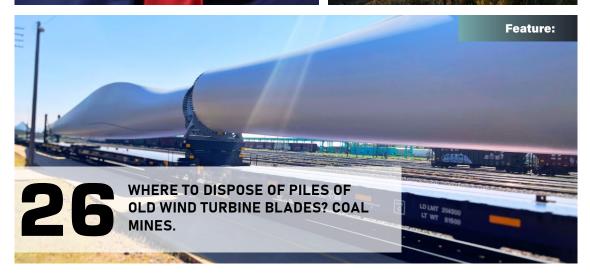






PROMOTE AMERICAN ENERGY





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LETTER FROM THE PUBLISHER



Dear Readers,

As we welcome you to the fourth issue of **Coal Energy** for 2024, we're excited to present a collection of features that not only highlight the evolving landscape of energy in America but also celebrate the critical role that coal continues to play in our energy future.

This issue is particularly significant as we delve into the recent executive order issued by the Trump Vance Administration to promote American energy. This initiative not only reaffirms our country's commitment to a robust energy sector, but it also underscores the fundamental role that traditional energy sources, including coal, will play in meeting our nation's energy needs. The executive order aims to enhance energy independence and security while driving job growth, supporting local economies, and ensuring that affordable energy remains accessible to all Americans. We believe this is a pivotal moment for the coal industry, and we are thrilled to examine

the implications of such policy advancements in our feature article.

In alignment with the government's focus on energy production, we are witnessing an unprecedented surge in electricity demand across the nation. As highlighted in our second feature, this demand underscores the need for reliable and consistent sources of energy. Coal is well-positioned to meet these needs due to its abundance and affordability. We'll provide insights into how coal not only meets current energy needs but also supports economic growth in various sectors. Our goal is to present a compelling case for coal's role in an evolving energy paradigm that prioritizes reliability and cost-effectiveness.

Additionally, we're proud to shed light on innovative solutions regarding the disposal and recycling of old wind turbines in coal mines. As the renewable energy sector grapples with managing its own environmental footprint, our feature explores the potential of utilizing existing coal mine infrastructure for the safe disposal of outdated wind turbine components. This not only addresses a significant environmental challenge but could also promote the co-existence of traditional and renewable energies. It's an exciting time for innovation, and we anticipate that this concept will spark new discussions about the future of energy in America.

At *Coal Energy,* we are immensely proud of our readership, which includes members from many of the nation's largest and most influential coal associations. Your ongoing support and engagement are what allows us to continue providing insightful and relevant content that reflects the interests and concerns of our industry. We extend our deepest gratitude to our advertisers, whose commitment and collaboration make this magazine possible. Your

partnership is invaluable, and we appreciate your contributions that help us disseminate important information to our audience.

Finally, we would like to thank each and every one of you, our readers. Your support and passion for the coal industry inspire us to deliver thoughtful and engaging content with each issue. As we continue to explore the various narratives surrounding energy production and its future, we invite you to stay informed and engaged. Together, we can advocate for a balanced energy approach that values all sources, ensuring a sustainable and prosperous future for the coal industry and beyond.

Thank you for being a part of our community. We hope you enjoy this issue and look forward to your feedback.

Maria Martonick

President

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Association Comparisons



www.nma.org

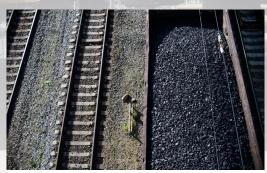
NATIONAL MINING ASSOCIATION (NMA)

Mission:

The NMA's mission is to build support for public policies that will help Americans fully and responsibly benefit from our abundant natural resources. Our objective is to engage in and influence the public process on the most significant and timely issues that impact mining's ability to safely and sustainably locate, permit, mine, transport and utilize the nation's vast resources.

NMA SERVES ITS MEMBERSHIP BY:

- Promoting the safe production and use of coal and mineral resources
- Establishing a strong political presence in the Nation's Capital
- Serving as the information center for and a single voice of U.S. mining
- Addressing the current and future policy needs of U.S. mining, mining equipment manufacturers and support for services members of NMA



www.movecoal.org

NATIONAL COAL TRANSPORTATION ASSOCIATION (NCTA)

Mission:

The mission of the NCTA is to provide education and facilitation for the resolution of coal transportation issues in order to serve the needs of the general public, industry, and all modes of transportation. This is accomplished through the sponsoring of educational fora and providing opportunities for the lawful exchange of ideas and knowledge with all elements of the coal transportation infrastructure.



www.asrs.us

AMERICAN SOCIETY OF RECLAMATION SCIENCES (ASRS)

Mission:

ASRS's mission is to represent and serve a diverse international community of scientists, practitioners, private industry, technicians, educators, planners, and government regulators involved in mineral extraction and disturbed ecosystem reclamation.

ASRS promotes the advancement of basic and applied reclamation science through research and technology transfer in the Society's annual meetings, workshops, published proceedings, newsletters, Reclamation Matters publication, Reclamation Sciences, and the ASRS website.

www.acaa-usa.org

AMERICAN COAL ASH ASSOCIATION (ACAA)

Mission:

The ACAA advances the management and use of coal combustion products in ways that are environmentally responsible, technically sound, commercially competitive and more supportive of a sustainable global community.

AMERICAN COAL COUNCIL (ACC)

Mission:

American Coal Council (ACC) provides relevant educational programs, market intelligence, advocacy support and peer-to-peer networking forums to advance members' commercial and professional development interests.

ACC represents the collective interests of the American coal industry in advocating for coal as an economic, abundant and environmentally sound critical resource.

ACC serves as an essential resource for industry, policy makers and public interest groups. The Association supports activities and objectives that advance coal supply, consumption, transportation and trading.



www.americancoalcouncil.org

FUTURECOAL

FutureCoal represents industry leaders, committed to building a sustainable future for global coal.



www.futurecoal.org



www.alltricitynetwork.org

ALLTRICITY NETWORK

Mission:

This short statement outlines the association's identity and business activities. The Mission Statement was modified to more clearly emphasize what the organization is, why it exists and who we serve:

Preparing the electric energy industry for the future through education and networking.

Since 1903, Alltricity Network has been an association by members, for members. Employees from member companies drive program content by serving on the association committees, presenting at events, writing in Alltricity Network's publications and providing feedback to the staff. Members also advocate for Alltricity Network, and the association sees growth because of the outstanding word-of-mouth promotion by members. When a member brings their colleague to an Alltricity Network event, that person experiences what the association is all about and leaves with an appreciation for the content and the trusted community of sharing. Electric energy professionals know they can get answers from Alltricity Network because of the knowledge and friendliness of the members. By working together through the association, they are driving their industry forward.

President Trump further expressed an intent to export American energy all over the world and to refill strategic petroleum reserves, which have been depleted in the last few years to their lowest level in decades. Additionally, the incoming administration promised to streamline energy infrastructure permitting and use the energy emergency declaration to build critical infrastructure. President Trump also indicated that he would end the prior administration's decarbonization policies, revoke the electric vehicle mandate, identify and rescind regulations imposing undue burdens on energy production and use, end leasing of government land to wind farms, and re-withdraw from the Paris Climate Accord.

DAY 1 ENERGY-RELATED EXECUTIVE ORDERS

On the first day of his second administration, President Trump signed the following executive orders pertinent to US energy policy:

Initial Recissions of Harmful Executive Orders and Actions

This order revokes several executive orders issued by former President Joseph R. Biden, including the following orders regarding the prior administration's energy and policy agenda:

- Executive Order 13990 of January 20, 2021 (Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis)
- Executive Order 14008 of January 27, 2021 (Tackling the Climate Crisis at Home and Abroad).
- Executive Order 14027 of May 7, 2021 (Establishment of the Climate Change Support Office).
- Executive Order 14030 of May 20, 2021 (Climate-Related Financial Risk).
- Executive Order 14037 of August 5, 2021 (Strengthening American Leadership in Clean Cars and Trucks).
- Executive Order 14052 of November 15, 2021 (Implementation of the Infrastructure Investment and Jobs Act).

- Executive Order 14057 of December 8, 2021 (Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability).
- Executive Order 14082 of September 12, 2022 (Implementation of the Energy and Infrastructure Provisions of the Inflation Reduction Act of 2022).
- The Presidential Memorandum of March 13, 2023 (Withdrawal of Certain Areas off the United States Arctic Coast of the Outer Continental Shelf from Oil or Gas Leasing).
- Executive Order 14096 of April 21, 2023 (Revitalizing Our Nation's Commitment to Environmental Justice for All).
- The Presidential Memorandum of January 6, 2025 (Withdrawal of Certain Areas of the United States Outer Continental Shelf from Oil or Natural Gas Leasing).

Putting America First in International Environmental Agreements

This order aims to promote the US economy while continuing the nation's leadership role in protecting the environment. As pertinent to energy policy, the order immediately withdraws the United States from the Paris Agreement under the United Nations Framework Convention on Climate Change and any similar commitment made under this Framework. The order also revokes the US International Climate Finance Plan. Further, agencies that plan or coordinate international energy agreements must prioritize economic efficiency, American prosperity, consumer choice, and fiscal restraint in such agreements.

Unleashing American Energy

This order encourages energy exploration on federal lands and waters and aims to establish the United States as a leader in nonfuel minerals. The order:

- Directs agencies to review existing regulations that impose an undue burden on the identification, development, or use of domestic energy resources, "with particular attention to oil, natural gas, coal, hydropower, biofuels, critical mineral, and nuclear energy resources."
- Revokes many energies and environmental

executive orders of the prior administration, and revokes Executive Order 11991 of May 24, 1977 (Relating to protection and enhancement of environmental quality).

- Directs the Council of Environmental Quality to provide guidance on implementing the National Environmental Policy Act (NEPA) and rescinding certain NEPA regulations, and to revise agency-level implementing regulations for consistency and to promote efficiency.
- Directs cabinet secretaries to eliminate permitting delays, such as through the use of general permitting and permitting by rule, and to expedite projects essential for national security.
- Directs the administration to prepare recommendations for Congress on permitting reform.
 - Requires federal permitting processes to adhere only to legislated requirements for environmental considerations and to use only robust methodologies to assess environmental impacts.
 - Disbands the Interagency Working Group on the Social Cost of Greenhouse Gases, established pursuant to Executive Order 13990, which would terminate use of estimates of the social cost of greenhouse gasses, and directs the Environmental Protection Agency (EPA) to address deficiencies or rescind the current social cost of carbon methodology.
- Suspends disbursement of funds appropriated through the Inflation Reduction Act of 2022 (Public Law 117-169) or the Infrastructure Investment and Jobs Act (Public Law 117-58), to include the electric vehicle mandate.
- Directs the Secretary of Energy to resume reviews of applications for liquified natural gas (LNG) export projects.
- Directs the Secretaries of the Interior and Agriculture to reassess withdrawal of public lands, to update critical mineral surveys including uranium, and to ensure that critical mineral projects, including the processing of critical minerals, receive consideration for federal support.



Declaring a National Energy Emergency

This order declares the supply of energy and critical minerals and associated infrastructure to be inadequate and a cause of high energy prices. The order:

- Directs agency heads to use available emergency authorization to facilitate the identification, leasing, siting, production, transportation, refining, and generation of domestic energy resources, including on federal lands and through the use of the Defense Production Act.
- Directs the Administrator of the EPA and the Secretary of Energy to consider issuing emergency fuel waivers to allow the year-round sale of E15 gasoline to meet any projected temporary shortfalls in the supply of gas.
- Directs agencies to expedite infrastructure, energy, environmental, and natural resources projects, including by facilitating the supply, refining, and transportation of energy in and through the West Coast, Northeast, and Alaska.
- Directs agency heads and the Secretary of the Army to identify planned actions to facilitate energy supply that may be subject to emergency treatment under the Clean Water Act and the Endangered Species Act.
- Directs the Secretaries of Energy and Defense to assess the Department of Defense's ability to acquire and transport the energy, electricity, or fuels needed to protect the homeland and to conduct operations abroad.

Temporary Withdrawal of All Areas on the Outer Continental Shelf from Offshore Wind Leasing and Review of the Federal Government's Leasing and Permitting Practices for Wind Projects

This order withdraws from disposition for wind energy leasing all areas within the Outer Continental Shelf, thereby preventing any new or renewed wind energy leases on the Outer Continental Shelf. The order also requires an immediate review of Federal Wind Leasing and Permitting Practices, to include an assessment of offshore wind on marine mammals and other wildlife, and the economic costs of intermittent electric generation and subsidies on the viability of the industry.

Unleashing Alaska's Extraordinary Resource Potential

This order finds that Alaska "holds an abundant and largely untapped supply of natural resources," including energy resources, and makes it government policy to maximize the development of these

resources, such as by expediting permitting of energy projects and leasing of land for energy extraction. The order:

- Directs agency heads to rescind, revoke, revise, amend, defer, or grant exemptions from any and all regulations, orders, guidance documents, policies, and any other similar agency actions that are inconsistent with this policy.
- Prioritizes the development of Alaska's LNG potential.
- Directs the Secretary of the Interior to withdraw orders and policies that prevent development of energy projects in Alaska and to return to the first Trump administration's policies for energy development in Alaska.
- Directs the Secretary of the Army to assist the Governor of Alaska in the clearing and maintenance of transportation infrastructure.
- Directs the Secretaries of the Army and Commerce to revise or rescind any agency action that might slow critical projects.

Return to In-Person Work

This order requires all federal workers, including those working at energy regulatory agencies, to return to in-person work on a full-time basis.

Regulatory Freeze Pending Review

This order prevents agencies from issuing any new rule until reviewed by an incoming administration official, and requires the withdrawal of any rule not yet published in the Federal Register until reviewed by an incoming administration official.

Delivering Emergency Price Relief for American Families and Defeating the Cost-of-Living Crisis

This order directs federal agencies to

"deliver emergency price relief
... and increase prosperity of
the American worker," in part by

"eliminat[ing] harmful, coercive

'climate' policies that increase the
costs of food and fuel."

INITIAL MAJOR PERSONNEL ACTIONS

President Trump announced the following nominations, appointments, and designations

pertinent to agencies affecting US energy policy:

Cabinet-Level Nominations, Cabinet Designations, and Sub-Cabinet Appointments

- Department of Energy:
 - → Christopher Wright to be nominated Secretary of Energy, with Ingrid Kolb to be acting Secretary in the interim.
 - → Preston Griffith to be Under Secretary of Energy.
 - → Darío Gil to be Under Secretary for Science at the Department of Energy.
- Douglas Burgum to be Secretary of the Interior.
- Lee Zeldin to be Administrator of the EPA, with James Payne to be acting Administrator in the interim.

Designations of Chairman

- Mark Christie has become the Chairman of the Federal Energy Regulatory Commission.
- David Wright has become the Chair of the Nuclear Regulatory Commission.
- Patrick Fuchs has become the Chair of the Surface Transportation Board.

We expect additional executive, regulatory, and legislative action in the next few days and months to implement President Trump's energy policy. We will provide additional analysis and guidance as these policies are being formed and once implemented.



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American Goal Gouncil Welcomes President Donald Trump's Second Term

ASHINGTON, DC - The American Coal Council (ACC) extends its congratulations to President Donald J. Trump and Vice

President JD Vance on their inauguration as the 47th President and 50th Vice President of the United States. We look forward to collaborating with the administration to advance policies that support the coal supply chain and ensure a stable energy future for our nation.

President Trump's recent executive actions, including the declaration of a national energy emergency and the "Unleashing American Energy" initiative, underscore his unwavering commitment to bolster domestic energy production. These measures aim to reduce regulatory burdens, promote energy independence, and enhance national security.

A recent poll conducted for the National Mining Association reveals that 88% of Americans support a comprehensive energy strategy that includes a diverse mix of baseload fuels, such as natural gas, coal, and nuclear power. Additionally, 70% of respondents advocate for increased domestic mineral production to lessen reliance on foreign sources, many of whom are adversaries.

The ACC is optimistic that the administration's focus on energy security and economic growth will create opportunities for the coal supply chain. We are committed to working with federal and state agencies to develop policies that promote responsible coal production, protect jobs, and contribute to the nation's energy needs.

About the American Coal Council

The American Coal Council is unique amongst industry trade associations, exclusively representing the collective and mutual interests of the entire coal supply chain. We champion our industry, our product and our people. We advocate awareness, educate and open mines, and connect our stakeholders. We cherish sustainability, cooperation and collaboration. We embrace the past, present and future as we work to create a better world for all.



AS PRESIDENT TRUMP TAKES OFFICE, AMERICANS WANT INCREASED SUPPORT FOR DOMESTIC MINING AND A RE-VERSAL OF BIDEN POWER PLANT OVERREACH

ASHINGTON, D.C. -As President Donald J. Trump is sworn in as our 47th President of the United States, new polling conducted by Maru Public Opinion for the National Mining Association (NMA) shows Americans want a course correction on overregulation and more focus on domestic sourcing for minerals.



"The mining industry looks forward to working with President Trump on issues of energy and supply chain security—issues that he has

said will be priorities for his administration, and that this polling shows are top priorities for the American people," said Rich Nolan, NMA President and CEO. "If we're going to regain control

of our supply chains, we must have secure domestic mineral production to feed American industry and buttress our national security. We must also have reliable electricity to affordably power our industrial base, underpin American competitiveness and meet soaring power demand. The American people understand those basic needs and now it's time for an administration and Congress that are committed to acting swiftly to address them."

The polling, conducted January 14-15, 2025, of 1,553 Americans, found:

Eighty-eight percent of Americans believe the United States should utilize a comprehensive energy strategy that includes a diverse mix of fuels including natural gas, coal, renewables and nuclear power; just

- 12 percent disagree (8 percent somewhat and just 4 percent strongly).
- Half of Americans (51 percent) believe the Trump administration should withdraw the EPA's power plant regulations to allow coal plants to continue operating until sufficient replacement capacity has been built and is brought online; just 25 percent oppose.
- Seventy percent of Americans want the U.S. to ramp up domestic minerals production to reduce our reliance on China; just 12 percent oppose.

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NMA STATEMENT ON **NERC'S ALARMING** RELIABILITY **ASSESSMENT**

ASHINGTON, D.C. - National Mining Association (NMA) president and CEO Rich Nolan issued the following statement on the release of the North American Electric Reliability Corp.'s (NERC) 2024 Long-term Reliability Assessment.

"NERC couldn't be clearer that the grid reliability math isn't adding up and that an increasingly dangerous situation will be untenable without a sharp change in policy. Surging electricity demand is colliding with an unworkable regulatory agenda that is producing self-imposed scarcity, undermining affordability and reliability. There should be no confusion: the nation's rapidly

deteriorating grid reliability and surging power prices are the direct result of policy failure.

The incoming Trump administration has an urgent opportunity to respond to the pleas of the nation's reliability regula-tors, grid operators, utilities and the states to pursue a regulatory and energy policy pivot that addresses this unfolding electricity supply crisis. Fundamentally, we can-not short-change the bridge to our energy future, and that requires recognizing the ongoing critical importance of the fuel-secure, dispatchable power provided by the nation's coal fleet."





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FUTURECOAL WELCOMES TRUMP'S "CLEAN COAL" VISION

utureCoal welcomes President-elect
Trump's recent reaffirmation of his
commitment to "clean coal," aligning
closely with FutureCoal's Sustainable Coal
Stewardship roadmap. This bold vision
underscores coal's enduring role in driving
economic growth, energy security, and environmental responsibility.

"Coal is more than energy—it's a strategic asset," said Michelle Manook, CEO of FutureCoal. "Our Sustainable Coal Stewardship roadmap highlights proven technologies like high efficiency low emissions (HELE), coal gasification, coal co-firing with biomass, and others that can cut emissions by up to 99%, setting a global benchmark for a low-emission, high-value coal future."

Countries like India and China have embraced coal as a cornerstone of economic growth, self-reliance, and energy security, advancing technologies to mitigate emissions. With its vast coal reserves of over 400 years and history of innovation, the U.S. is uniquely positioned to lead the way, surpassing these nations through investment in coal innovation technologies and cutting-edge research.

"American universities and research

centers are unlocking coal's potential beyond energy. Innovations such as converting coal waste and ash into high-value products—including materials for electric vehicle batteries, defense systems, and advanced technologies like graphene and carbon fiber—are poised to transform key industries," Manook stated. "However, to match or surpass India and China, aligned government and investment policies are essential to drive coal innovation and sustainability."

FutureCoal calls for a united effort across the American coal value chain to promote pragmatic policies that recognize coal's role in securing a sustainable and prosperous future.

"In a world, where coal has been demonised, "clean coal" must humanize this debate. For our part, FutureCoal and the American coal value chain need to continue to champion for a reality-based responsible conversation about coal."

"We look forward to collaborating with the administration to build a prosperous, sustainable future that maximizes coal's full potential." Manook concluded.



COP29: The Uprising of Energy Sovereignty

LutureCoal Limited (FutureCoal) has maintained that every nation's sovereign rights must be respected to support both economic development and climate goals.

FutureCoal's Chief Executive Officer, Michelle Manook said, "What we are witnessing is an uprise in energy sovereignty. This should come as no surprise. The reality tions and contingent funding year after year has neither advanced development nor climate goals. The voices of developing and emerging nations are unmuted."

Manook, invited to give a keynote address to the COP29 China delegation further emphasised that any 'just' transition needed to be viewed through the lens of 'Energy Addition' not substitution.

"We know that advanced coal technologies can reduce emissions by up to 99% in combustion while driving development. The path forward is not a transition away from coal. It is abating coal emissions through innovation and technology. As and promote the Sustainable Coal Stewardship roadmap. This gives us the best chance to achieve energy security, affordability and reliability; the pathway to economic prosperity and climate progress."

FutureCoal also raised concerns about the climate finance pledge of USD 300 billion, which falls short of the USD I.3 trillion needed for developing nations to meet climate goals.

Manook concluded, "Developing nations need more than promises—they need genuine and unconditional financial support to invest in ALL technologies. **Abated coal technologies exists** beyond carbon capture and storage and policies must not disqualify these solutions."



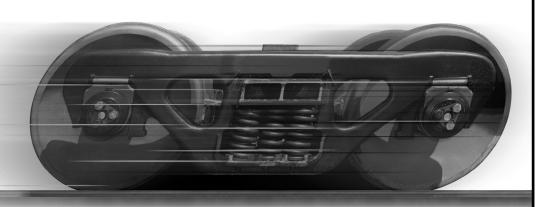


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ntegrating digital tools in mining operations can optimise processes, reduce costs, and minimise ecological footprint. However, implementing these changes requires strategic planning and industry-wide collaboration.

Enhancing operational efficiency

Adopting digital technologies such as the Internet of Things (IoT), big data analytics, and artificial intelligence (AI) is revolutionising coal mining operations.

IoT devices and sensors in equipment provide real-time data on machinery conditions and performance. This wealth of information is analysed using advanced algorithms to predict equipment failures before they occur, significantly reducing downtime and maintenance costs.

A critical enabler of these advancements is high-speed internet infrastructure. Fibre optic internet, with speeds commonly reaching 1000 Mbps, allows for the seamless transfer of large volumes of data. This is essential for real-time monitoring and analytics, enabling coal mining companies to respond quickly to operational challenges and maintain productivity without interruptions.

For example, automated haul trucks with IOT technology optimise fuel usage and reduce human error. Similarly, Al-powered scheduling tools help streamline workflows by allocating resources more effectively, increasing productivity while lowering operational

costs. These innovations represent a critical step toward maximising overall equipment effectiveness in coal mining.

Improving safety standards

Safety remains a cornerstone of the coal mining industry, and digital transformation offers innovative ways to protect workers. Remote-controlled and autonomous machinery allows operators to perform high-risk tasks from a safe distance, minimising their exposure to hazardous environments.

For instance, Anglo American's use of remote-control dozers at the Capcoal Complex in Australia exemplifies this shift. These dozers reduce the risk of rollovers and other safety incidents, showcasing how digital technologies can save lives while maintaining operational efficiency.

Furthermore, wearable devices with IoT sensors can monitor workers' vital signs and environmental conditions, providing early warnings for potential hazards, such as gas leaks or heat stress.

Advancing environmental sustainability

Environmental considerations are driving the adoption of digital solutions in coal mining. Technologies such as digital twins – a virtual representation of physical assets – allow mining companies to simulate operations and test scenarios in a controlled environment.

This approach reduces environmental disturbances during exploration and optimises resource usage.

Digital twins are also being used to monitor energy consumption and greenhouse gas emissions. For example, advanced simulation models can identify inefficiencies in ventilation systems, enabling operators to reduce energy waste and carbon output. Such tools are critical as the industry seeks to align with global sustainability goals while maintaining its role in the energy mix

Forging a sustainable future through digital innovation

Digital transformation allows the coal mining industry to modernise its operations while addressing critical safety, efficiency, and environmental sustainability challenges. Mining companies can enhance productivity and reduce their ecological impact by embracing technologies such as IoT, AI, and digital twins.

However, this transition requires careful planning, investment in technology and human capital, and a commitment to continuous improvement. By adopting a proactive and innovative mindset, the coal mining industry can navigate the complexities of digital transformation and contribute to a more sustainable and resilient future.

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WORLD NEWS



Coal Will Continue to Stay: It's Time to Level the Playing Field



■utureCoal welcomes the International Energy Agency's (IEA) 2024 Coal Outlook findings, which confirm coal's enduring role in the global energy landscape. Global coal demand reached historic levels in 2024, underlining its essential role in energy security, economic growth, and industrial development.

Key findings from the report include:

- Global coal demand is expected to grow by 1% in 2024 to an all-time high of 8.77 billion tonnes (Bt).
- Electricity generation from coal is set to reach an all-time high of 10,700 terawatt-hours (TWh) in 2024.
- Global coal production is forecasted to surpass 9 Bt for the first time in history.
- Since 2020, the global coal market has grown by more than 1.2 billion tonnes.

"Coal will continue to stay-it is the bedrock for over 100 countries," said Michelle Manook, Chief Executive at FutureCoal. "This report underscores coal's vital role in driving economies, creating jobs, and fuelling industrial growth. Nations like China, India, and emerging economies like Indonesia and Vietnam are harnessing coal for growth and self-sufficiency."

"More importantly, coal supports heavy manufacturing, allowing regions like Europe to help afford new capital spending on socalled clean energy transition products such as electric vehicles, solar PV and wind turbines-or at least their essential components."

China's coal demand is expected to grow by 1% to reach 4.9 Bt in 2024, and India's coal demand is projected to grow by over 5%, reaching 1.3 Bt. Emerging economies such as Indonesia and Vietnam also drive demand to support economic development.

"Coal is central to decarbonisation when paired with proven abatement technologies," Manook stated. "Our Sustainable Coal Stewardship roadmap shows how coal can reduce emissions, enhance economic growth, and ensure environmental responsibility. It's time for global stakeholders like the IEA to acknowledge coal's transformative role."

To sustain coal's future responsibly, FutureCoal calls for increased investment in abatement technologies and balanced, fair policies supporting coal

"Technologies today can abate up to 99% of emissions while boosting efficiency, without the need for massive new infrastructure or overreliance on critical minerals," said Manook. "A level playing field in regulations and finance, backed by fair government and media support, will drive investment to modernise coal abatement technologies and de-risk assets that will operate for decades", Manook concluded.





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Growing Electricity Demand Calls for Coal

merica's coal policy has been an abysmal failure. Government policy has made it increasingly difficult and costly to produce and use coal for nearly two decades. The Biden administration went so far as to craft an entire package of rules to wipe out the nation's coal power plant fleet.

This amounted to a bruising war on mining states and communities and was supposed to chart a course for the world to follow under the banner of environmental progress. However, a report by the International Energy Agency illuminates just how much of a mistake we made.

Rather than pivoting away from coal and following our lead, global coal consumption has grown, reaching a high in 2024.

Coal remains the world's leading fuel for electricity production. Irreplaceable for industrial development, energy security and the workhorse for pulling countless millions out of energy poverty, the age of coal appears to be going nowhere. While coal use has fallen in some nations, including the United States, and was eliminated in Britain, soaring coal demand in Asia has more than swallowed those reductions.

Despite being lauded as the world's leader in deploying wind and solar power and adopting electric vehicles, China's economic engine continues to run firmly on coal. China now consumes 30% more coal than the rest of the world combined.

Facing surging electricity demand and wary of the variability of weather-dependent renewable energy, China is only adding to its already enormous coal fleet. India too is building its future on a foundation provided by coal. India will soon consume twice as much coal as the United States and Europe combined.

It's past time to acknowledge the obvious: the world will not turn its back on its most abundant, affordable and secure fuel.

With the world's largest coal reserves and an incredible capacity for innovation, the United States should have led the moonshot effort to develop a new generation of advanced coal power plant technologies to reduce emissions and increase the efficiency of coal use. That would have been global leadership that recognized the world as it is, not what some hope it to be

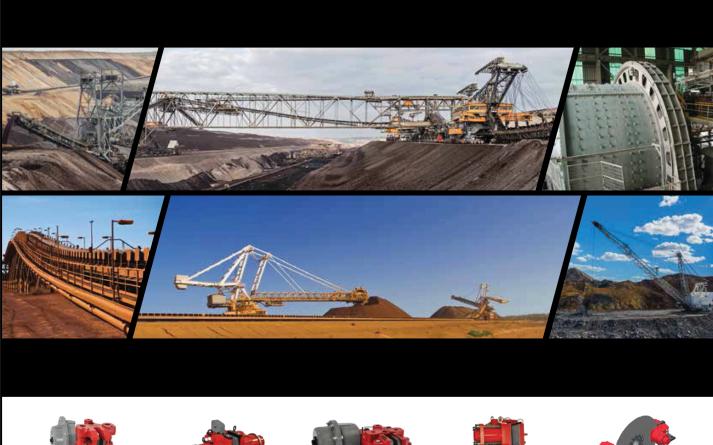
Despite our missteps, the Trump administration will have a golden opportunity to refocus and reinvigorate U.S. coal policy.

Despite efforts to kill American coal, surging electricity demand — fueled by the reshoring of industry, electric vehicles and, notably, the rapid deployment of massive data centers — is giving American coal another life.

With U.S. power demand now expected to jump by as much as 130 gigawatts in the next five years we need every coal plant available. A report by the nation's electricity grid monitor warns that more than half of the country faces risking blackouts over the next decade as power demand eclipses supply.

It's time to stop fighting American coal and recognize its critical importance to our energy security and electricity affordability. The United States should champion advanced coal technology and make it a pragmatic, balanced energy strategy.















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By: Dustin Bleizeffer

Where to Dispose of Piles of Old Wind Turbine Blades? Coal Mines.

As the wind energy industry grapples with its industrial waste, Wyoming says it has plenty of space for disposal at world's largest coal mines.

ind farm operators in Wyoming and across the nation can now bury decommissioned wind turbine blades and other materials at surface coal mines in the state — a solution of mutual benefit to both industries, and especially local landfills, state officials say.

The federal Office of Surface Mining and Reclamation and Enforcement issued a final rule approving "the repurposing of inert, decommissioned wind turbine blades and towers" at surface coal mines in the state. The rule helps address an ongoing concern that turbine blades — which are frequently replaced with new ones — take up too much space at local landfills.

While those landfills typically earn fees to take on the materials, many worry the scores of wind fins and discarded towers might prematurely push landfills to their limits. A single blade would block twoway traffic if deposited on a street in downtown Casper.

"Repurposing these blades and towers as backfill as part of a rec lamation plan was a novel answer for both the coal industry that needed backfill to accelerate final reclamation and for the wind industry that needed disposal answers," former Wyoming Department of Environmental Quality Land Quality Division Administrator Kyle Wendtland, who led the state's rulemaking effort before moving on to the Wyoming Energy Authority, said in a prepared statement.

Simply put, surface coal mines in Wyoming have much bigger holes to fill than the average municipal landfill.

A typical coal mine in the southern Powder River Basin, for example, digs hundreds of feet down before it reaches coal, and those coal seams can be 50 feet thick. With the coal removed, there are big holes to fill and plenty of room for non-toxic materials, rule proponents say. The mining region is home to the biggest earth-moving industries in the world when it comes to digging and refilling holes — a prime opportunity to dispose of industrial waste such as wind turbine blades.

FEATURE

The coal mines are already permitted to bury some of their own inert industrial waste on-site, and they can take on more, according to state and federal regulators. When a tornado struck the nearby mining town of Wright in 2005, mines won quick approval from state regulators to bury debris from the devastation.

"Options to dispose of blades and towers are limited," Wyoming DEQ Solid and Hazardous Waste Division Administrator Suzanne Engels, said in a prepared statement. "Landfilling the retired blades and towers is unsustainable due to land limitations that are needed for communities' waste."

Stockpiling decommissioned blades, as a proposed alternative by some in the industry, "is an eyesore and problematic for the environment," Engels added.

Burying wind blades and other permitted wind energy materials can benefit coal mines by helping to speed up the reclamation process of backfilling pits, Wendtland said. Mines are also allowed to charge a fee, with 25% of the receipts sent to the state. There are no parameters around what coal mines might charge for disposal, he added.

"Not only can we handle Wyoming's waste stream off of wind, we can handle a national level waste stream off of wind and do it responsibly," Wendtland said.



Borne on two flatbed rail cars each, wind turbine blades pass through the historic coal mining town of Rock Springs in March, 2019.

The Office of Surface Mining and Reclamation and Enforcement, which has federal oversight of surface coal mine reclamation, worked closely with Wyoming DEQ to develop the updated rule. The action was spurred by a Wyoming law passed in 2020 — House Bill 129, "Reclamation of surface coal mines-turbine blades." The federal agency noted that it asked for public comment regarding the rule change and did not receive any.

The wind energy industry, in recent years, has taken steps to address its waste issue by moving away from certain composite materials that are costly to recycle, according to the American Clean Power Association, a renewable industry trade group. Today, about 90% of wind blades in the U.S. are recyclable, according to the U.S. Department of Energy.

The waste issue is still on the minds of lawmakers in Wyoming, however.

House Bill 89, "Wind turbine blades-onsite disposal required," sponsored by Rep. J.R. Riggins (R-Casper), would require "disposal of decommissioned wind turbine blades and towers on the site where the wind turbines operated." The measure, however, would still allow for disposal at surface coal mines, Riggins told WyoFile.

Though he was unsure of whether federal approval for burial at Wyoming coal mines would come to fruition when drafting HB 89, Riggins said he wanted to ensure that wind energy developers have a disposal plan that doesn't burden municipal landfills in the state — even if that burden falls on the private property owners who lease to wind energy developers. The landfill that serves Casper received international attention for storing hundreds of wind turbines.

Wind energy companies primarily target privately owned lands to avoid myriad federal permitting reviews.

"I'm putting the burden on the site owners and on the operating companies," Riggins said. "That was the purpose of it. And I know they won't like it. So give me a better plan ... without Wyoming taxpayers bearing any of that burden."

EVENTS

NCTA (NATIONAL COAL TRANSPORTATION ASSOCIATION)

May 19 - 22, 2025

NCTA 2025 Spring and Operations & Maintenance Conferences

InterContinental San Antonio Riverwalk 111 E Pecan St, San Antonio, TX 78205

ASRS (AMERICAN SOCIETY OF RECLAMATION SCIENCES)

March 11, 2025

Mike Curran, Abnova Ecological Solutions

Webinar

April 8, 2025

Discussion Topic "Ideas on Professional Networking"

Virtual Mixer

May 13, 2025

Poster Prep/Help Session for Students

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June 1 – 5, 2025

2025 Meeting Butte, MT

ACAA (AMERICAN COAL ASH ASSOCIATION)

October 7 - 9, 2025

ACAA Fall Membership Meeting & Workshop

Salt Lake City Marriott City Center 220 S State St.

Salt Lake City, UT 84111

ACC (AMERICAN COAL COUNCIL)

May 5 – 8, 2025

American Coal Council Fly-In

August 19 - 21, 2025

Coal Innovation & Market Strategies Conference

ALLTRICITY NETWORK

February 19, 2025

Introduction to the Electric Utility Workshop

Emergency Management Center Training Facility

4514 Frank Bryant Lane,

San Antonio, TX 78219

March 18 - 19, 2025

Empowering Operations: Lineworker Safety,

Skills & Leadership Workshop

The CPS Energy Training Yard 4919 East Houston Street,

San Antonio, TX 78205

March 19 - 20, 2025

2025 Transmission & Substation Renewables Conference

Tri-State Generation & Transmission Association 1100 W 116th Ave.

Westminster, CO 80234

<u>May 5 – 7, 2025</u>

2025 Alltricity Network Spring Conference

Thompson Dallas, by Hyatt 205 North Akard Street,

Dallas, TX 75201

May 21 – 23, 2025

2025 Safety Conference

SRP's PERA Club

1 E Continental Dr

Tempe, AZ 85281

June 24, 2025

2025 Alltricity Scholarship Foundation Golf Tournament

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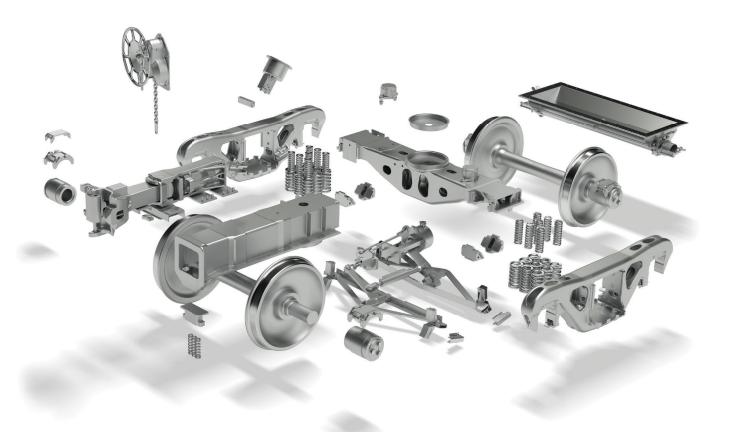
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