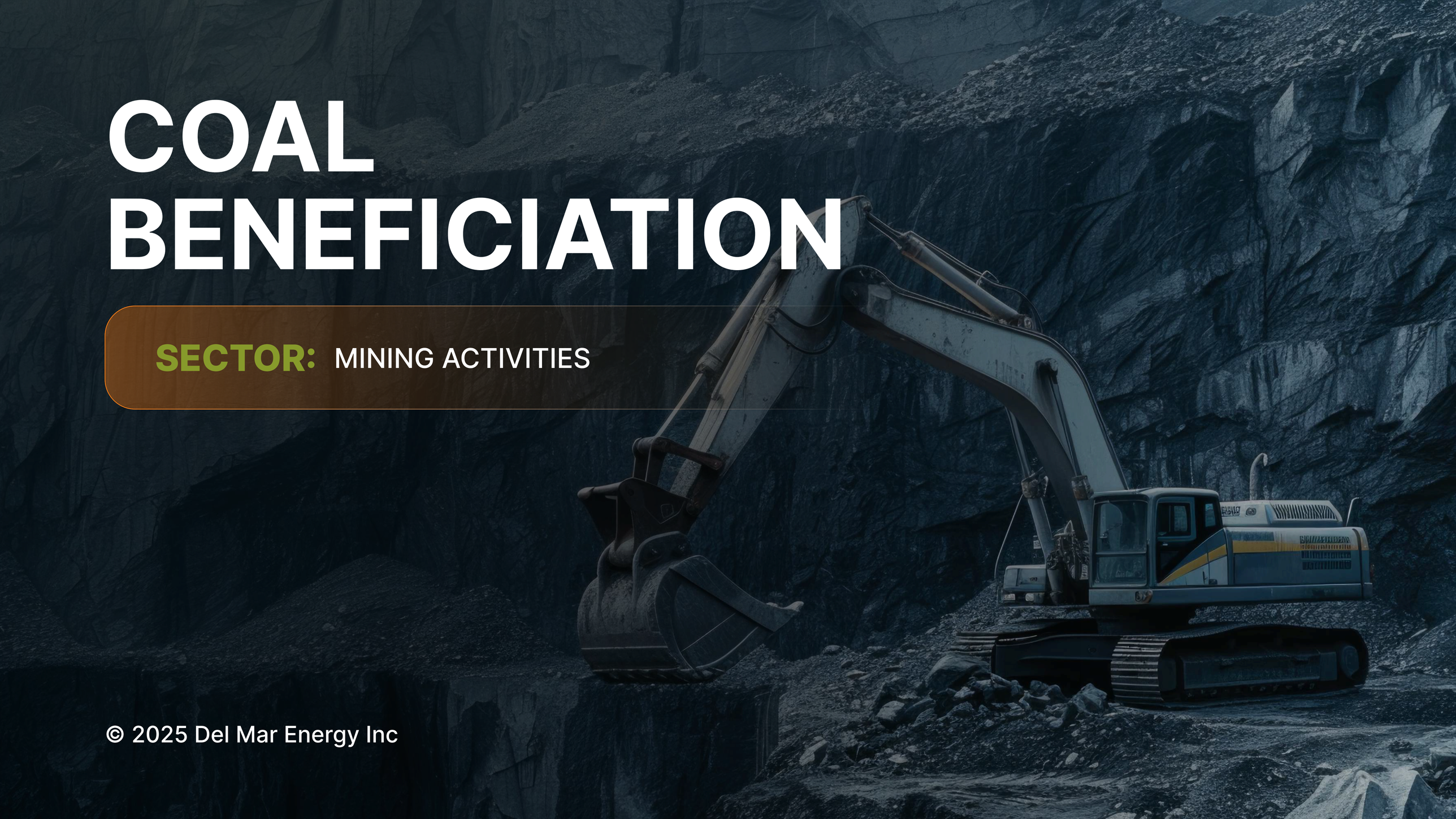
COAL BENEFICIATION

SECTOR: MINING ACTIVITIES



COAL BENEFICIATION: THE FOUNDATION OF EFFICIENT MINING AND INDUSTRIAL ENERGY

Coal beneficiation is a critical raw material processing step that removes rock, impurities, and harmful elements from coal. The goal is to produce higher-quality coal for use in metallurgy, energy, and the chemical industry

Why beneficiation matters

- Increases the calorific value and consistency of coal
- Reduces ash, sulfur, and moisture content—key pollutants
- Improves transportability, storage, and combustion safety

Its role in the modern economy

- High-grade coal is essential for the stable operation of metallurgical and power facilities
- Beneficiated coal reduces equipment wear, boosts efficiency, and helps meet environmental standards
- In developing economies, it is a foundation for export competitiveness

DEL MAR ENERGY: OPERATOR OF THE COAL BENEFICIATION PROJECT

Del Mar Energy is leading a large-scale coal beneficiation initiative under its Mining Activities division. The company not only manages raw coal extraction but also operates a full beneficiation complex focused on producing upgraded coal for export and industrial use

KEY ADVANTAGES OF THE PROJECT

* Increased profitability through higher commercial value of refined coal
* Reduced emissions and more efficient coal utilization in downstream sectors

DEL MAR ENERGY'S ROLE IN THE PROJECT

* Designing and constructing a beneficiation plant based on the company's owned coal reserves
* Implementing gravity, flotation, and magnetic separation technologies
* Securing supply contracts for high-quality coal to metallurgical, energy, and cement industries

PRODUCTION CYCLE: FROM EXTRACTION TO BENEFICIATED COAL

Del Mar Energy's project covers the full production cycle—from coal extraction to beneficiation and preparation for industrial use. This integrated approach ensures consistent physical and chemical properties that meet the standards of international buyers

Key stages of the cycle

1

EXTRACTION AND SORTING

Separation of large fractions and removal of waste rock at the site

2

GRAVITY BENEFICIATION

Removal of light materials and ash using cyclones and jigging machines

3

FLOTATION

Enhancing the quality of fine fractions by removing organic impurities

4

THICKENING AND FILTRATION

Reducing moisture content and preparing coal for transport

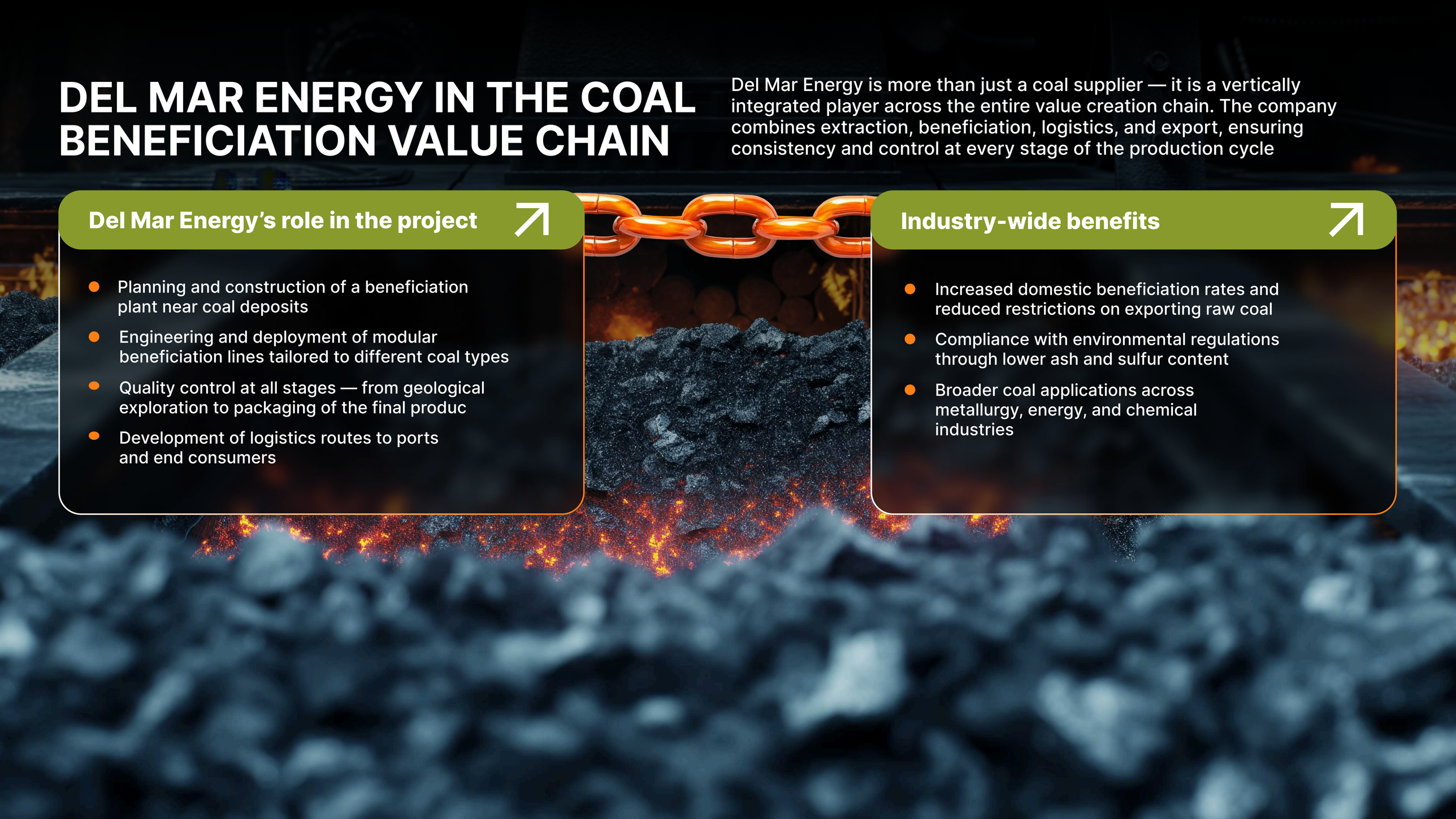
5

DRYING AND PACKAGING

Final stage where coal is processed to meet export-grade specifications

DEL MAR ENERGY IN THE COAL BENEFICIATION VALUE CHAIN

Del Mar Energy is more than just a coal supplier — it is a vertically integrated player across the entire value creation chain. The company combines extraction, beneficiation, logistics, and export, ensuring consistency and control at every stage of the production cycle



Del Mar Energy’s role in the project

- Planning and construction of a beneficiation plant near coal deposits
- Engineering and deployment of modular beneficiation lines tailored to different coal types
- Quality control at all stages — from geological exploration to packaging of the final produc
- Development of logistics routes to ports and end consumers

Industry-wide benefits

- Increased domestic beneficiation rates and reduced restrictions on exporting raw coal
- Compliance with environmental regulations through lower ash and sulfur content
- Broader coal applications across metallurgy, energy, and chemical industries

KEY STAGES OF THE BENEFICIATION PROCESS

Screening and sorting: Removal of large inclusions and separation by size

Flotation: Recovery of valuable components through surface-active agents that cause them to float

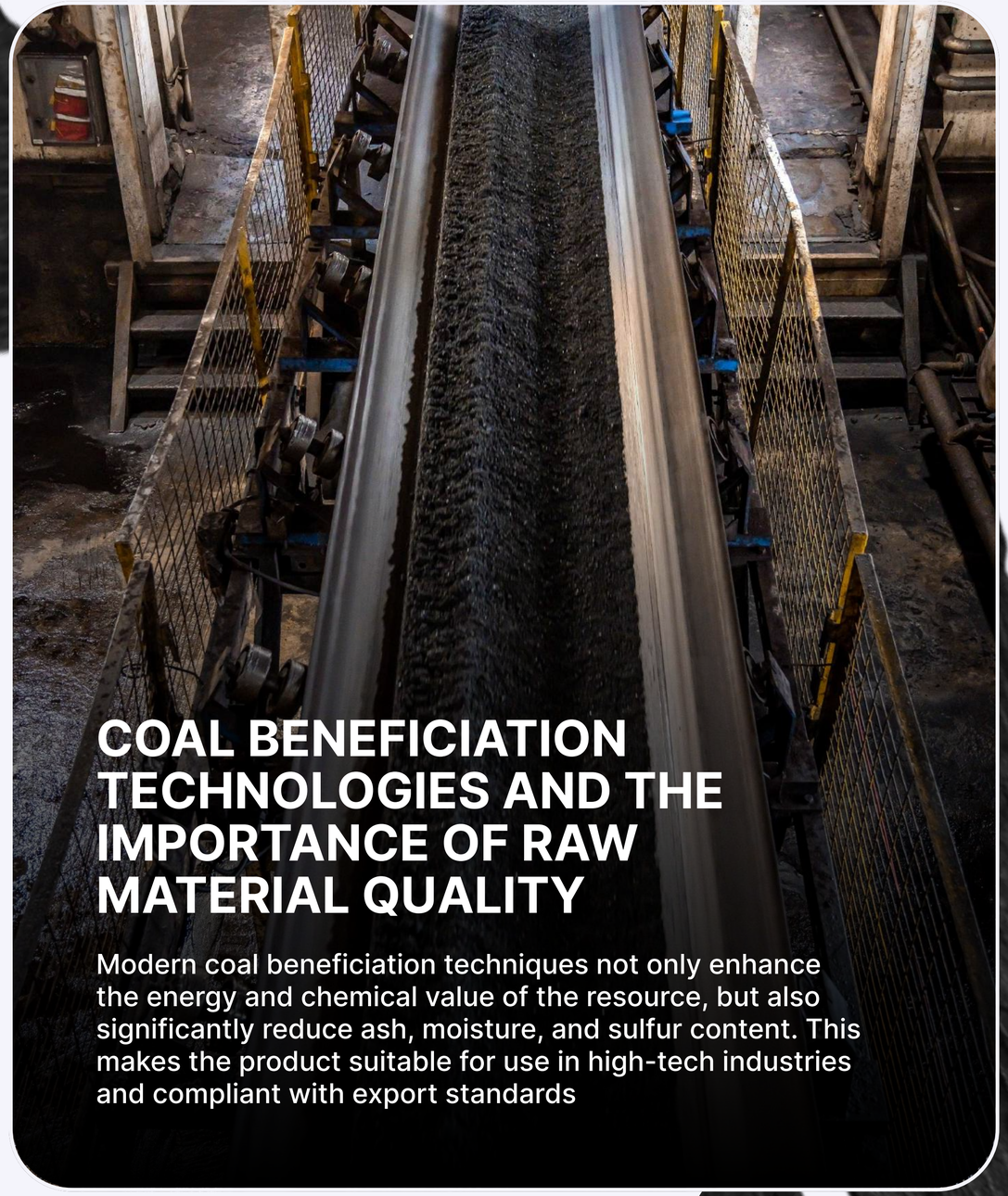
Gravity separation: Separation of light fractions using hydrocyclones and spiral concentrators

Magnetic separation: Removal of ferromagnetic impurities from the raw coal

Drying and briquetting: Final preparation of fuel or industrial feedstock for transport and storage

IMPORTANCE OF RAW MATERIAL QUALITY

- The quality of extracted coal determines the depth and efficiency of beneficiation
- A stable chemical composition reduces reagent consumption and increases yield of marketable product
- Coal from Del Mar Energy features low ash content and consistent particle size — ideal for advanced processing



COAL BENEFICIATION TECHNOLOGIES AND THE IMPORTANCE OF RAW MATERIAL QUALITY

Modern coal beneficiation techniques not only enhance the energy and chemical value of the resource, but also significantly reduce ash, moisture, and sulfur content. This makes the product suitable for use in high-tech industries and compliant with export standards

DEL MAR ENERGY IN THE GLOBAL COAL PROCESSING CHAIN

Del Mar Energy is more than just a mining company — it's a key operator in the international coal processing and supply network. By maintaining full control over the production cycle, from mine to export terminal, we create a stable value-added chain and ensure reliable, high-quality delivery

Our role in the supply chain

- Extraction of coal with targeted specifications: low ash, stable moisture content, and high calorific value
- On-site beneficiation at mobile or fixed facilities, tailored to customer-specific requirements
- Transportation across domestic and international routes — rail, road, and sea
- End-to-end client support — from technical specification alignment to logistics and customs processing

Del Mar Energy advantages

- Technological flexibility to meet the needs of metallurgy, energy, and chemical industries
- Long-term contracts with key consumers in the U.S., Asia, and Europe
- Agile logistics that minimize delivery times from mine to end user
- Standardized coal batches with digital quality passports — ensuring seamless integration into partners' production chains

INNOVATION IN COAL BENEFICIATION

Modern coal beneficiation is far more than removing impurities — it's a high-tech process that enhances calorific value, environmental compliance, and product consistency. Del Mar Energy's coal meets international industrial standards and is designed for end-users with strict quality requirements

QUALITY'S ROLE IN END-USE

- **Low ash content** reduces equipment wear and increases combustion efficiency
- **Minimal moisture** ensures higher heat output and lower transportation costs
- **Consistent specifications** form the foundation of stable industrial operations

KEY BENEFICIATION TECHNOLOGIES

- **Gravity separation:** Efficient density-based separation for improved product purity
- **Flotation:** Removal of fine particulate matter and sulfur compounds
- **Magnetic separation:** Elimination of ferromagnetic particles to meet metallurgical specifications
- **Desalination and dewatering:** Reducing corrosiveness and increasing energy value
- **Drying and sizing:** Preparation of coal fractions with targeted moisture and particle size

MARKET FOR BENEFICIATED COAL

Beneficiated coal holds a strategic position in both the energy and metallurgical markets. Its growing demand stems not only from superior technical performance, but also from compliance with evolving environmental and industrial standards

CURRENT MARKET LANDSCAPE

- Rising demand in Asia and Europe for low-ash, low-sulfur coal
- Stricter emissions regulations are pushing consumers toward cleaner, processed coal
- Infrastructure expansion in India, China, Vietnam, and South Korea is driving consumption growth

1 1

TRENDS AND GROWTH DRIVERS

- Greater use of beneficiated coal in energy production as a transitional solution toward ESG targets
- Government-backed modernization programs for thermal power and steel production
- Increased use of automated control systems in industrial operations, requiring more consistent raw materials

1 2

DEVELOPMENT OUTLOOK

- By 2030, beneficiated coal could account for up to 50% of global coal consumption
- New export routes to Southeast Asia and Africa are opening opportunities for high-purity coal suppliers
- Growth of small-scale beneficiation facilities offers solutions for regions with limited processing infrastructure

1 3

Digital technologies in beneficiation

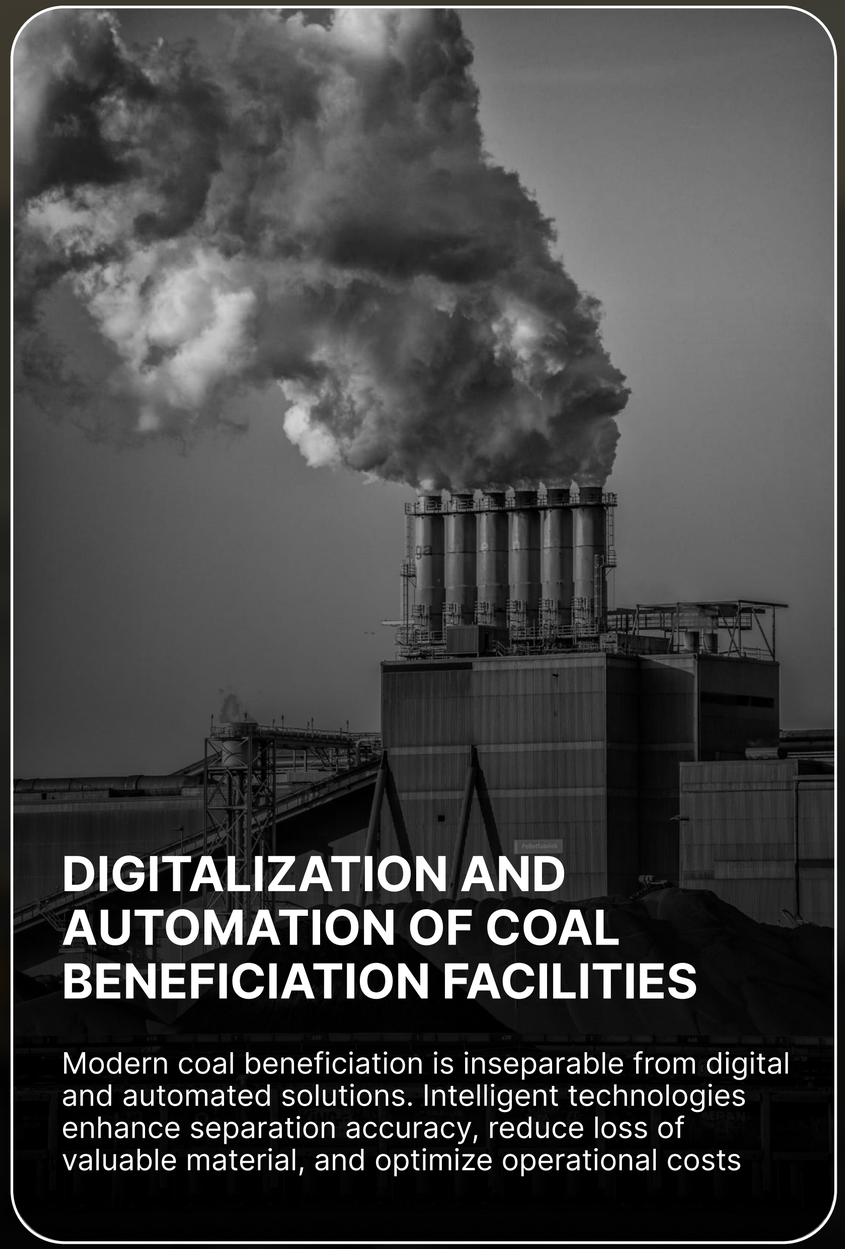
- Use of digital twins to simulate and fine-tune plant performance
- Implementation of AI-based predictive analytics to forecast blockages, overloads, and material inconsistencies
- Centralized process control systems with real-time visualization — from raw input to final product

Process automation

- Automated monitoring of pulp density, feed rate, ash content, and moisture levels
- Robotic sorting by particle size and quality — increasing the yield of saleable coal
- Integration with logistics systems: warehouse management, dispatch coordination, and documentation flow

Del Mar Energy’s role

- Designing and deploying proprietary automation systems across its beneficiation lines
- Supporting a digital ecosystem by connecting equipment to the corporate IT infrastructure
- Enhancing profitability through precise quality control and reduced operational costs



DIGITALIZATION AND AUTOMATION OF COAL BENEFICIATION FACILITIES

Modern coal beneficiation is inseparable from digital and automated solutions. Intelligent technologies enhance separation accuracy, reduce loss of valuable material, and optimize operational costs

COAL BENEFICIATION IN THE UNITED STATES

The United States places significant emphasis on domestic mineral processing — including coal beneficiation — viewing it as a strategic sector that strengthens economic autonomy, reduces costs, and boosts the competitiveness of the national energy and steel industries

INDUSTRY FACTS AND STRUCTURE

- The U.S. ranks among the top five global leaders in coal mining and processing
- Over 75% of coal used in American metallurgy and energy undergoes beneficiation
- Coal preparation plants are located across all major coal-producing regions: Appalachia, Illinois, and Wyoming

KEY ADVANTAGES OF THE U.S. MODEL

- Advanced infrastructure: transportation, power supply, and proximity to end-users
- Broad adoption of modern technologies: dry beneficiation, flotation, and automation
- Standardized quality control and environmental regulations at both federal and state levels

DEL MAR ENERGY'S ROLE

- Tailoring coal supply to meet the needs of the American steel industry
- Upholding high quality standards: low ash content, consistent moisture levels, and elimination of unwanted impurities
- Integrating into resilient logistics chains with the ability to serve both domestic and export markets

GLOBAL COMPETITION IN COAL BENEFICIATION

- **The global coal market is undergoing rapid transformation:** demand for higher-quality feedstock is rising, environmental regulations are tightening, and competition among suppliers is intensifying

COMPETITIVE LANDSCAPE

Asia remains the largest consumer but faces a shortage of high-grade coal

Europe is shifting to low-sulfur, low-ash coal, driving increased demand for beneficiated imports

The United States is focusing on localized processing and positioning coal as part of its broader ESG transformation

KEY INDUSTRY CHALLENGES

Increasing costs for logistics and processing

Growing need to meet international standards (ISO, ASTM)

Demand shift from raw to refined coal products

ADVANTAGES

- ✓ Direct control over mining and beneficiation infrastructure
- ✓ Flexibility to serve diverse markets — from metallurgy to power generation
- ✓ Alignment with environmental priorities through supply of low-impurity coal
- ✓ Integration into both export and domestic logistics chains

THE ROLE OF BENEFICIATED COAL IN MODERN INDUSTRY

Coal beneficiation is a critical stage in producing efficient, environmentally compliant, and cost-effective coal products. It's this process that gives coal the properties needed for use in metallurgy, power generation, and other high-tech sectors

Functions and advantages of beneficiated coal

Increased calorific value: Removal of waste rock boosts fuel energy density

Reduced ash and sulfur content: Enhances environmental performance and reduces equipment wear

Standardized quality: Coal becomes a predictable, specification-compliant product

Improved processability: Ensures consistent performance in boilers, furnaces, and industrial systems

Industries that rely on it

Metallurgy: Stable temperatures and reduced impurities during smelting

Power generation: Higher efficiency and lower emissions

Cement and chemical industries: Precise combustion behavior and dosing control

Technological relevance

Only beneficiated coal meets international standards such as ISO and ASTM

It ensures reliable, uninterrupted operation of large-scale industri facilities

VALUE CHAIN: FROM EXTRACTION TO INDUSTRIAL APPLICATION

Del Mar Energy's coal beneficiation project is part of a fully integrated value chain — starting with geological exploration and ending with delivery of standardized coal products to key industrial sectors

01 Exploration and mining

- Evaluation of coal seam reserves and quality
- Surface and underground mining using advanced technologies
- Quality control of raw coal during the extraction phase

02 Coal beneficiation

- Separation of coal from waste rock by density and size
- Reduction of ash, sulfur, and moisture content
- Production of concentrates with specific technical properties

03 Transport and logistic

- Modular logistics: rail and road transport
- Fast-track delivery to ports or processing facilities
- Direct integration with clients and export terminals

04 Industrial application

- **Metallurgy:** Used in blast and electric arc furnaces
- **Power generation:** For coal-fired plants, boilers, and hybrid systems
- **Construction and chemical sectors:** For cement, lime, and synthesis processes

Financial impact

- Coal value increases **by 25–40%** after beneficiation
- Lower logistics costs due to reduced waste volume
- Business resilience driven by demand for standardized, high-quality product

THE FUTURE OF COAL BENEFICIATION

A modern coal beneficiation project is more than just a processing facility — it is a technological platform aligned with the principles of sustainability, digital transformation, and logistics efficiency

ENVIRONMENTAL STANDARDS (ESG)

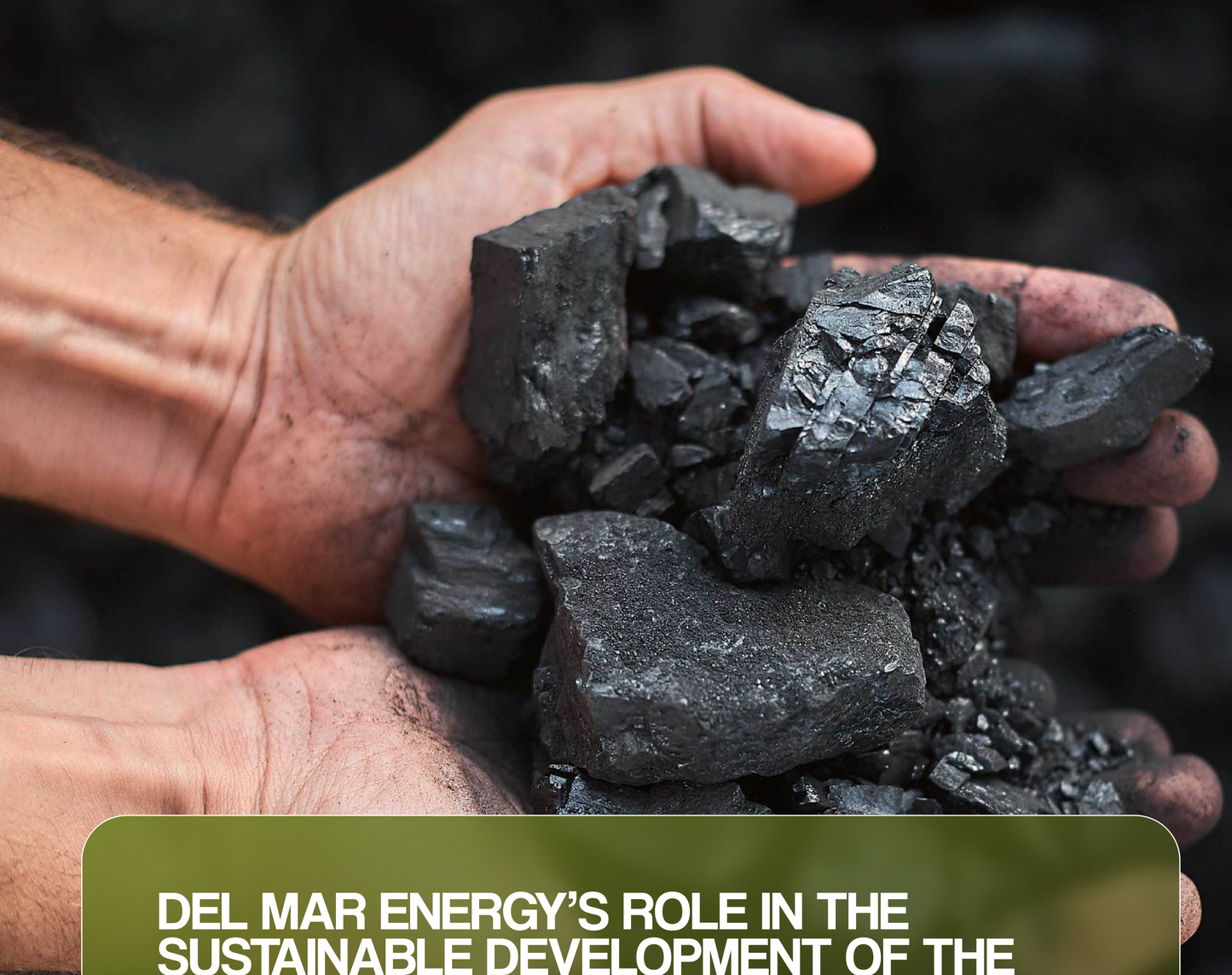
- Closed-loop water treatment and slurry management systems
- Emissions reduction through pre-processing removal of sulfur and ash
- Smaller carbon footprint per ton of product due to high coal concentration post-beneficiation

PROCESS AUTOMATION

- Remote control and operation of beneficiation plants
- Real-time quality monitoring and process adjustment systems
- Predictive maintenance to increase reliability and reduce downtime

INTEGRATED LOGISTICS

- Facility design near extraction sites and major transport hubs
- Direct shipping capability to metallurgical and energy sector clients
- Integration into multimodal logistics: rail + maritime terminals + road transport



DEL MAR ENERGY’S ROLE IN THE SUSTAINABLE DEVELOPMENT OF THE COAL INDUSTRY

Del Mar Energy’s coal beneficiation project is more than just a production facility — it’s part of a broader sustainability strategy that balances economic performance, environmental responsibility, and social impact

Environmental responsibility

- Implementation of dry or low-waste processing technologies to reduce water consumption
- Removal of impurities before transport to reduce emissions during combustion
- Land reclamation programs and ecosystem restoration in mining and processing areas

Innovation and digitalization

- Deployment of automated quality control systems across all beneficiation stages
- Use of AI models to optimize equipment loads and energy efficiency
- Creation of digital product passports including carbon footprint and purity metrics

Social and regional development

- Job creation and industrial infrastructure development in mining regions
- Support for educational initiatives and workforce training in the mining sector
- Collaboration with local authorities on community development and entrepreneurship programs

ENVIRONMENTAL TRANSFORMATION OF THE COAL INDUSTRY

Key environmental focus areas

Reduced water consumption
Implementation of dry separation technologies, closed-loop water systems, and technical water reuse

Emission and dust control
Dust collection systems, sealed transport infrastructure, and regular air quality monitoring

Land reclamation and landscape restoration
Post-mining land rehabilitation, vegetation planting, and soil restoration upon site closure

Waste repurposing
Byproducts such as rock and sludge are processed for use in construction, road surfacing, and as mineral additives

Integration of ESG principles:

- ✓ The project complies with ISO standards and global carbon reduction initiatives
- ✓ Environmental impact assessments are conducted throughout design and construction phases
- ✓ Participation in green investment programs and ESG-certified initiatives

Modern coal beneficiation projects are increasingly driven by environmental priorities. Del Mar Energy’s initiative incorporates a full range of solutions aimed at minimizing ecological impact

INVESTMENT APPEAL OF COAL BENEFICIATION AMID GLOBAL ENERGY TRANSITION

Despite the global shift toward a low-carbon economy, high-quality coal remains a vital component in the value chain of many industrial processes

KEY DRIVERS OF INVESTMENT ATTRACTIVENESS:

Steady demand from steel and power sectors

Beneficiated coal remains an irreplaceable resource for steel mills, thermal power plants, and the cement industry

Higher margins through quality

High carbon content, low ash and moisture levels allow for premium pricing and reduced processing costs for end users

Low competition among modern facilities

Most existing plants are outdated, while new projects are rare — creating an open market niche for modern infrastructure

Integration with national modernization programs

Government initiatives for import substitution and decarbonization drive demand for advanced beneficiation infrastructure

Key metrics for investors

Average project returns of 18% to 25% annually

High predictability of operating cash flows

Potential for long-term contracts with industrial clients and public-sector buyers

TERM: 196 DAYS

ROI: 412.188%

INVESTMENT OFFER

By opening a deposit with the minimum eligible amount of $600,000, your balance after 196 days will total

$3,090,888

DEL MAR ENERGY INC.

is an american holding company primarily focused on the extraction, processing, and sale of oil

The company also engages in electricity production and distribution; manufacturing, repairing, and leasing electromechanical equipment; designing and constructing wind, solar, and geothermal power plants; extracting coal and gas; and developing oil and gas infrastructure

Having started out with just a few oil rigs in 2002, we began developing and manufacturing with our own technologies in 2012

of our products are exported to more than 40 countries worldwide

91%

LEADERSHIP TEAM

Del Mar Energy Inc.

THOMAS LIEBERMAN

CMO (Chief Marketing Officer)

Born in 1984 in Nevada, Thomas studied at a local university before moving to New York in 2006 to work in marketing and public relations. He began collaborating with Del Mar Energy in 2011. Prior to joining the company, Thomas worked on promoting brands such as P&G, Gillette, and General Motors

STEFAN RUSSO

CIO (Chief Information Officer)

Stefan started his internship at Del Mar Energy in 2016. In less than five years, he advanced from intern to company director

NICK KAUFMAN

COO (Chief Operating Officer)

Nick has served as COO since 2018. A Texas native and graduate of the University of Massachusetts, Nick initially worked in law. He first encountered Del Mar Energy in 2013 and officially became a partner in 2018. Nick introduced many of the modernized technologies now used in production

MICHAEL LATHAM

Founder/CEO

Michael Latham is the founder and CEO of Del Mar Energy. He established the holding company in 2002 in Texas, successfully building and growing industrial sectors