-fueled electricity has nearly tripled since 1970, as key emissions per megawatt hour have decreased 87 percent.

Advanced coal technologies build on this progress. Upgrading the world's coal fleet with technologies available today would deliver a 90 percent improvement in sulfur dioxide, 93 percent less nitrogen oxide and virtually zero particulates, according to data from the U.S. Department of Energy. Doing so also would achieve carbon dioxide emissions that are 30 percent below the oldest U.S. plants. Replacing older coal plants with this advanced generation could create \$4.3 trillion in economic benefits and 21 million new jobs during a four-year construction process, according to a study by Management Information Services. Avoided carbon dioxide (CO<sub>2</sub>) emissions would have the same effect as removing 325 million passenger vehicles from the road, essentially the entire U.S. passenger car fleet. All of this can be achieved without carbon capture and storage (CCS), and these plants would be carbon capture ready when the technology is commercially deployable.

To address concerns about carbon and climate, nations are also turning to carbon dioxide utilization and storage, which involves injecting CO2 into oil fields or other deep geologic formations, including deep saline reservoirs. The world has centuries of potential storage capacity, and researchers have identified storage locations capable

#### Advanced Coal Technologies Drive Major Environmental Improvement

#### U.S. Emissions Decline 87% Since 1970 as Coal Use Nearly Triples



Source: Energy Information Administration 2012; U.S. EPA Air Trends Data, 2012; Peabody analysis 2012. GDP in 2005 U.S. dollars.

Coal's environmental efficiency continues to improve through use of advanced technologies. Criteria emissions have been reduced 87 percent per megawatt hour in step with a tripling of coal use and doubling of gross domestic product per capita since 1970.

of holding at least a century of CO<sub>2</sub> emissions from power plants. The International Energy Agency has called for nations to commission 2,000 plants by mid-century.

Both the science and technologies for CO<sub>2</sub> utilization have been widely used by the petroleum industry for a half century to recover more oil and are well understood. In this enhanced oil recovery process, injecting carbon dioxide into a given reservoir allows greater capture of the "stranded" oil, a resource that could not be recovered by traditional methods.

The National Coal Council, a federal advisory committee to the U.S. Secretary of Energy, estimates the United States could produce an additional 2 million to 3 million barrels of oil daily through greater deployment of CCS. If the worldwide average oil recovery rate rose just 10 percent through use of this technique, the IEA estimates the increase would be equivalent to new reserves larger than those of Saudi Arabia.

Peabody continues to advocate for the clear regulatory and legal frameworks to broadly deploy carbon capture, utilization and storage (CCUS) technologies on a global scale.

# **Near-Zero Emissions and Low-Carbon Projects**

Peabody is a leader in sustainable mining and clean coal solutions, with lowemissions, low-carbon projects and partnerships in the United States, China and Australia.

# **China Initiatives**

#### GreenGen, Tianjin, China

The GreenGen power plant and research center is China's signature climate project and began generating commercial power outside Tianjin in 2012. This major coal gasification project is designed to be the world's largest near-zero emissions coal plant. It is a global model, and Peabody is the project's only non-Chinese partner.

## China and United States Energy Cooperation Program, Beijing

Peabody is a founding member of the United States-China Energy Cooperation program, which includes Fortune 500 companies pursuing clean energy projects in coordination with key government agencies of both countries. Participants are advancing a variety of projects, including coal-based power generation with carbon capture and storage, smart power grid development and clean transportation.



Sources: Platts World Electric Power Plant Database, January 2013, and Peabody Energy Global Analytics.

There are some 450 gigawatts of advanced coal-fueled plants in operation or under construction worldwide. China leads this major build out of coal-fueled generation, representing more than half of the world's 21st Century coal fleet.

# **U.S. Initiatives**

## FutureGen, Illinois

Peabody is a founding member of the FutureGen Alliance, a consortium of energy and coal companies cooperating with the U.S. Department of Energy (DOE) to develop a first-of-its-kind near-zero emissions coal-fueled power plant. The project will involve upgrading the Meredosia Energy Center in Illinois with oxy-combustion technology to capture 90 percent of the plant's carbon emissions. The technology is cleaner than conventional natural gas combined cycle plants and lower cost than other forms of post-combustion carbon capture. Using safe, proven pipeline technology, the plant will transport carbon dioxide to Morgan County, Ill., where it will be stored in deep geologic formations.

#### Asia Leads Global 21st Century Coal Build-Out

#### **Prairie State Energy Campus, Illinois**

Peabody currently owns a 5 percent equity stake in the Prairie State Energy Campus in Southern Illinois, the largest new coal-fueled generating plant to be built in America in the last quarter century. The plant's second unit started up in late 2012, and the project is among the most efficient coal-fueled plants in the nation and ranks among the cleanest 6 percent of all U.S. coal plants, virtually eliminating major emissions. Sound long-term forecasts show electricity costs from Prairie State will be extremely competitive with other fuels during the anticipated 30-year life of the facility. Prairie State has the lowest fuel and operating costs of any coal plant in the United States.



Sources: The U.S. Environmental Protection Agency Clean Air Markets database, July 2012; Project Permits.

Equipped with \$1 billion in environmental controls, the Prairie State Energy Campus is a great environmental success story, achieving near-zero sulfur dioxide and nitrogen oxide emissions and 15 percent to 30 percent less carbon dioxide than the oldest plants.



The Prairie State Energy Campus illustrates the power of advanced coal plants to achieve environmental objectives and revitalize communities. The plant has created 4,000 real green jobs during construction with overall wages approaching \$1 billion since 2007.

#### **Consortium for Clean Coal Utilization, St. Louis**

Peabody is a founding member of the consortium, which is advancing coal and energy research at Washington University in St. Louis. The center is testing oxy-coal combustion and use of  $CO_2$  to grow certain species of algae. As part of the International Center for Advanced Renewable Energy and Sustainability, the consortium belongs to a partnership of universities, industry leaders and foundations advancing clean coal technologies.

#### National Carbon Capture Center, Alabama

Peabody is a founding member of the carbon research center, a public-private partnership with the U.S. DOE to advance low-carbon technologies at a research center in Wilsonville, Ala. The center brings scientists and experts together to analyze technologies in a coal-fueled power plant setting. Sponsors include Peabody, Arch Coal Inc., American Electric Power, The Southern Company, Luminant, the U.S. Department of Energy and the Electric Power Research Institute.

#### Prairie State Is Global Model, Among Top 6% Cleanest U.S. Coal Plants

# **Australia Initiatives**

### **COAL21 Fund, Canberra**

Peabody is a founding member of the COAL21 Fund in Australia, an industry effort to pursue a collection of low-carbon technologies, including the 30 megawatt Callide-A Oxyfuel Project in Queensland. The project started carbon capture in December 2012. This is the world's first demonstration of oxyfuel with carbon capture and is designed to remove 70 tonnes of carbon dioxide per day for two years.

#### **Global Carbon Capture and Storage Institute, Canberra**

Peabody is a founding member of the Global Carbon Capture and Storage Institute, which is hosted by the Australian government and has a mandate of developing 20 integrated industrial-scale carbon storage projects in 10 years. The institute has a number of strategic partners that include the Carbon Sequestration Leadership Forum, the International Energy Agency, the World Coal Association, the International Aluminum Institute, the Carbon Capture and Storage Association, the Asian Development Bank, the World Bank, the Climate Group, the Clinton Climate Initiative and the Coal Industry Advisory Board.

## **Btu Conversion Technologies**

Securing a sustainable energy future is a worldwide concern at a time when energy resources remain centered in unstable regions, subject to cartels to control price and supply, or too small to be meaningful for baseload power. Affordable, easily transported and energy-dense, coal is the world's most widely available fossil fuel resource. Coal's versatility is a core advantage. Btu Conversion technologies allow coal to be converted into multiple high-demand forms of energy. Nations are implementing projects to convert coal to diesel and jet fuels through liquefaction, which is economic as prices for oil reach \$100 per barrel. Coal can also become a substitute natural gas and is a feedstock for multiple chemicals. China is leading this expansion, prompted by expensive and unstable imports and rapidly rising demand. Coal-to-chemical conversion is currently one of the fastest-growing uses for coal in the nation, and China has initiated pilot projects totaling \$14 billion that are set to deliver 15 billion cubic meters of substitute natural gas by 2015.

# **Broadening Support for Coal**

As an industry leader, Peabody seeks to influence public perceptions and legislative outcomes in favor of greater coal mining and use. The company acts independently

and in cooperation with associations and grassroots advocates to emphasize coal's far-reaching benefits in the United States and Australia. Under the company's 2012 leadership of the American Coalition for Clean Coal Electricity (ACCCE) Communications Committee and National Mining Association, the industry launched a series of campaigns that involved national bus tours, mailings, rallies and major print and electronic paid, social and earned media efforts in support of coal. Internally, the company engaged suppliers, created an advocacy toolkit for employees and launched a Vote for Coal campaign in the United States.

Polling results were positive. In the third quarter of 2012, respondents to a multi-year ACCCE poll were asked to identify energy policies they support following the election and prioritized greater use of clean coal electricity. More than three-quarters of all adults agreed that in the next four years America should emphasize clean coal electricity. That supporting view was shared by 64 percent of all Democrats, 80 percent of Independents and 88 percent of Republicans. In that same poll, a bipartisan 76 percent called for the expansion of industry and government research programs to further develop clean coal technologies.



A coal exhibit in Xinjiang, China, showcases Peabody's growing presence in Asia and world-class practices in safety, training, productivity, resource recovery and environmental care.



Hundreds of citizen volunteers rallied for coal in public events in state capitals, cities and Washington, D.C., throughout the contentious U.S.-election season. Participants called on elected leaders to recognize the importance of coal to fueling economic growth and a high quality of life.

Peabody is expanding its United States and Australia advocacy efforts, proactively placing pro-coal advertisements in national publications and continuing to advance its widely recognized "Coal Can Do That" campaign. The program delivers messages through multiple channels: direct stakeholder contact, earned media, interactive web and social media, including Twitter and YouTube.

Peabody believes it is essential to participate constructively and responsibly in the political process. All Peabody contributions comply with state and federal election laws.

Additionally, Peabody contributed \$2.9 million to Australia's COAL21 Fund in 2012, a voluntary fund supported by producers and established by the Australia coal industry to commercialize clean coal technologies. In total, the company directed \$11.5 million to research and educational initiatives designed to advance these technologies.

Peabody actively engages with legislative and regulatory bodies regarding public policy issues such as access to resources, taxes, energy policy, trade and environmental legislative and regulatory policy. Pursuant to the Lobbying Disclosure Act, the company publicly reports its U.S. federal lobbying expenses quarterly (including the issues lobbied). Reports are accessible to the general public on the U.S. Senate's website at *Senate.gov*. The portion of dues paid to trade associations that is used for U.S. federal lobbying is included in the amounts reported in public Lobbying Disclosure Act filings. Peabody provides similar periodic reports to U.S. state agencies that reflect state lobbying activities. These filings also are publicly available.



Peabody Energy's flagship global and Coal Can Do That websites comprise two of a number of channels in which the company communicates its industry leadership, corporate responsibility and advocacy efforts for coal and the Peabody Plan.

At times, the company engages in grassroots lobbying with respect to legislation that affects its business, as well as contributes to organizations that write and endorse model legislation. Peabody also participates in trade associations, including those that engage in legislative activity related to matters affecting energy policy. The company may not share all of the views of these organizations. Peabody's direct, indirect and grassroots lobbying activities are directed by the executive leadership team with oversight from the company's board of directors, and these activities are conducted in accordance with applicable laws, the company's Code of Business Conduct and Ethics, and its corporate policy on lobbying activities.

Management provides reports to the board's Nominating and Corporate Governance Committee at least annually with respect to our lobbying expenditures, trade association participation and grassroots lobbying activity.

The company makes extensive public disclosure of its substantive positions on legislation through a variety of media, including Peabody's annual report to shareholders, the company's annual corporate and social responsibility report, external websites such as PeabodyEnergy.com and CoalCanDoThat.com, testimony before legislative bodies and through multiple public presentations.

Peabody is advancing projects and partnerships in the United States, China and Australia toward the ultimate goal of near-zero emissions from coal. Chief among these is the GreenGen power plant and carbon research facility that was commissioned in 2012. Peabody is the only non-Chinese partner in the project.

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# ECONOMIC AND CORPORATE RESPONSIBILITY

# Every day in 2012, coal fueled...

More U.S. energy than any other resource.

More than 40 percent of worldwide power.

Enough steel to build 38 Golden Gate bridges.

# Every day Peabody Energy...

Generated \$58 million in economic benefits.

Trained 20 employees.

Donated \$20,000 to nonprofit causes worldwide.

Day after day, year after year, coal fuels the clean, affordable and abundant energy and steel that build healthier and wealthier societies.

In the past 20 years, the number of global megacities has doubled as developing nations industrialize and urbanize at an unprecedented pace. Rapid industrialization, modernization and urbanization are lifting billions of people around the world to a better quality of life and driving enormous demand for energy.

The world continues to turn to coal to meet the need. Coal has been the fastest-growing major fuel for the past decade. It currently accounts for more than 30 percent of global energy use – the highest level since 1969. Demand is projected to continue to grow, surpassing oil as the worlds largest energy source as early as 2013.

Peabody Energy delivered more than 680,000 tons of coal daily in 2012 to fuel electricity and enable steelmaking in nearly 30 nations across six continents. The company is the world leader in sustainable mining and clean coal solutions, and was recognized with more than 35 honors for excellence in safety, corporate and financial performance, environmental excellence and social responsibility in 2012. Among these accolades is the Global Energy Commodity Excellence Award for leading the global coal sector in performance and stewardship.

Peabody's 2012 results demonstrated the strength of the company's global platform in the face of extraordinary industry pressures. This year, the world's largest economies were affected by significant macroeconomic challenges, including easing Asian growth, lower U.S. coal use and recession in Europe. Despite these challenges, Peabody delivered notable financial results: record revenues, record U.S. Mining Adjusted EBITDA and record sales volumes in Australia. Peabody contained costs, increased its U.S. reserve position, completed critical late-stage expansion projects and integrated a major acquisition.

The company also continued to empower economic prosperity, stronger societies and a better quality of life around the globe. In 2012, Peabody contributed more than \$21.5 billion in direct and implied economic benefits, which includes \$5.3 billion in wages, taxes, royalty payments, capital investments and vendor contracts. Peabody also made strategic charitable investments of \$7.2 million. In the Economic and Corporate Responsibility section, you will find:

- Empowering Life
- Global Partnership and Charitable Giving
- Corporate Governance and Ethics
- Board of Directors
- Code of Business Conduct and Ethics

# **Empowering Life**

Supply disruptions and rising energy costs of recent years emphasize the essential role affordable, accessible energy from coal plays in the 3Es: economic growth, environmental solutions and energy security.

Coal powers the world's lights, fuels factories and builds cities cleanly, affordably and reliably. Globally, coal maintains a distinct cost advantage over natural gas and other energy sources and is the leading baseload fuel to replace declining nuclear generation. An estimated 450 gigawatts of coal-fueled generation are expected to come on line around the world by 2017, requiring 1.4 billion tonnes of thermal coal per year at expected capacity.

The world also is forecast to increase steel output about 20 percent in the next five years, requiring more than 200 million tonnes of metallurgical coal annually. More than 85 percent of projected demand growth is expected to come from China and India, where hundreds of millions of people continue to move to cities, enter the middle class and pursue a higher quality of life that requires significantly more energy and steel.



Coal has been the fastest-growing major fuel for the past decade, and international energy research firm Wood Mackenzie estimates that coal could overtake oil as the world's largest energy source by as early as 2013.

#### **Environmental Solutions and Energy Poverty**

Peabody believes that energy access is a human right, as essential as food, shelter and water. Yet half the global population lacks adequate energy today to meet the most basic needs. For these families, the day finishes far earlier due to a lack of light. No refrigeration is available to keep food and medicines fresh, and an estimated 1 billion people are served by health facilities that have no access to electricity. Baseload electrification rates for the health care sector are lowest in Southeast Asia and Africa: in India 46 percent of health facilities, serving an estimated 580 million people, are without electricity. In sub-Saharan Africa, doctors and nurses in three out of 10 health facilities serve patients in the dark, and an estimated half of all primary school students in the developing world must study by candlelight.

Hundreds of millions of people rely on traditional biomass stoves to heat homes and cook food. In some nations, stoves burning wood, agricultural residues and other wastes account for more than 90 percent of household energy consumption. Often women and children spend hours gathering these fuels, contributing to deforestation, damaging the ecosystem and reducing economic productivity.

The World Health Organization estimates that each year 1.3 million people die as the result of fumes from these indoor stoves and a total of 1.5 million succumb to the effects of energy poverty. Only malnutrition and HIV/AIDS take more lives.

This is a human tragedy and an environmental crisis with a solution: clean low-cost energy from coal. Economic strength is closely correlated with environmental progress; more prosperous nations can afford greater environmental protections and more advanced technologies. Tens of billions of dollars have been invested by U.S. utilities in clean coal technologies to reduce emissions over the past several decades. Since 1970, emissions per kilowatt-hour from coal-fueled generation have been reduced by 87 percent.

The next generation of coal-fueled technology builds on this progress. Peabody is a global leader in 21st Century Coal technologies, advancing low-carbon and near-zero-emissions projects and partnerships on multiple continents. The company is the only non-Chinese partner in GreenGen, China's signature climate project that is designed to be the world's largest near-zero emissions coal plant; Peabody holds an interest in the Prairie State Energy Campus, which ranks among the cleanest U.S. coal plants while achieving the lowest fuel and operating costs of any American coal plant; and the company is participating in multiple Btu Conversion initiatives.

#### **Economic Growth**

Coal is a significant catalyst for economic growth, powering both the largest and best global economies. Coal mining and coal use directly provide more than 7 million jobs and indirectly support hundreds of millions more.

#### Low-Cost Electricity In America Correlates With States That Use Coal



Retail Cost per kWh and Percent of Coal Generation

Source: U.S. Energy Information Administration, February 2013.

Coal fuels the most affordable electricity in the United States. The 10 states that use the highest percentage of coal enjoy electricity rates that are about 47 percent less than the cost of states that rely the most on other fuels.

Beyond employment and direct economic benefits, coal's low cost and large scale have made energy accessible and affordable across the developing world. Consider the rapid economic development of contemporary China. The International Energy Agency has credited coal with fueling China's economic miracle, noting that the resource "underpinned China's massive and unprecedented growth in output" and "has helped to improve the standard of living." The United Nations and other groups have shown a tight correlation between human longevity, economic development and electrification.

# **Global Partnership and Charitable Giving**

Peabody works to sustain a social license to operate through world-class safety and social responsibility practices that empower communities around the world. The company views good corporate citizenship as making a positive difference wherever employees live and work.

In 2012, Peabody injected \$21.5 billion into global economies. This includes \$5.375 billion in direct contributions such as the wages, taxes, royalty payments, capital investments and vendor contracts that create jobs and fuel prosperity. Peabody paid nearly \$1.6 billion to governments to satisfy more than 50 different taxes and royalty requirements.



Peabody Energy Chairman and CEO Gregory H. Boyce reads to children at the University City Children's Center, one of many nonprofit groups funded by United Way of Greater St. Louis. He visited the agency during his tenure as chairman of a record-breaking 2012 regional fundraising campaign for United Way that resulted in community giving of more than \$72 million.



The company also seeks to improve lives and livelihoods through philanthropic partnerships, community outreach endeavors and robust employee volunteerism. Peabody provided nearly \$7.2 million in 2012 charitable funding to organizations around the world. The company's strategic social investments aim to fuel the health and welfare of communities; educate the next generation; restore, conserve and beautify the environment; and engage employees to give back.

A major area of charitable focus is the company's world headquarters in St. Louis. For more than half a century, Peabody has called the city home and sought to empower the region. In 2012, Peabody continued this tradition through grants that benefited nearly 200 regional nonprofit service agencies, cultural institutions, educational entities and civic organizations.

Perhaps the most visible demonstration of the company's community commitment in 2012 was Peabody's leadership in a regional campaign to raise funds for United Way of Greater St. Louis, a nonprofit intermediary that provides vital support to 170 member health and human service agencies that assist 1 million people in the greater St. Louis metropolitan region. Peabody Chairman and Chief Executive Officer Gregory H. Boyce led the regional fundraising campaign, helping to raise a record \$72 million. The effort ranked among the most successful fundraising initiatives for United Way organizations in the United States during the year. Employees from the corporate offices and the Gateway Mine near Coulterville, III., broke participation and fundraising records as well. Including the company match, \$1.36 million was generated for the United Way.

#### **Charitable Contributions And Scholarships**

| Dollars in Thousands                  | 2012    |
|---------------------------------------|---------|
| Arts and Culture                      | \$ 729  |
| Civic and Public Affairs              | \$ 455  |
| Community and Economic Development    | \$ 567  |
| Environmental                         | \$ 230  |
| Health Care and Social Services       | \$1,325 |
| Higher Education                      | \$ 640  |
| Mining and Coal Education Initiatives | \$1,178 |
| Youth Services/Education K-12         | \$ 843  |
| Disaster Relief                       | \$ 111  |
| Scholarships                          | \$ 612  |
| Employee Matching Gifts               | \$ 404  |
| Other                                 | \$ 92   |
| Total                                 | \$7,186 |

Scholarships include \$430,000 to Navajo and Hopi youths.

The company invests in partnerships and organizations including those that advance health and human services, education, community development, youth services, the environment and arts and culture.

Also in 2012, Peabody partnered with world-renowned pediatrics hospital SSM Cardinal Glennon Children's Medical Center to launch "Homers for Health Powered by Peabody." The unique fundraising program was jointly chaired by St. Louis Cardinals baseball players Matt Holliday and David Freese and encouraged the public to pledge donations to Cardinal Glennon hospital based on the number of home runs Cardinals players achieved during the regular baseball season. In 2012, nearly half a million dollars was raised from 160 home runs.

#### **Community Outreach in Australia**

Stakeholder engagement is a primary emphasis of Peabody's community relations strategy in Queensland and New South Wales. The company seeks to partner with and fully engage landholders and community leaders.



Peabody sponsored former Navajo "Code Talkers," who served as grand marshals in the 2012 Flagstaff, Ariz., Chamber of Commerce 4th of July Parade. Veterans Sidney Bedonie and George Willie used the Navajo language as an unbreakable code to convey critical battlefield messages during World War II.

To encourage open, constructive dialogue, the company hosts regular information sessions, organizes community consultative committees, sends newsletters, staffs phone hotlines and participates in industry forums and working groups. Just outside the Metropolitan Mine in Helensburgh, a Coal Community Consultative Centre was established in February with regular office hours; visitors learn firsthand about mine developments and share thoughts and concerns.

This investment yields results. For example, when the community consultative committee informed the Wambo Mine leadership that local residents had raised concerns about noise, the mine introduced noiseless radio frequencies and signals inside the cabs of vehicles. The improvement was audible and applauded by community leaders.

In 2012, Peabody continued to direct charitable gifts to health and human services organizations benefiting communities where the company operates. For example, the Wambo Mine sponsored the Cystic Fibrosis Race Day in Newcastle to raise funds for research and patient support. A A\$20,000 gift from Peabody directly benefited the Children's Hospital at Westmead, John Hunter Pediatric Hospital and Cystic Fibrosis New South Wales.

The company also continued an annual commitment to the Black Nugget races, an event raising funds for charities in the Mudgee community near the Wilpinjong Mine in New South Wales. Peabody's A\$25,000 donation helped upgrade a local aged-care facility and purchase life-saving equipment for the Mudgee Ambulance service.

Cultural enrichment is another area of longstanding focus in Australia. Peabody has provided nearly A\$200,000 to the Queensland Youth Orchestra since the start of the company's partnership. The group is the state's major orchestral training and performance organization for young musicians aged 10 to 23 and fosters youth music scholarship and appreciation. Peabody's support enables orchestra students to tour the state and perform alongside local school students in joint concerts. In 2012, more than 20,000 people attended performances, and the regional concert and tour engaged 220 students, dozens of Peabody employees and countless community members.

#### **Community Outreach in the Americas**

Community outreach also is core to the company's activities throughout the United States. Peabody's Arizona operations provide a case in point: Peabody operates on a highland plateau called Black Mesa on the Navajo and Hopi reservations through lease agreements with both tribes. The company creates local jobs and has injected \$3.3 billion into tribal economies since operations began, including more than \$117.1 million in 2012. Peabody also provides a number of in-kind contributions to residents in this arid and remote region, including coal for home heating, potable water and road building services.

Cultural appreciation is at the core of the company's community engagement. Peabody is one of the nation's largest private employers of Native Americans, and the company has earned global honors for a first-of-its-kind managed grazing program that returns essential cultural plants to cultivation that are used for medicinal, ceremonial and traditional purposes.

Education also is an area of emphasis. In Steamboat Springs, Colo., the Twentymile Mine hosted a one-day "Coal Camp" for friends and family that featured interactive lessons on modern mining. The mine team also developed a mock coal mine display and hosted students from neighboring schools for a series of tours and lessons about how a mine functions. Peabody sponsors a range of educational programs, from outdoor environmental science programs in Indiana to Raising Readers, a parent-child reading program that distributed 4,000 books across Northeast Wyoming.





Brown Elementary Principal Matthew Phillips is presented with a Peabody Energy Leaders in Education honor during a student assembly at his Florissant, Mo., school. He joins 100 educators recognized in 2012 with the award, which celebrates the profound difference these professionals make in young lives.

## **Peabody Energy Leaders in Education**

Peabody created the Leaders in Education program with the premise that a single educator can make a profound difference in a child's life. In its third full year, the Peabody Energy Leaders in Education program honors dedicated K-12 education professionals across Colorado, Illinois, Indiana, Missouri and Wyoming with community recognition and an unrestricted \$1,000 monetary award. The program honors educational professionals of all kinds, from teachers and coaches to librarians and counselors. By recognizing this broad array of role models, the company seeks to celebrate the adults who help children achieve their true potential and ignite greater investment in education and educators nationwide.

Every school year, in each region where the program operates, a single winner is distinguished from all the honorees as the Educator of the Year and receives an additional \$5,000 gift. Recipients are selected anonymously by committees of top educators, business leaders and community volunteers. Nearly 100 men and women were recognized during 2012. The program also reached more than 1,700 schools in 44 different counties, with a potential impact on more than 1.2 million students.

Many honorees – and the program itself – attracted coverage in local community newspapers and radio and television stations. Supporters include dignitaries such as Missouri Governor Jay Nixon, who commended Peabody for launching a program that, "…recognizes and rewards the transformational change that teachers and mentors can bring about in the lives of our children. This visionary approach is a model that I hope will inspire others to step up, pitch in and support the dedicated folks who are making a critical difference in public, private and charter schools all across our state."

#### **Empowering Employees to Give Back**

Peabody has designed a variety of initiatives to empower employee charitable giving and volunteerism, from annual food and toy drives to fundraisers for local families in need. Peabody's Dollars for Doers program funds eligible nonprofits based on the number of hours employees volunteer for these organizations. Peabody employees have donated hundreds of hours and given thousands of dollars to organizations as diverse as Food Outreach in St. Louis; Girl Scouts of Southwest Indiana; and the Powder River Symphony in Wyoming.

The company's Matching Gifts program also encourages charitable donations by matching employees' financial gifts to eligible nonprofits. In 2012, Peabody increased giving through its Matching Gifts and Dollars for Doers programs by more than a quarter over 2011 levels.

Charitable athletic events have provided valuable teambuilding opportunities while supporting healthier communities in 2012. A group of St. Louis-based volunteers walked and ran to raise more than \$15,000 for Susan G. Komen Race for the Cure to support breast cancer research, screening, treatment and education programs, and the company's Evansville, Ind., office sponsored a water stop for a similar Komen event. In Australia, Peabody employees donned cycling gear and participated in the Ride to Conquer Cancer, a biking event that raised more than A\$57,000 for cancer research at the Queensland Institute of Medical Research. Separately, employees participated in the 96-kilometer Kokoda Challenge, an endurance race to raise funds for youth programs.

Still, physical activity isn't always necessary for successful fundraising. For the past six years, employees at the North Goonyella Mine in Australia have raised more than A\$200,000 for the Leukaemia Foundation's "Shave For A Cure" simply by shaving off their facial hair. In 2012, the foundation named the North Goonyella Mine among its top 30 fundraisers on the continent.

In Australia, employee volunteerism also healed communities following tragedies. The company organized a major charity golf tournament near Peabody's Moorvale and Coppabella mines in Australia, bringing together employees, vendors and community leaders to raise funds for the two surviving sons of a member of the Moorvale team who died along with other family members in a vehicular accident.

## **Recognition for Community Leadership**

Peabody's community leadership is garnering attention and honors from every region where the company operates:

- Peabody was named a 2012 Business of the Year by the Grants Chamber of Commerce in New Mexico and a Top 50 company from the St. Louis Regional Chamber.
- The company earned recognition on the *InvestorPlace.com* Real American Index for sizeable statewide employment and philanthropy efforts in Wyoming's Powder River Basin.
- Peabody received the Australian Business Arts Foundation (ABAF) Regional award in Queensland for its partnership with the Queensland Youth Orchestra.



Employee volunteers gather for Pedal for the Cause, a bike race to raise money for cancer research and treatment held each year in St. Louis. Peabody actively encourages volunteerism at offices and operations throughout the world.

The award honors highlight businesses and arts organizations that partner to provide access to culture and the arts in regional and rural areas.

• Peabody earned a Communitas Award for Leadership in Community Service for its commitment and funds raised as part of the 2012 United Way of Greater St. Louis annual campaign.

# **Corporate Governance and Ethics**

Good corporate governance is the foundation of Peabody's actions at every level. The company's mission statement is prominently displayed in office locations and throughout mining locations and reads: "Peabody Energy's mission is to be a leading worldwide producer and supplier of sustainable energy solutions that enable economic prosperity and a better quality of life."

It is the company's working statement of principles and receives constant attention.

Peabody's corporate governance program is robust, extensive and subject to ongoing evaluation by independent, third-party rating agencies.

The board reviews the company's corporate governance practices at least annually to ensure they continue to reflect best practices and promote the best interests of shareholders. During this process, the board solicits input from leading governance advisors who are independent of management. The board also considers views expressed by third parties, including independent governance ratings agencies.

In 2012, the company's shareholder rights plan expired and was not renewed. The company maintains various other shareholder protections that may be viewed unfavorably by some shareholder activists and governance rating agencies.

The board periodically evaluates these protections with assistance from outside experts to confirm that they continue to provide significant benefits and serve the best interests of shareholders.

# **Board of Directors**

Peabody is governed by a board of directors consisting of 11 members as of March 31, 2013. Ten members of the board are independent under New York Stock Exchange (NYSE) rules. The board of directors appoints and oversees the Chief Executive Officer and other officers, who are charged with the conduct of the company's business. Directors have full access to officers and employees of the company and its affiliates.



The "three games of men" - wrestling, horse racing and archery - are main features of Naadam, Mongolia's most important traditional festival. Peabody was proud to participate in this unique nomadic cultural event, which took place in July 2012 at the National Stadium in the capital city of Ulaanbaatar.

Additional director biographies and compensation details are featured in Peabody's annual proxy statement. The board has appointed five standing committees from among its members to assist it in carrying out its obligations. These include the Audit Committee; Compensation Committee; Executive Committee; Health, Safety, Security and Environmental Committee; and Nominating and Corporate Governance Committee. Each standing committee has adopted a formal charter that describes in detail its purpose, organizational structure and responsibilities.

# **Corporate Governance Principles**

The board of directors 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, and management evaluation and succession. Peabody governance practices include:

- At least a majority of the company's directors must meet the criteria for independence established by the NYSE. The independence of each director is reviewed at least annually and at other times when a change in circumstances could potentially impact a director's independence.
- The company's articles of incorporation provide for the annual election of directors, and the company's bylaws provide for majority voting in uncontested director elections.
- The Audit; Compensation; Health, Safety, Security and Environmental; and Nominating and Corporate Governance committees are comprised entirely of independent directors.
- Non-management directors meet at least quarterly in executive session without management.
- The board has established a robust Lead Independent Director role.
- The board and its committees conduct annual performance reviews to evaluate whether they are functioning effectively and to determine what actions, if any, could improve their performance.
- Each director participates in an orientation program shortly after his or her election, and each director is required to attend, at company expense, an appropriate continuing education program at least once every three years.
- The board and each committee have the authority to hire independent legal, financial and other advisors without consulting or obtaining the advance approval of any officer.
- Each member of the Audit Committee has been determined by the board to be an "Audit Committee financial expert" for purposes of the Securities and Exchange Commission's (SEC) rules relating to audit committees.
- The Audit Committee must pre-approve all audit and non-audit services performed by the company's independent registered public accounting firm to ensure that such services do not impair that firm's independence.
- Directors may not serve on more than four other public company boards.
- Directors are required to submit their resignations to the board for consideration following a job change.
- Directors may not stand for election or be appointed to fill vacant or newly created board positions after reaching age 75.

- The company has adopted a "claw back" provision that allows the board, at its discretion, to require that current or former executive officers reimburse the company for all or any portion of cash or equity-based compensation under certain circumstances following an accounting restatement by the company.
- The company has adopted and disclosed stock ownership requirements for executive officers and directors.

# **Code of Business Conduct and Ethics**

Directors, officers and salaried employees must adhere to a rigorous Code of Business Conduct and Ethics, which is designed to avoid conflicts of interest, achieve compliance with laws and protect the company's assets. This code defines ethical standards to help establish and maintain our reputation as a world-class company.

Employees regularly certify their obligation to act in a responsible, ethical and constructive manner through workplace communications and training sessions. All salaried employees annually are required to take online training and provide written certification of compliance with the code. Any exceptions or qualifications are investigated and reported to the board of directors. Any modification in or waiver of the code for executive officers or directors must be approved in advance by the board of directors and promptly disclosed as required by law or stock exchange regulations.

#### **Communications, Transparency and Training**

Peabody's shareholders, customers, employees and the public can communicate directly with the board of directors by submitting written comments to the Chairman, Peabody Energy, Peabody Plaza, 701 Market St., St. Louis, MO 63101. These written communications are forwarded to each board member and reviewed by the full board whenever appropriate.

The company also has established procedures for the receipt, retention and investigation of reported violations of the Code of Business Conduct and Ethics. Employees who have concerns about business practices are asked to raise their concerns to their supervisors or human resources representatives.

If this type of communication is not a viable option based on the nature of the issue, the company has established a third-party hotline called Tell Peabody that allows for confidential and anonymous communication of potential concerns.

These are reported to the company's Chief Compliance Officer who determines the appropriate action, including investigation. Report summaries are routinely distributed to senior management and discussed with the Nominating and Corporate Governance Committee.

Peabody ensures that key corporate compliance and governance information and documents are accessible to shareholders and other stakeholders on *PeabodyEnergy.com* and in the company's annual proxy statement.

To ensure legal and ethical compliance, regular training sessions are conducted at

appropriate levels on a variety of topics, including

safety, environmental laws, antitrust and competition laws, anti-bribery and corruption laws, securities and insider trading laws, equal employment opportunity matters, discrimination and sexual harassment. Peabody also maintains robust corporate compliance policies and approval processes that are updated regularly and communicated throughout the organization.

The company has formalized existing relationships between law, compliance and ethics, internal audit, risk, supply chain, human resources and corporate security through the creation of a Compliance Committee comprised of senior management representatives from each area. Key oversight areas for the Compliance Committee are: compliance and ethics, internal audit, risk and enterprise risk-management.

Peabody's current compliance program incorporates many effective elements. Still, the company's executive leadership believes this is an area that requires continuous attention. Peabody continues to supplement its risk management assessment to ensure that all significant legal risks affecting its businesses have been identified and that appropriate training programs and policies are in place to mitigate those risks and detect violations.



# **EMPLOYEE** RESPONSIBILITY

# Every day in 2012, the 8,500 people of Peabody Energy produced enough coal to...

Operate all the hospitals in the United States.

Build the steel frames for half a million passenger cars.

Every day somewhere in the world, four dozen employees learned mining and safety best practices in high-tech classrooms, and thousands more helped Peabody earn its reputation for safety, sustainability and performance.

> The largest surface mine east of the Mississippi River, Peabody Energy's Bear Run operation benefits from a diverse, highly skilled workforce.

Peabody Energy provides an empowered and collaborative environment for its global workforce of more than 8,500 people. The company embraces a culture of mutual trust, respect and continuous improvement.

Safety is core to this culture, and the company has an intense focus on achieving zero incidents of any kind – a workplace without any injuries, occupational illnesses, property damage or near misses. Strong communications, training and prevention programs helped Peabody realize this goal while marking record safety results. In 2012, Peabody achieved the safest global performance in the company's 130-year history, as measured by incidence rate.

#### 2012 U.S. Incidence Rate: Peabody Compared To Other Industries



Sources: Peabody 2012 data; U.S. Department of Labor, Occupational Safety and Health Administration, 2011 data; Mine Safety and Health Administration, 2012 data.

In 2012 for the fifth consecutive year, Peabody Energy delivered its safest global performance in company history. On average, working at a Peabody operation remains far safer than working in most other U.S. business sectors.

The company also emphasizes training and career development and an environment that values inclusion and diversity. Employees are supported by comprehensive benefits and competitive compensation programs. In the Employee Responsibility section, find more about:

- Global Safety Results
- Emergency Preparedness
- Safety Awards and Recognition
- Employee Relations

# **Global Safety Results**

- Inclusion and Diversity
- Workforce Planning
- Learning and Development
- Health and Wellness

Safety is Peabody's core value. The company's ultimate objective is to operate without an incident of any kind, and Peabody actively involves employees in developing approaches to prevent accidents and improve record keeping, reporting and accident investigations. The root causes of all incidents are thoroughly analyzed to avoid any recurrence. The company also stresses personal accountability, requiring every employee to commit to safety goals and governing principles. Managers, frontline supervisors and employees are held accountable for personal safety and the safety of others.

The company's operations around the world continue to demonstrate improvement in safety performance. Peabody delivered the best global results in its history with an incidence rate of 1.82 per 200,000 work hours in 2012. This marks a 9 percent improvement over the company's 2011 performance and the company's fifth consecutive year for setting safety records. This superior performance was recognized with more than two dozen major safety honors in 2012.

Peabody's incidence rate, which is monitored through the company's safety tracking system, represents the number of injuries that occurred for each 200,000 employee hours worked. Peabody also tracks incidence rates for its Australian mines in this fashion to consistently measure performance across its global operations. Companywide, Peabody underground mines achieved a 3.33 incidence rate in 2012, a nearly 10 percent improvement over 2011 results. In 2012, the company's global surface mines realized a 1.21 incidence rate, a slight reversal after multiple years of improvement.

Leading the company's global surface operations in safety performance were the Eaglefield Mine in Queensland, Australia, and the Cottage Grove, Somerville Central and Wild Boar mines in Illinois and Indiana in the U.S. Midwest. All of these operations achieved zero reportable incidents in 2012.



Safety improvement in the Midwest, Colorado and Southwest regions in the Americas and at Peabody Energy Australia helped the company achieve another year of record safety results worldwide.

# **Global Safety Initiatives**

Peabody believes all employees must be empowered with the resources, skills and authority to perform their jobs safely. Employees begin every meeting with a "Safety Contact," a reminder about staying safe, and are compensated with incentives based on safety performance.

Since 2004, Peabody's "Safety: A Way of Life" safety and health management system has helped drive significantly improved performance. During his tenure as chair of the U.S. National Mining Association (NMA) board, Peabody Chairman and Chief Executive Officer Gregory H. Boyce oversaw the April 2012 launch of CORESafety, a safety and health management system developed by NMA member companies. With CORESafety, industry leaders came together to share best practices and design a system that can serve as a global model. The goal is to eliminate fatalities and achieve a 50 percent reduction in the injury rate at U.S. mines in five years. Ultimately, the overriding objective of the companies participating in CORESafety echoes Peabody's safety goal: to achieve zero incidents of any kind.

Peabody is assessing gaps between CORESafety standards and current safety practices at Peabody operations. Major opportunities for improvement in 2012 included increasing communication of responsibility and accountability for safety, implementing comprehensive risk assessment procedures in the Americas that are similar to the best practices employed in Australia, strengthening occupational health management, and establishing formal change management processes.

Peabody collaborates with government agencies to identify and test emerging safety technologies. The company also partners with other companies and certain government agencies to pursue new technologies that can bolster safety. Working with E-Spectrum Technologies and the U.S. National Institute for Occupational Safety and Health, Peabody is testing the Rescue Dog emergency system at the Twentymile Mine in Colorado. This system uses low frequency signals that can reach depths of more than 2,000 feet. A mobile surface unit sends signals to a number of



Employees at the Twentymile Mine in Colorado were honored in 2012 with the President's Award in the Americas for achieving a 0.96 incident rate, a new record for Peabody underground operations. The safest underground mine in the business unit, Twentymile marked a safety rate that is less than a third of the U.S. average for all coal mines, based on the latest MSHA data.

sub-surface, battery-powered underground units. Once activated, the underground units continuously communicate known location and underground conditions to the surface unit and allow miners to send text messages.

Peabody also continues to test proximity detection systems on underground section equipment at the Gateway Mine in Southern Illinois and the North Goonyella Mine in Australia. These systems alert operators and shut down equipment that comes near a person or another piece of equipment, providing added protection for employees in high congestion, low visibility areas.

Peabody's safety and engineering teams completed ventilation reviews at global underground operations in 2012. Each review included an audit of all plans, air quality measurements and inspection results for all airways, fans, seals, controls and airmonitoring devices. If there are any concerns regarding air quality readings, workers immediately vacate the area until all issues are resolved. Safety chambers are installed at Peabody underground operations, and self-contained self-rescue units are kept on site and are inspected regularly.

All employees are encouraged to advance ideas that enhance safety. The company's third annual Safety Innovation Awards program honored safety inventions across the global platform in 2012. The strongest submissions earned a series of awards:

- Best Overall Innovation Haul Road Roundabouts, North Antelope Rochelle Mine, Wyoming: Converting a four-way intersection into a roundabout enhances safety by increasing visibility, reducing vehicle brake wear and eliminating the need for road grading because vehicles are no longer forced to come to full stops.
- Best Overall Second Place, Safe Road System, Coppabella and Moorvale mines, Queensland: This system increases the safety of mine haul roads based on road geometry, road material and the reuse of water for dust control.

Located in Southern Illinois, the Cottage Grove Mine, which earned the President's Award as the safest surface mine in the Americas in 2012, achieved more than 17 months without a reportable injury.



- Best Overall Third Place and Most Transferable, Cardinal Rules DVD, Brisbane Office, Queensland: This team developed a training DVD to illustrate correct and incorrect safety behaviors based on company Cardinal Rules, which guide the Australia business unit.
- Most Original Ladder Spotter, Twentymile Mine, Colorado: Employees developed a stabilizing rod that attaches to the leg of a standardized ladder and can be used underground. The spotter increases stability and supports greater weights than the ladder alone.
- Best Cost-to-Impact Ratio Continuous Miner Cover Handles, Columbia Rebuild Shop, Indiana: A Peabody employee designed a simpler cover handle that eliminates pinch point hazards.

#### Safety in the Americas

Peabody's 2012 Americas incidence rate of 1.19 reflected a 20 percent improvement over 2011 and a rate 66 percent better than the industry average.

The Wambo underground operation in New South Wales earned a President's Safety Award for achieving the company's best Australian safety performance for underground mines in 2012. Wambo reduced its incidence rate 38 percent from a year ago.

The company's U.S. surface operations achieved incidence rates that were 50 percent safer than the industry average, while U.S. underground operations also outperformed peers by 50 percent. Among the regions, operations in Colorado and the U.S. Southwest delivered the strongest improvements.

All these achievements are notable, but mean little in the wake of a fatality in November at the Willow Lake Mine, an underground operation in Illinois. The incident was thoroughly investigated and, in two weeks, the company made the difficult decision to close the mine due to the operation's failure to meet Peabody's operating standards.

Each Peabody Americas operation employs a Mine Safety and Health Team to routinely review mine incidents and reportable injuries. These employees evaluate near misses, help develop preventive measures, communicate findings to the workforce and work to ensure best practices are always applied. These teams include both management and hourly employees who represent multiple shifts and work crews. Supporting these efforts is the company's centralized, crossfunctional Central Safety and Health Team. This group is responsible for establishing benchmarks, developing safety initiatives, and introducing a robust regimen of safety audits and observations that enforce the highest standards.





Emergency preparedness competitions sharpen skills and test the knowledge of mine rescuers and emergency responders at Peabody. The company's all-volunteer mine rescue teams are among the industry's best trained, earning honors in competitive events around the world.

# Safety in Australia

Safety performance has improved for five consecutive years at operations in Queensland and New South Wales, and the Australian region had another record-setting year in 2012. The company's Australian incidence rate reached a new low of 2.64 incidents per 200,000 hours worked in 2012, an improvement of 4 percent over 2011. Two newly acquired operations – the Coppabella and Moorvale mines – achieved a 17 percent year-over-year improvement in safety.

The company's underground mines in Australia achieved an 8 percent improvement over the prior year. When compared to peers, the company's operations in Queensland outperformed the industry safety average by 40 percent. In New South Wales, Peabody delivered safety results that are 25 percent better than the state's typical mine. The Peabody Incident Management System tracks hundreds of new entries and helps reclassify data from older legacy platforms, allowing employees to document incidents, analyze principal risks and design and manage critical controls. The company's Australian Safety Leadership Team and Corporate Safety Committee actively lead safety improvement efforts with support from site-based Safety Leadership teams. These groups review "high probability" incident investigations and safety performance, direct audits and develop safety improvement strategies. The team also standardized safety measurement, risk management and personal protective equipment procedures throughout Australia in 2012.

# **Emergency Preparedness**

On a regular basis, Peabody's mine rescue and first aid teams use their training to assist in emergencies far beyond mine boundaries. The skills of the company's mine rescue and surface mine emergency response teams are recognized as world class across the industry.

In the United States, a Viking Mine employee and volunteer firefighter initiated a project to fund a new fire department FireTextResponse system to dispatch text messages to fire department members. The technology helps the department notify responders and secure the proper apparatus for each fire hazard. This donation is only one of many examples of how Peabody and its employees apply safety excellence both inside and outside the workplace.

In Australia, Peabody continues to be a major sponsor of the Central Queensland Rescue helicopter, which serves the mining industry and the broader community. Operating out of Mackay on the central Queensland coast, the helicopter helps save lives, and minimizes severe trauma and hospitalization needed for emergency patients. With the assistance of supporters, such as Peabody, more than 5,000 rescue missions have been flown.

The company's Crisis Management Plans are regularly reviewed, updated and aligned across the global organization. Peabody also implemented the Everbridge Emergency Notification System in 2012 for its St. Louis workforce and global crisis management team members. Everbridge allows the company to instantly dispatch text messages, emails and phone voice mail messages via work and personal contacts to employees in the event of an emergency or significant event requiring critical communications. Similar systems are in use across the company's global platform.

# **Employee Relations**

Peabody fosters a spirit of collaboration and innovation, offering employees career growth opportunities and financial rewards linked to the company's safety, operational and financial performance.

A career with Peabody is one of the highest-paid and highest-skilled jobs in the communities where Peabody operates. An average U.S. coal miner earns about \$81,200 a year, compared to the average U.S. worker who earns \$47,815. In Australia, the average mining industry weekly pay – the highest among all industries – is more than \$718.80 greater than the next highest sector, financial and insurance services, according to the Australian government's Bureau of Statistics.

#### **Employee Demographics**

Peabody employs approximately 8,500 people in the United States, Australia, Asia and Europe.

The typical employee has worked at Peabody for nine years. The company maintains a 95 percent voluntary retention rate by providing a safe work environment, strong leadership development initiatives and competitive compensation. Approximately 93 percent of Peabody's global employees worked at mine operations and regional offices, while the remaining employees work at the company's global corporate headquarters building in St. Louis.

## **Inclusion and Diversity**

Peabody believes it is important to reflect the multicultural and multigenerational communities in which it operates and the global markets it serves. The company is focused on welcoming a diversity of experiences and ideas to enhance the work environment, encourage greater creativity, improve employee commitment and contributions, and anchor Peabody in the communities where the company operates.

Policies and practices formalize Peabody's vision for greater inclusion and diversity, including the company's Equal Employment Opportunity Policy and Code of Business Conduct and Ethics. Peabody also builds an inclusive culture through communications, training and development, staffing and a robust minority supplier program.

In 2012, Peabody continued to make progress in inclusion and diversity. The company hired approximately 300 employees in the United States in 2012; 17 percent were non-Caucasian.

The company also reported that women held 19 percent of director roles or higher at its global headquarters. In Australia, the company increased the numbers of women in the workforce by 70 percent.

Executive Vice President and Chief Technical Officer Jeane Hull leads a crossfunctional Inclusion and Diversity Advisory Board that guides the company's inclusion initiatives and has four key focus areas:

- **Employees:** Recruiting and retaining a diverse workforce, and promoting an environment that accepts and leverages differences. For instance, in 2012, the board fostered a series of seminars and webcasts that provided insights into different cultures and practices.
- **Communities:** Providing financial support and employee participation in organizations that advance diversity and inclusion.



In Australia, the company increased women in the workforce by 70 percent in 2012 as part of the company's global inclusion efforts.

- **Customers:** Increasing Peabody's market penetration by advancing our position as the partner and supplier of choice.
- **Suppliers:** Enhancing partnerships and increasing spending with qualified diverse suppliers.

# **Tribal and Indigenous Employment and Engagement**

Peabody seeks to reflect and respect the cultures and communities where the company operates. The company accomplishes this, in part, by identifying and improving employment and business opportunities for indigenous peoples. During the company's 40-year operating legacy on native lands in the U.S. Southwest, Peabody has delivered more than \$12 billion directly and indirectly in economic benefits, created thousands of jobs and reinvested in surrounding communities. Peabody continues to be among the largest private employers of Native Americans on reservation lands in Arizona. The Kayenta Mine in Arizona creates more than 450 skilled jobs, and Native Americans account for more than 90 percent of the workforce and hold more than 72 percent of the mine management, administration and supervisory positions.

Peabody also offers area residents free potable water and coal to heat their homes, and grades and builds gravel roads for area residents and local chapters representing the governmental structure on reservation lands where the company operates.

In Australia, the company's Indigenous Employment and Engagement Strategy drives initiatives to attract, develop and retain skilled, flexible and motivated indigenous employees. This strategy provides specific employment targets and site- and corporate-level activities – all aimed at preserving the economic, social and cultural rights of indigenous people. Peabody works to create a sustainable employment model and working partnerships with Aboriginal and Torres Strait Islanders associated with the company's mining operations through Cultural Heritage and Native Title Agreements. In 2012, Peabody sponsored an exchange among the Wiri Core, Wiri 2, and Northwest Wiradjui people of Australia, the Navajo Nation, the Hopi Nation and the company. An historic tour of the Black Mesa sponsored by Peabody helped strengthen these sustainable partnerships with indigenous communities on both continents.

#### **Partnerships for Greater Inclusion**

Peabody partnerships in and outside the company assist people in developing skills to manage a diverse workforce, build the infrastructure to attract and retain a diverse



Peabody is among the largest private employers of Native Americans in Arizona and is globally honored for programs that recognize and honor indigenous culture and heritage around the world.

employee population, and increase the percentage of minority and female employees across all job levels. Peabody encourages greater dialogue with students of diverse backgrounds who are pursuing advanced engineering and business degrees. The company also commits resources to expanding access to qualified, diverse candidates through community outreach and recruitment activities.

Current employees benefit from the company's ongoing partnerships with such organizations as Coro Women in Leadership, Coro Diversity Initiative Fellows and Women in Mining Network New South Wales. Peabody sponsored the 2012 Women in Mining and Resources Queensland "Inspire" event, which featured high-profile women from the sector. Peabody employees were able to participate in professional development seminars on improving networking, negotiating and presentation skills, among other topics.

#### **Supplier Diversity**

Peabody's supplier diversity efforts help ensure that Peabody has the strongest supplier network in the industry.

The company aggressively pursues contracts with qualified minority- and womenowned enterprises, especially in areas such as staffing, tools, mine services, welding, security, electrical, information technology and radio communications. Since 2007, the company has increased spending with minority businesses year over year. In 2012, purchases exceeded \$59.5 million – up 18 percent from the prior year. The company increased the number of minority- and woman-owned business enterprise partners by more than 50 percent year over year.

Peabody is active with organizations such as the Indiana Minority Supplier Development Council and the St. Louis Minority Business Council. In 2012, the Indiana Minority Supplier Development Council selected Peabody as Regional Corporation of the Year, and a Peabody supply chain employee was named Buyer of the Year. In Australia, Peabody continues to work with the Indigenous Minority Supplier Council and related affiliates. Each mine and office trains employees on methods to build a diverse supplier base, prepare indigenous candidates and foster an inclusive workplace.

## **Workforce Planning**

Planning for the next generation workforce is a business imperative for future growth. Peabody realizes that it operates in a competitive market for key mining talent and that the industry's workforce is aging.

The company is responding with a comprehensive workforce planning effort, with robust learning and development at its foundation. The company's initiatives include training programs, succession planning, and partnerships with universities, junior colleges, and vocational and technical schools.

#### **Workforce Planning in the Americas**

Peabody continued its operations and management associate and internship programs in 2012.

 In three rotations of six to eight months, operations associates work directly with a range of staff members and benefit from experience at Peabody's mining operations. Students and recent graduates across mining, engineering, environmental, mechanical, electrical and related fields are candidates.



Two years ago, Peabody Energy, through a partnership with Gillette College, established a program to provide trained industrial electricians. This initiative allowed employees to earn an accelerated Associate's of Applied Science industrial electrical degree and to advance in the company's Powder River Basin operations.

 Management associates, often recent Master's of Business Administration students and graduates, rotate through key departments in three-year terms. The program strengthens associates' business acumen, analytical abilities and leadership skills.

Peabody employed more than 60 operations associate interns in 2012. The company also contributed more than \$1 million to support higher education initiatives in 2012, including \$108,000 in scholarships for 27 operations interns; \$365,000 to benefit 12 of the nation's top mining schools; and more than half a million dollars to fund scholarships for promising Navajo and Hopi students.

#### Workforce Planning in Australia

The company's graduate, Vacation-student and apprentice programs help identify, develop and retain emerging leaders by combining on-the-job learning and

classroom sessions. Peabody added 17 individuals to its fully structured, two-year program for graduates, up from 11 in 2011. Peabody's apprenticeship initiative spans four years and the company offers dependent scholarship grants and vacation student opportunities in technical specialties.

### **Learning and Development**

Life-long learning and skills development are important to employee satisfaction, advancement and performance. Peabody's approach integrates four key Leadership Pillars: Inspiration, Innovation, Collaboration and Execution. Effective leadership inspires others to achieve, collaborate and innovate. These drive execution, creating a high-performance culture that delivers results and engages employees.

Every Peabody manager is encouraged to provide employees with timely feedback on performance, personal strengths and developmental areas, and on their career paths to help drive professional growth. To support managers and employees in these discussions, the company expanded development planning resources in 2012. Through the Performance Management Process, employees receive guidance and coaching to set clear performance expectations and achieve business results. Continuing education opportunities include:

- Signature leadership development programs for managers and frontline supervisors, focusing on leaders developing leaders, individual accountability for development, and tangible methods to apply leadership skills through continuous improvement projects.
- The Peabody Tuition Reimbursement program, which provides salaried employees with 100 percent tuition reimbursement for achieving associate, undergraduate and graduate degrees. During 2012, more than 120 employees participated in the program, resulting in more than \$1,150,000 in paid tuition.

Peabody-provided training targets specific job groups and includes skills and safety training for a variety of mining positions and orientation for new hires. All employees benefit from extensive safety training, as well as operations training for new miners and technicians. In 2012, U.S. training centers and programs offered at the St. Louis corporate office and in Australia reached more than 7,900 employees and vendors; more than 139,000 training hours were logged.

Peabody continues to strengthen its high-technology training facilities and programs companywide. The company's U.S. training centers and corporate and global training programs identify, build and deliver effective learning systems that increase workforce knowledge and capability. In the Americas, the Western Training Center serves

employees in the Powder River Basin, Arizona and New Mexico, while employees in Indiana and Illinois are supported by the Midwest Training Center, and Colorado employees also benefit from training. In Australia, training takes place at both the mine site and in corporate offices.

# **Health and Wellness**

Peabody employees and retirees are supported by comprehensive health care benefits that are competitive in the U.S. industry and with the majority of large employers.

#### **Wellness Programs**

Employee programs at Peabody begin with an emphasis on prevention and physical fitness and encourage employees to invest in their health and wellness.



Peabody operates and supports facilities to encourage employee health and fitness, from a state-of-the art center at the company's St. Louis headquarters to a well-equipped gym at the Terowie Camp serving workers of the company's Coppabella and Moorevale mines in Australia's Bowen Basin.



Peabody sponsors a range of team-based walks and runs, such as the Susan G. Komen Race for the Cure to fight breast cancer. Employees also receive health club and Weight Watchers reimbursements to encourage healthy lifestyles.

Employees receive incentives for regularly seeking preventive care and building relationships with their primary care physicians. In the United States, the company provides employees and covered spouses \$150 each upon the completion of a physical examination. Peabody provides a tobacco cessation program in the United States that includes telephonic and web-based counseling along with over-the-counter nicotine replacement therapy. Since the program launched in 2010, more than 240 employees and spouses have participated, achieving a 45 percent quitting rate. In addition, the company's Healthy Smiles/Healthy Lives program provides extra preventive dental exams and cleanings during the year.

Other U.S. wellness offerings include:

- Annual worksite flu shots
- Preventive services covered at 100 percent with no annual dollar limit

- Reimbursement for health club and Weight Watchers memberships in the United States, as well as a new health and fitness facility at the company's St. Louis global headquarters
- Birthday reminders of preventive services and additional educational materials

In Australia, employees socialized coverage is supplemented with Peabody's "whole approach" remuneration package. This includes an annual structured health awareness program and personalized recommendations for management, in addition to other benefits. Benefits in Australia include discounted health club membership rates, workshops and subsidized or organized fitness programs.

#### **Non-Health Care Benefits**

Employees also benefit from:

- An Employee Assistance Program that provides counseling and comprehensive life management services.
- Adoption Assistance to help offset expenses
- Short- and long-term disability coverage
- Life insurance
- Accidental death and dismemberment coverage
- Business travel accident coverage
- Tax-free health care and dependent care reimbursement accounts
- Tuition assistance
- Employee stock purchase plans
- Global matching gifts program
- Scholarships
- Vacation and holidays

#### **Professional Compensation**

Peabody Energy's total rewards philosophy includes a competitive compensation package to recruit and retain talented employees. This package includes base salary, annual incentives and long-term incentive programs.
Five-Year Employer Contribution To 401(k) Program

|      |             |      | Annual |
|------|-------------|------|--------|
| Year | Performance | Base | Total  |
| 2012 | 4.2%        | 6%   | 10.2%  |
| 2011 | 6%          | 6%   | 12%    |
| 2010 | 6%          | 6%   | 12%    |
| 2009 | 6%          | 6%   | 12%    |
| 2008 | 6%          | 6%   | 12%    |

Pay levels are determined by job responsibilities benchmarked with peer market data, and opportunities for pay growth are based on measured job performance.

Peabody links compensation closely to performance levels and observed potential, allowing for pay differentiation where appropriate. Accountability is emphasized with employees and managers for setting performance expectations, monitoring performance outcomes and providing ongoing feedback. In 2012, Peabody earned top honors at the Australia and New Zealand Annual Employee Share Ownership Awards Program in Melbourne, Australia, for "best performance in fostering long-term share ownership." The honor recognized Peabody's global human resources team for the group's effective development and communication of the value of Peabody's Employee Stock Purchase Plan and total rewards program.

#### **Retirement Savings**

Peabody provides employees with opportunities to save and invest in their future, aligning employee and shareholder interests to enhance performance. Both the 401(k) and Employee Stock Purchase Plans incentivize employees to take ownership in the company.

The 401(k) plan allows employees to contribute 1 percent to 60 percent of their regular pay based on U.S. Internal Revenue Service guidelines. For non-represented employees, the company match varies by region. On average, employees receive a 100 percent match on up to 6 percent of salary. Employees also may be eligible for an additional Peabody performance-based annual contribution equal to as much as 6 percent of salary. Peabody's 401(k) plan has more than 6,500 participants, of which an average individual balance of about \$123,000 is maintained. The company's 401(k) participation levels exceed those of many peers.



# ENVIRONMENTAL RESPONSIBILITY I

# Every day in 2012, the people of Peabody Energy...

Restored 12 acres of farmland, forests and lakes.

Planted enough trees to fill a third of London's Hyde Park.

Recycled enough material to pack an average parking lot.

Every day, Peabody demonstrates respect for the natural world and builds upon an award-winning legacy of environmental stewardship.

American and Australian employees inspect rehabilitated lands in New South Wales during the third year of a dual-continent technical review of mine rehabilitation activities. These experts tour sites and exchange best practices as part of an information sharing program that strengthens global environmental performance.

# Peabody Energy knows that today's energy policies and operational decisions affect tomorrow's environment.

A key principle of Peabody's mission is to "leave the land in a condition equal to or better than we found it," and the company continues to implement sustainable practices to restore lands and provide lasting benefits to current and future generations.

This Environmental Responsibility section provides the details on another year of environmental excellence for Peabody. It offers information on the following areas:

- Environmental Compliance and Oversight
- 2012 Environmental Achievements
- Restoring Lands for Greater Community Benefit
- Land Restoration and Bond Release
- Recycling and Waste Management
- Greenhouse Gas Intensity and Energy Efficiency
- Water Conservation

### **Environmental Compliance and Oversight**

Peabody's environmental policies and programs are designed to ensure that coal mining and coal use benefit society, enhance the company's environmental leadership and assure compliance with regulatory requirements. Multiple federal, state and tribal environmental laws and regulations govern mining operations. Peabody conducts regular monitoring of the air, soil, water, wildlife, vegetation and other natural resources at its operations, and the company meets and often improves upon compliance requirements. The company's policy is to adhere to all applicable environmental laws, while demonstrating strong environmental stewardship every hour of every day.

Environmental initiatives begin with environmental impact assessments; these are conducted before any mining activity starts. They include comprehensive baseline studies of the local ecosystems and land uses. Detailed post-mining plans are researched, designed and approved. Contemporaneous land restoration provides for the minimal amount of surface disturbance, and ongoing monitoring allows the company to measure results and adjust to changing conditions.

Building lasting alliances in communities where the company operates is essential to successful reclamation. Before mining, the company meets with local stakeholders to understand and include social, cultural and traditional values and community needs



A worker at Peabody's Kayenta mine examines a diverse seed mix destined for reservation lands in the Arizona high-desert. Restored lands at the mine are typically 10 times more productive than native range, in part due to seeding that offers highly nutritious grazing forage.

in all aspects of mine planning. Committees and other partnerships help guide local decisions and enable the company to rapidly return mined lands to productive community use. A highly trained and experienced environmental team supports Peabody's global operations in the United States and Australia. Employees receive extensive environmental training; more than 6,800 employees attended in excess of 275 training sessions in 2012 alone.

In addition to conducting extensive internal benchmarking and monitoring at the highest levels, Peabody submits the results of monitoring, inspections and reviews to regulatory agencies. In the United States, these findings are made available to the public. Each active operation is inspected by various federal, state and local government agencies at least once per month in the United States and as needed in Australia.

### **Environmental Achievements**

In 2012 in the United States, the company restored more than 4,000 acres of mined lands, creating rangeland, wildlife habitat, hardwood forests, prime farmland and wetlands that are often more productive than before mining occurred. Peabody also recycled more than 18,000 tons of materials and completed the second year of a three-year study of global energy and water use as part of a long-term strategy to reduce both.

The company is internationally recognized for environmental and community leadership and earned multiple 2012 honors. Peabody's flagship North Antelope Rochelle Mine (NARM) in Wyoming was recognized with one of the highest environmental honors offered by the U.S. Department of the Interior: the Excellence in Surface Coal Mining Reclamation award.

The Interior Department's Office of Surface Mining recognized Peabody's multi-faceted approach to sustaining populations of eagles, hawks, owls and other birds of prey through the creation of high-quality habitat and protection of nesting areas. Breeding pairs of raptors depend on places to perch, nest and roost, as well as on a healthy food supply. To create high-quality habitats, the mine's environmental team used more than 40 native species to revegetate the land, planted more than 1,900 cottonwood and willow trees, and created snags.

The mine team also developed an extensive database on the birds' behavior patterns and uses this information to schedule road building, power line construction and similar activities to avoid active nests during critical times. Nearly three decades of monitoring data confirm that raptor populations have been sustained, even as mining activities significantly increased.

The company also earned a second 2012 Excellence in Surface Coal Mining Award from the U.S. Department of the Interior. The award singled out Peabody for environmental performance at its Cottage Grove Mine in Illinois. Farmland surrounding the mine is among the most productive in the county, and restoring this land to pre-mine yields is no small task. To meet the challenge, the team at the Cottage Grove Mine pioneered soil handling and crop management techniques that have generated corn, soybeans, wheat and hay yields that equal or surpass that of neighboring farms. In the first four years of the program, crop productivity improved more than 500 percent.

In Australia, Peabody aims to become the first producer to rehabilitate or reclaim 90 percent of available land by 2017. Peabody continued to make progress in 2012, restoring 610 acres.

#### **Environmental Performance**

| 2012      | 2011  | 2010  |  |  |
|-----------|---|---|--|--|
|           |   | 2010  | 2009   | 2008   |
| \$1,840.5 | \$1,721.3   | \$1,624.4   | \$1,594.2  | \$1,514.0  |
| \$55.3    | \$59.9  | \$56.3  | \$55.4   | \$59.2   |
| 1,445     | 505   | 1,462   | 1,030  | 518  |
| 18,021    | 16,596  | 21,256  | 16,298   | 14,856   |
| \$134.0   | \$45.0  | \$96.0  | \$162.0  | \$160.0  |
| 10,980    | 6,618   | 8,114   | 6,550  | 6,183  |
| 4,854     | 5,113   | 5,212   | 3,695  | 3,767  |
| 163,518   | 152,658   | 144,485   | 134,931  | 136,646  |
| 97,329    | 92,616  | 86,047  | 80,742   | 83,194   |
| \$16.6    | \$41.9  | \$54.6  | \$29.5   | \$26.1   |
| 470,331   | 364,360   | 489,516   | 243,381  | 251,411  |
| 104       | 148   | 308   | 136  | 310  |
|           | \$55.3<br>1,445<br>18,021<br>\$134.0<br>10,980<br>4,854<br>163,518<br>97,329<br>\$16.6<br>470,331 | \$55.3 \$59.9   1,445 505   18,021 16,596   \$134.0 \$45.0   10,980 6,618   4,854 5,113   163,518 152,658   97,329 92,616   \$16.6 \$41.9   470,331 364,360 | \$55.3   \$59.9   \$56.3     1,445   505   1,462     18,021   16,596   21,256     \$134.0   \$45.0   \$96.0     10,980   6,618   8,114     4,854   5,113   5,212     163,518   152,658   144,485     97,329   92,616   86,047     \$16.6   \$41.9   \$54.6     470,331   364,360   489,516 | \$55.3   \$59.9   \$56.3   \$55.4     1,445   505   1,462   1,030     18,021   16,596   21,256   16,298     \$134.0   \$45.0   \$96.0   \$162.0     10,980   6,618   8,114   6,550     4,854   5,113   5,212   3,695     163,518   152,658   144,485   134,931     97,329   92,616   86,047   80,742     \$16.6   \$41.9   \$54.6   \$29.5     470,331   364,360   489,516   243,381 |

\*The decrease in cumulative permanently reclaimed acres from 2008 to 2009 was due to selling the Baralaba mine and re-permitting some reclaimed areas at Wild Boar and Bear Run.

In 2012, Peabody planted more than 470,000 trees, an increase of 29 percent over the year prior, across 104 acres of forested lands. The company also reclaimed 488 acres of prime farmland in 2012, doubling volumes from the prior year. The company met 100 percent of its U.S. reclamation targets during the year.

Other major 2012 environmental honors earned include:

- The Wildlife Society's Citizen Conservation Achievement Award was given to the Thunder Basin Grasslands Prairie Ecosystem Association. Peabody Energy is the sole energy-based charter member of this association. The honor recognizes the association's ecosystem management work with the U.S. Fish and Wildlife Service to protect the habitat of eight species in five counties across Northeastern Wyoming.
- The Dr. James A. Pendleton Award for Reclamation was presented to Peabody's Colorado Operations Reclamation Manager Roy Karo. The award from the Colorado Division of Reclamation Mining and Safety recognizes lifetime achievements in land restoration in the state.

- The Colorado Division of Reclamation Mining and Safety and the Colorado Mining Association jointly recognized Peabody's Twentymile Sage Creek portal with the Coal Reclamation Award for record legacy bond releases. Before any activity may occur on a mine site, a U.S.-based operator must post a bond that is held until lands are restored to a standard specified in a mining permit. The honor recognizes the company's excellence in completing this process and releasing thousands of high-quality acres in 2012 alone.
- In addition, the Division of Reclamation and Colorado Mining Association honored Peabody for the operation's success in recycling more than 1 million pounds of materials, including cable, scrap metal and used oil. The mine also was recognized for creating a master plan to protect species habitat and guide future restoration practices, working with the Colorado Division of Parks and Wildlife.
- Peabody's Midwest Environmental Specialist Dan Williamson was awarded the 26th Vance "Pat" Wiram Award from the Indiana Society of Mining and Reclamation. The award recognizes Williamson's pioneering methods to increase hardwood tree survival on restored lands, working with Purdue University.
- The North Antelope Rochelle Mine (NARM) and Peabody's Powder River Basin environmental team earned the Interstate Mining Compact Commission's National Mine Reclamation Award. NARM was nominated by the Wyoming Department of Environmental Quality/Land Quality Division in recognition of its superior mining and reclamation practices, including the use of innovative technology to assist regulators in tracking and documenting wildlife.

# **Restoring Lands for Greater Community Benefit**

In 2012, Peabody built on more than half a century of experience in land restoration by reclaiming over 4,200 acres of land, releasing 2,569 acres from bond and planting more than 470,000 trees.

In Australia, Peabody is setting a new standard for rehabilitation. An area is classified as "rehabilitated" in Australia when grading, topsoiling and seeding have been completed. Peabody has established the most significant and ambitious rehabilitation target in the Australian mining industry: rehabilitation of 90 percent of available lands that also happen to be owned by the company by 2017. Since this target was established in 2011, approximately 2,545 acres have been rehabilitated across the continent, including 610 acres in 2012.

Progress continued at a slower pace in 2012 as the Australian operations diverted resources to address inclement weather and other operational challenges. Still, during the past year the company's Wilpinjong, Wambo and Moorvale mines each achieved 100 percent of their respective rehabilitation targets, contributing 432 acres of the total. Looking forward, the company is focusing on rapidly expanding the quantity and quality of future rehabilitation through the implementation of standardized best practices and new technologies.

Peabody believes sustainability is achieved by developing and implementing environmental solutions that return lands to be used for equal or higher community benefit. While the company continues to accelerate community-based partnerships, Peabody also works closely with a range of federal and state agencies to promote environmental excellence.

Efforts to protect raptor populations and create nesting habitats at the North Antelope Rochelle Mine have helped sustain species such as Ferruginous Hawks. The initiative in 2012 earned one of the highest environmental honors offered by the U.S. Department of the Interior.





High yields of soybeans, corn, wheat and hay crops are routinely achieved on restored lands at Peabody's Cottage Grove Mine in Illinois. Flourishing fields on Peabody lands around the world provide visual proof that restored farmland can be as or more productive than surrounding properties.

The company partnered with the U.S. Fish and Wildlife Service, the Indiana Department of Natural Resources and a number of conservation groups to expand the Patoka River National Wildlife Refuge, a region that spans more than 8,000 acres of wetlands, floodplain forest and uplands along the Patoka River in Southwestern Indiana. The company granted more than 1,000 acres associated with its former Columbia Mine to this vital conservation effort. These diverse restored lands are expected to be attractive for multiple wildlife species. Similarly, Peabody is in the early stages of pursuing a partnership with the Navajo Nation to produce hay to help establish plantings on restored lands at the Kayenta Mine in Arizona. Native grasses would be grown locally, providing economic benefits to the Navajo Nation.

In Mongolia, the company continues to monitor about 40 acres of hardy pastureland as part of the first coal mine restoration project in that nation. Through a joint

venture, Peabody led a team of scientists, engineers and government specialists in transforming Ereen, a former mine site near the northern city of Bulgan. The company created a community well, a pond and grazing land that is four times more productive than nearby fields. The lands have flourished amid Mongolia's harsh winters, and the project has become a global model of sustainable post-mine land use. Peabody continues to advance flora and fauna studies and a hay-cutting project for local herders.

In Australia, the company's activities at its Wilpinjong Mine in New South Wales represent a mining industry case study in Peabody's natural approach to enhancing unmined lands and rehabilitating mined lands. For the past half century, properties surrounding Wilpinjong have been under stress due to drought, invasive species, and a soft market for crops. After purchasing Wilpinjong in 2006, Peabody began acquiring property for a noise buffer zone between private landowners and mining operations. Peabody owns more than 90 percent of the mine's surrounding lands, approximately 44,479 acres, which the company leases to previous landowners. The team works with local farmers to select seeds seasonally and maximize pasture production. The company's comprehensive rehabilitation and land management practices are delivering more fertile soil and more diverse plant species. The Wilpinjong environmental team's focus extends beyond farming. The mine has established a windbreak corridor, or band of trees, that helps protect habitat for certain native animals, including the endangered Regent Honeyeater bird. This black and yellow species and other animals benefit from a year-round food supply and migratory passageway.

While burning of cleared vegetation is a standard agricultural practice at the Wambo and Wilpinjong mines, this material was identified as a resource and is now being mulched. Adding this organic matter to topsoil as part of rehabilitation increases nutrients, assists with reducing compaction, enhances rainfall infiltration and soil water holding capacity and improves topsoil.

In addition to improving land quality, Peabody works to re-establish sensitive native plant species that are vital to maintaining habitat for wildlife. In 2012, the company partnered with the non-profit conservation group Greening Australia to collect native seeds amid a growing shortage and heightened demand. The initiative establishes an insitu and external native grass and tree propagation program that will supply a large proportion of the Wambo Mine's needs.

Peabody also continues to adopt advanced technologies for its land restoration activities. In 2012, the Australian operations began to roll out a Geographic Information

System that has been developed and used successfully in the United States for several years. The system improves the accuracy and efficiency of reporting by producing highly precise maps and data.

Community engagement is central to Peabody's environmental efforts. The company's work in the Surat Basin of southeast Queensland is one example of the way Peabody partners with local landowners to achieve shared environmental objectives. This region is rich in natural resources. Until recently, agriculture has been responsible for most local economic activity.

While rapid resources-industry growth in Australian resource areas has strained relationships between local communities, agricultural users and industry, Peabody has demonstrated that farming and mining can coexist.

The company completed its second full-year harvest of restored lands in the Surat Basin. The mine worked with a neighboring landholder to transform fertile black alluvial soils in the Wilkie Creek Mine into highly productive sorghum fields. This initiative is expected to continue during 2013 with the introduction of lucerne or alfalfa. The site is a showcase for the community and has been observed by the Centre for Mined Land Rehabilitation at the University of Queensland.

Acknowledging and protecting cultural heritage are critical to environmental stewardship at Peabody. This involves identifying areas and artifacts of significance and devising detailed plans to preserve cultural treasures. From Australia to Arizona, employees closely consult with indigenous communities to develop a cultural heritage management plan and survey greenfield sites before site work begins.

Diverse seed selection and experimentation with crops and stocking regimes result in superior cropping lands and improved grazing at the Wilpinjong Mine.



| Peabody′s Recycled Materials By Type         |        |        |        |  |  |  |  |
|--|--------|--------|--------|--|--|--|--|
| (In Tons)                                    | 2012   | 2011   | 2010   |  |  |  |  |
| Used Oil                                     | 7,820  | 5,486  | 5,065  |  |  |  |  |
| Used Grease                                  | 196    | 167    | 75     |  |  |  |  |
| Used Oil Filters                             | 207    | 354    | 352    |  |  |  |  |
| Antifreeze                                   | 371    | 538    | 79     |  |  |  |  |
| Spent Solvents                               | 10     | 27     | 23     |  |  |  |  |
| Tires  | 821    | 191    | 684    |  |  |  |  |
| Batteries                                    | 148    | 193    | 221    |  |  |  |  |
| Scrap Metals                                 | 7,185  | 8,882  | 11,426 |  |  |  |  |
| Computer Equipment                           | 1      | 33     | 2      |  |  |  |  |
| Other (e.g. HID Bulbs,<br>Used Paint, Paper) | 1,264  | 725    | 3,329  |  |  |  |  |
| Total  | 18,021 | 16,596 | 21,256 |  |  |  |  |

Peabody has a broad recycling program for a variety of materials, such as tires, batteries, paper and computers. The company recycled more than 18,000 tons in 2012, a 9 percent increase from the prior year due to improved administration and recovery activities.

The company conducts archeological excavations and the salvage and relocation of culturally significant objects from stone artifacts to ancient hearths. In Australia, regular cultural heritage committee meetings and the negotiation and execution of agreements cultivate respectful working relationships. Peabody is committed to identifying and improving employment and business opportunities for indigenous peoples, with a focus on traditional landowners in the company's operational areas.

Employees also regularly visit classrooms to share information about the importance of affordable and sustainable energy production. In 2012, Peabody partnered with the West Central Indiana Watershed Alliance and U.S. Fish and Wildlife Service to provide expanded outdoor education programs for dozens of students near the Bear Run Mine in Sullivan County, Indiana. Similarly, Peabody's Metropolitan Mine in New South Wales participates in the EnviroSmart Grant program with the Illawarra mining industry. A number of local public and parochial schools receive grants from EnviroSmart to educate students about land restoration and sustainable environmental management. The Wilpinjong Mine team, near Mudgee in New South Wales, also regularly interacts with students and supports the Ulan Public School Environmental Education Program and other initiatives aimed at educating kindergarteners to sixth graders.

## Land Restoration and Bond Release

The company conducts extensive planning well in advance of any mining activity, and lands are restored contemporaneously as mining proceeds. This practice ensures the smallest active area for mining operations. In the United States, it also enables timely bond release or the formal return of lands to predictive use by nearby communities. The company has approximately 387,000 surface acres permitted and secured by reclamation bonds throughout its mining operations. During 2012, mining activities began on more than 9,991 acres, more than 4,200 acres were restored, and approximately 2,569 acres were released from bond. These results compare with 2011 mining activities initiated on nearly 8,100 acres with more than 5,100 acres restored and 4,300 acres released from bond.

Bonds were released on a broad array of properties and fluctuate depending on mining and restoration needs in a given period. The company released a total of \$16 million in bond liability in 2012.

# **Recycling and Waste Management**

Peabody's recycling program continues to increase the beneficial reuse of materials across multiple categories. In 2012, Peabody recycled 18,021 tons of various materials, up 9 percent over 2011 results. This increase is partly due to arrangements the company has made to recycle a greater variety and volume of materials.

Results are visible across Peabody's operations and offices. For example, U.S. tire recycling increased after Western operations repurposed more of these tires for use as road guards and watering tanks for livestock and wildlife.

The company also continued its agreement with the U.S. National Park Service to reuse large tires from the U.S. Southwest region to construct an artificial barrier reef around a marina at Lake Powell, the nation's second largest man-made reservoir. In Australia, operations reported a year-over-year increase of more than 2,000 tons of recyclables, reflecting improved administration and more than 700 tons of additional reused materials from new operations. Due to greater focus and better recordkeeping,

the company's global headquarters in St. Louis recycled 66 tons of materials in 2012, a significant increase over the three tons recycled in 2011.

Peabody also continues to introduce technologies to increase recycling and enhance waste management throughout its global platform. One example: Peabody invested in an industrial can crusher at its North Antelope Rochelle Mine in Wyoming. With this device, NARM dramatically increased recycling of aerosol cans that are used for machine maintenance and operations. Crushing reduces each can's size by as much as 90 percent so this waste can be effectively moved to a recycling center.

## **Greenhouse Gas Intensity and Energy Efficiency**

Peabody is working to conserve energy and reduce greenhouse gas intensity through better mine planning and engineering, use of advanced technologies and operational best practices. Peabody employs the industry's most widely accepted metric for comparing year-to-year emissions among mines at different stages of development:

#### U.S. Annual Greenhouse Gas Intensity



Pounds of GHG Emitted (CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O) per Unit Produced (Including Mine Methane Emissions)

Greenhouse gas (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) intensity is calculated based on emissions of CO<sub>2</sub> equivalent per unit (defined as tons of coal produced plus cubic yard of overburden moved).

Peabody's U.S. operations have voluntarily reported greenhouse gas intensity (pounds of CO<sub>2</sub>e per unit produced) for several years using U.S. Department of Energy (DOE) requirements under Section 1605(b) of the Energy Policy Act of 1992. The annual results include mine methane emissions monitored at underground mines and "fugitive" methane at surface mines.



The North Goonyella Mine installs a new gas-drainage and methane flaring network that dramatically reduces the mine's environmental footprint.

emissions in pounds of carbon dioxide equivalent or  $CO_2e$  ( $CO_2$ ,  $CH_4$  and  $N_2O$ ) per ton of coal mined and cubic yards of overburden moved (units of production). Although total greenhouse emissions may increase as a mine expands, greenhouse gas intensity measures can result in flat or declining emissions on a per-ton-of-production basis due to initiatives to increase efficiencies and mitigate or prevent emissions.

The company's greenhouse gas management efforts begin before mine development, continue during overburden and coal removal, and are conducted as part of land restoration processes and during revegetation activities.

#### **Investing in Efficiency to Limit Greenhouse Gas Intensity**

With surface coal mining reaching to greater depths in many regions of the United States and Australia, the energy needed to recover a ton of coal is rising. Still, in 2012, Peabody achieved a 10 percent reduction in greenhouse gas intensity across its global operations. Progress was particularly notable in Australia, where the company achieved record production and emissions reductions.

#### Global Annual Greenhouse Gas Intensity



Pounds of GHG Emitted (CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O) Per Unit Produced (With Methane)

Greenhouse gas (CO2, CH4 and N2O) intensity is calculated based on emissions of CO2 equivalent per unit (defined as tons of coal produced plus cubic yard of overburden moved).

In the company's third full year of international data collection, Peabody's global 2012 emission intensity with methane was 12.43 pounds of greenhouse gas per unit produced, which declined from 13.83 pounds of greenhouse gas per unit produced calculated in 2011. When methane is excluded, the company's greenhouse gas intensity rose slightly from 4.08 pounds per unit in 2011 to 4.26 pounds in 2012.

The company submits public and government reports outlining detailed greenhouse and energy emissions as required by the National Greenhouse and Energy Reporting Act of 2007 in Australia. The public report is available at *PeabodyEnergy.com*. Peabody also has participated in the U.S. Department of Energy, Energy Policy Act, Section 1605(b) voluntary greenhouse reporting program when this initiative was active. Peabody is pursuing more accurate, data-driven reporting methods for methane, which are supported by a robust drilling program in Australia and an ongoing partnership with the U.S. Geological Survey to undertake methane content and desorption testing at its large surface mines in Wyoming. These activities have enabled the company to demonstrate declining methane per unit across its global platform in 2012. Activities to seal off old workings at U.S. underground operations and upgrade ventilation systems also contributed to reduced methane emissions. Coalbed methane, a natural component of the coal resource and a greenhouse gas, is present at mining operations. However, methane measurement at surface mines is a highly subjective exercise leading to wide variations in assumptions and outcomes. There is no universally accepted procedure to effectively measure the release of fugitive methane at surface mines.

The U.S. Environmental Protection Agency (EPA), in the preamble to its Mandatory Reporting Rule of 2010, argues that the agency need not report methane emissions from surface coal mines because doing so was not effective or feasible: "... there are currently no robust facility-level monitoring methods to measure fugitive CH<sub>4</sub> [methane] emissions from surface mines. Measuring fugitive emissions at specific locations would not adequately capture the emissions from the entire mine, would be expensive and resource-intensive, and difficult for mine operators to implement on a periodic basis."

Similarly in Australia, the company estimated fugitive methane releases at surface or open-cut mines based on a default factor established by Australian regulators that may overstate fugitive methane emissions, especially from shallow deposits. In 2012, the Australian Coal Association Research Program released guidelines for the direct measurement of fugitive emissions from open-cut mines known as "Method Two" reporting. These guidelines establish requirements for drilling and gas testing, gas content analysis, modeling and peer review, and the incorporation into production reporting systems that are rigorous enough to undergo a regulatory or third-party audit. Peabody's Wilpinjong and Wambo mines initiated this process during the year.

Peabody continued to upgrade and standardize ventilation metering and emissions reporting standards and the measurement of gas drainage at underground operations in 2012. These activities enhance fugitive emissions measurement across its underground fleet while streamlining reporting requirements. State-of-the-art continuous emission monitoring technology is installed adjacent to every Australian underground mine fan and feeds measurements of methane and carbon dioxide in real time to a data management system.

The company also improved gas drainage practices at its North Goonyella Mine in Queensland. Methane that was formerly vented from the mine can now be "flared" or collected and combusted. The flaring process chemically converts methane to less potent carbon dioxide, reducing the greenhouse gas potency by a factor of seven. This safe, commercial and highly effective process is estimated to reduce the North Goonyella Mine's greenhouse emissions by as much as 350,000 tonnes of CO<sub>2</sub>e per year.

### **Engaging with Government to Shape Carbon Policy**

On July 1, 2012, the Australian Government's fixed price carbon tax commenced. This tax will continue for three years before transitioning to a cap-and-carbon emissions trading scheme. Peabody began paying for carbon emissions associated with the diesel and electricity consumption at its Australian operations and began accruing a carbon liability for fugitive emissions. The fixed price of carbon commenced at \$23 per tonne of CO<sub>2</sub>e, increasing at 5 percent per year (2.5 percent real and 2.5 percent nominal), and the company's operations are subject to a 6 cent per liter reduction in a diesel fuel excise rebate.

Peabody has established a Carbon Working Group of operational and functional experts in Australia to satisfy these new compliance obligations, evaluate abatement technologies and measurement procedures for accuracy, minimize liability and communicate performance. Among its 2012 accomplishments, Peabody:

- Established Emissions Source Procedures at all locations to ensure compliance;
- Implemented monthly emission and carbon cost tracking and reporting procedures;

- Introduced fugitive emissions measurement initiatives at underground sites;
- Began fugitive emissions estimation initiatives at New South Wales open-cut sites to improve reporting accuracy; and
- Received the first tranche of federal compensation of A\$22.5 million for "gassy" mines to assist in the transition to a carbon price mechanism for the North Goonyella, Wambo and Metropolitan mines.

In conjunction with industry associations such as the Australian Coal Association and Queensland Resources Council, Peabody advocates for realistic targets that achieve real emissions reductions. The company contends that policies designed to increase the cost of Australian coal in a highly competitive global market simply drive customers to switch to less expensive, but more carbon-intensive, sources of supply, resulting in a net increase in global emissions. In the absence of binding international carbon agreements, the company calls for regulation that is broadly and fairly applied and straightforward to encourage compliance, and that offers predictable outcomes and measures to ease the industry's transition.

Peabody continues to upgrade equipment to minimize energy use and related emissions. In 2012, the company introduced a fleet of "ultra-class" haul trucks to Australia, each adding fuel efficiencies of 15 percent to 20 percent. A newly commissioned electric rope shovel at the Millennium Mine is replacing diesel-powered hydraulic excavator activity, reducing fuel use and emissions.

#### **Actions to Improve Energy Efficiency**

Peabody's non-methane-related greenhouse gas emissions relate primarily to electricity and diesel fuel use during overburden handling, coal removal, mine ventilation, coal processing and land restoration.

Peabody conducts regular energy audits and seeks to minimize energy use and improve its greenhouse gas intensity. In 2012, the company advanced a global baseline study to help evaluate its energy efficiency measures.

This three-year assessment involves all major forms of energy use across the company's global operations. In the company's second year of study, Peabody determined that its:

- Diesel fuel use intensity was 4,128 kilocalories (kcal) per unit of production.
- Electricity use intensity was 729 kcal per unit of production.
- Total energy use intensity was 4,857 kcal per unit of production.

Moving forward, Peabody will evaluate the relative effectiveness of conservation and efficiency measures against these baselines.

Sagebush dots the dry landscape near Peabody's Lee Ranch and El Segundo mines in New Mexico. Here, annual precipitation averages a meager two inches and land restoration techniques go far to minimize erosion and conserve water. Many of Peabody's U.S. surface mines have diesel energy use intensity well below this global benchmark, and the company seeks to share best practices from these operations when possible. In the United States, surface operations improved by 1.7 percent in 2012 over 2011 levels led by the Midwest region. Longer haul roads and a larger fleet led to an increase in fuel use at some operations. The company is now focused on lowering horsepower and curtailing machine idling to optimize fuel use.

Enhancing machine performance and upgrading equipment offer an immediate opportunity for energy savings. A \$165 million state-of-the-art dragline, conveyor system and blending facility at North Antelope Rochelle replaced haul trucks, reducing annual diesel consumption and contributing significant improvements in carbon emissions. The mine recently commissioned a new dragline that will reduce truck traffic and diesel requirements.

In Australia, the company began upgrading energy monitoring systems and optimized haul truck and shovel assignments to maximize energy efficiencies. Peabody conducts energy use assessments across its Australian platform and publicly reports the results as a participant in the government's Energy Efficiency Opportunities program. Upgrades to equipment continue to reduce the amount of electricity and diesel fuel expended per unit of production throughout the Australian surface fleet.

# Water Conservation

Peabody views water as a vital and finite resource that must be conserved. The U.S. Geological Survey has determined that hard rock mining, coal mining and oil and gas operations cumulatively use less than 1 percent of water consumed by all industry in the nation, and Peabody is committed to further reducing its water use whenever possible.

The majority of water generated on a mine site is the result of precipitation runoff. In the United States, the use of surface basin or settling ponds removes suspended sediments and associated metals. Water is then either used on the mine site or released to natural receiving streams. Peabody primarily uses water onsite for controlling dust, asset maintenance or coal preparation. The company's water management programs comply with and often surpass regulatory standards. In addition, the company's land restoration techniques are designed to reduce soil erosion, minimize suspended sediment runoff, maintain soil quality and support runoff water quality. These approaches also create natural carbon sinks, increasing the amount of carbon that is retained in soils rather than released into the atmosphere.

Peabody provides publicly available and detailed water use reports to federal, state and tribal regulatory agencies. Released water must meet strict water quality standards. Peabody rigorously tests water and often evaluates aquatic biology in the receiving streams to assure quality.

In Australia, excessive water during the nation's wet season poses a challenge for mining operations. Peabody is exploring ways to improve water management at sites by reducing the risk of flooding and implementing solutions to address legacy water held in basins at the mines in accordance with regulations. The company is actively working with government and the industry to develop improved water release conditions that take into account community concerns relating to discharges. Also in limited circumstances, water associated with the production of adjacent and naturally occurring coalbed methane is reused in Australia.

In 2011, Peabody initiated a three-year study of water intensity across the company's global operations to better assess the success of future water conservation initiatives. The intent is to establish a baseline amount of groundwater the company uses on the mine site as measured in volume per unit of production.

#### **Civic and Community Water Management Cooperation**

Peabody seeks to develop and implement best practices to improve community access to water resources. For example, water is a valuable commodity on reservation lands on the arid high-desert Black Mesa surrounding the Kayenta Mine in Northeastern Arizona. Peabody is a partner in the Manymules Water Pipeline Project, working in conjunction with the Navajo Nation on these lands to supply potable water to more than 835 residential locations in and near the company's Kayenta complex lease area by 2016. Peabody will provide the water source and electricity.

The project includes a detailed cultural assessment of lands where pipeline infrastructure would be constructed. It also involves creating an electricity source to run water pumps and establish sanitary water infrastructure. Key project partners include the Navajo Department of Water Resources, the Black Mesa Review Board and the Kayenta, Forest Lake, Chilchinbeto and Shonto chapters, which are tribal governmental structures similar to townships. Assistance is also being provided by the Navajo Tribal Utility Authority and the Indian Health Service. The company has long offered potable water from supply wells to area residents.

Peabody routinely evaluates opportunities to create water features that provide additional wildlife habitat. Compared to pre-mined lands, restored properties feature two to three times the water features where development is compatible with existing water rights. These features provide for good surface water quality, increased groundwater flows and additional protection in flood-prone areas. In the past four years, Peabody has earned more than 30 major environmental honors; more than a third of these recognize excellence in restoration of streams and wetlands. Peabody has also won four of the highest national honors for wetland restoration granted by the U.S. Department of the Interior.



Bales of hay in Indiana reflect Peabody's success in transforming mined lands into fertile fields. The company has used the same practices to restore prime farmland from Mongolia to Australia.



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