

STEEL PRODUCTION

A large industrial machine, likely a ladle, is pouring a thick stream of bright yellow-orange molten metal into a dark, rectangular mold. The scene is set in a dimly lit industrial environment, with the primary light source being the intense heat of the molten metal. The background shows various industrial structures and pipes, slightly out of focus.

SECTOR: COAL INDUSTRY



STEEL

The Foundation of Modern Industry

- ▶ Steel production is a key link in the global value chain. It is essential for the development of construction, mechanical engineering, energy, and transportation. Every element of modern infrastructure—from skyscrapers to railroads—begins with high-quality steel
- ▶ Coking coal remains the foundation of steel production, providing the high temperatures and reducing atmosphere required in blast furnaces. Its unique properties make it possible to produce strong, uniform metal alloys that meet international standards
- ▶ Today, over 70% of the world's steel is produced using coking coal. According to the World Steel Association, global steel production surpassed 1.8 billion tons in 2023. The leading producers are China, India, Japan, and the United States
- ▶ The steady demand for steel makes this sector highly attractive for investment, especially given the ongoing need to modernize infrastructure in developing economies

CONTRIBUTING TO GLOBAL STEEL PRODUCTION

Del Mar Energy plays a vital role in the steelmaking supply chain by providing the industry with high-quality coking coal—an essential component in steel production. Our capabilities and international partnerships position us as a key player in the global metallurgy ecosystem

CORE AREAS OF OPERATION:

- Supplying steel mills with high-coking, low-ash coal
- Direct raw material deliveries to over 10 countries, including Germany, South Korea, the U.S., and Japan
- Logistics solutions with minimal delivery time—from mine to blast furnace

STRATEGIC PARTNERSHIPS:

- Participation in scientific consortia focused on modernizing steelmaking processes
- Testing adaptive coal grades tailored to specific production needs
- Joint investments in infrastructure and reducing the carbon footprint of steel plants

Partnering with Del Mar Energy means access to world-class raw materials, advanced technologies, and integration into a sustainable global steel industry

STEEL PRODUCTION:

Processes And Raw Material Base

Steel production is a highly advanced process that relies on the use of high-quality coking coal. This resource is essential for achieving the key parameters of smelting: temperature, a reducing atmosphere, and the physical strength of the charge

IMPORTANCE OF THE RAW MATERIAL BASE:

- The quality of coking coal directly impacts energy efficiency and the cost of steel production
- Continuous monitoring of raw material properties ensures process stability in metallurgy
- Modern steelmaking requires coal with low sulfur, ash, and moisture content—standards that Del Mar Energy coal consistently meets

Main stages of steel production:

1

Coke production:

Coking coal undergoes thermal processing in coke ovens, turning into metallurgical coke

2

Blast furnace process:

Coke is used in blast furnaces as both a heat source and a reducing agent, transforming iron ore into pig iron

3

Converter and electric arc furnace production:

Pig iron is converted into steel through impurity removal and the addition of alloying elements

4

Casting and rolling:

The finished steel is formed into ingots, sheets, pipes, and other product types

DEL MAR ENERGY IN THE GLOBAL STEELMAKING SUPPLY CHAIN

THE COMPANY'S ROLE IN THE PRODUCTION CYCLE:

- Engineering coal blends tailored to the specifications of individual blast furnaces
- Delivering certified raw materials with traceable logistics from the mine to the furnace
- Utilizing smart logistics routes to reduce delivery time and transportation costs

Del Mar Energy does more than supply coking coal—it plays an active role in shaping a sustainable and highly efficient supply chain for the global steel industry

ADVANTAGES FOR STEEL PRODUCERS:

- Increased coke yield with consistent chemical composition
- Reduced costs for coal processing and filtration due to the high purity of supplied materials

METALLURGICAL INNOVATION FROM RAW MATERIALS TO HIGH-TECH STEEL

Modern steelmaking is far more than melting metal—it's an intelligent process where every component, including coking coal, plays a critical role. Technological advancements are driving new levels of efficiency and environmental responsibility

REVOLUTIONIZING STEEL PRODUCTION APPROACHES:

- Implementation of hybrid systems: combining blast furnaces with electric arc furnaces to reduce carbon emissions
- Full automation of all stages—from charge loading to quality control of finished steel
- Use of digital twins and real-time quality prediction models

01

03

THE ROLE OF COKE IN THE TECHNOLOGICAL CHAIN:

- Coke provides not only the necessary heat but also maintains the gas permeability of the charge
- It creates optimal conditions for uniform reduction and melting reactions
- Its robust structure helps reduce defects during steel production

02

03

TECHNOLOGICAL PRIORITIES:

- Modernizing blast furnaces with gas recovery and afterburning systems
- Lowering coke consumption per ton of steel by optimizing the charge composition
- Its robust structure Integrating intelligent algorithms to control temperature and fuel efficiency helps reduce defects during steel production

03

03



STEEL MARKET

Trends And Outlook

The global steel market plays a vital role in the world economy, as steel is used across nearly every sector—from construction and manufacturing to infrastructure and energy

Steel production remains a strategically important industry, critical to economic stability and industrial advancement worldwide

CURRENT MARKET OVERVIEW:

- Annual steel production exceeds 1.8 billion tons
- Leading producers: China, India, Japan, the U.S., and Russia
- Primary demand comes from construction (50%), machinery manufacturing (16%), and transportation (12%)



KEY TRENDS:

- Increased consumption in developing countries driven by urbanization and infrastructure development
- Shift toward eco-friendly steelmaking: reducing carbon footprints and expanding electric arc furnace technologies
- Greater use of recycled materials and scrap metal



GROWTH PROSPECTS:

- Global steel demand is expected to grow by 15–20% by 2030, fueled by major infrastructure projects across Asia, Africa, and Latin America
- Rising quality standards are driving the development of new steel grades and technological innovations
- Market expansion is supported by growth in the transportation, energy, and defense sectors

BENEFITS FOR THE ECONOMY AND INVESTORS:

- Strong multiplier effect: Every dollar invested in steel production stimulates growth in related sectors, from logistics to energy
- Reliable tax revenue: Large enterprises contribute significantly to local and national budgets
- Export potential: Steel products are in high demand globally, generating substantial foreign currency earnings



FINANCIAL METRICS:

- Average return on steel projects ranges from 15% to 22% annually
- Payback period is typically between 5 and 8 years, assuming stable raw material supplies
- Up to 60% of revenue for major steel plants comes from international markets



The steel industry is highly capital-intensive, yet it consistently delivers solid profitability due to large-scale operations, steady demand, and long-term contracts

KEY PROFITABILITY FACTORS:

- Cost of energy and raw materials, particularly coking coal and iron ore
- Level of automation and energy efficiency in production facilities
- Effectiveness of logistics and access to export infrastructure



ECONOMIC EFFICIENCY OF STEEL PRODUCTION

THE ROLE OF COAL IN SMART METALLURGY:

Delivered to exact specifications, with each batch monitored across dozens of parameters

Accompanied by a digital quality and carbon footprint certificate

Enables flexible control of coke composition tailored to the needs of specific smelting units

PROCESS DIGITALIZATION:

Digital twin models monitor the real-time behavior of blast furnaces and steelmaking units

Predictive analytics detect anomalies before they cause disruptions

AI systems optimize the ratio of ore, coke, and fluxes for maximum energy efficiency

The intelligent steelmaking cycle precision meets sustainability

21st-century steel is made not only from raw materials but also from data, automation, and digital technologies. The production cycle has evolved into an intelligent ecosystem—where coking coal provides a stable physical-chemical foundation, and technology ensures flexibility and process predictability

FLEXIBLE PRODUCTION LINES:

Automated reconfiguration of equipment for different steel grades

Programmable casting and rolling systems reduce waste and accelerate turnaround time

Full integration with logistics and inventory systems to ensure timely deliveries

All of this transforms the steelmaking cycle into a controlled, transparent, and sustainable process—where every gram of coal and every kilowatt of energy delivers maximum efficiency



The steel industry plays a crucial role in the development of energy infrastructure. From drilling platforms to power line towers, from wind turbines to oil pipelines—every energy facility begins with strong, reliable, and resilient steel

Steel And Energy: An Unbreakable Link In Industrial Progress

APPLICATIONS OF STEEL IN THE ENERGY SECTOR:



Traditional Energy:

Oil and gas pipelines, heat exchangers, drilling and pumping equipment



Renewable Energy:

Structural supports for wind turbines, solar panel farms, components of hydroelectric plants



Nuclear Energy:

Reactor casings, fuel rods, shielding systems, and pressure vessel components

THE ROLE OF COKING COAL:

Only coke makes it possible to achieve the necessary steel properties: strength, ductility, and heat resistance

Coke quality directly impacts melt stability and minimizes loss in complex alloy production


The use of purified and enriched coal ensures compliance with international ASTM and ISO steel standards

QUALITY REQUIREMENTS:

Steel must withstand extreme temperatures, corrosion, vibration, and harsh environments

Homogeneity and freedom from internal defects are critical—especially in high-pressure energy systems





The United States remains one of the most resilient steel-producing nations in the world, actively modernizing its industrial base and adapting steel production to meet new economic and environmental challenges

Industry Statistics and Structure:

In 2023, the U.S. produced over 80 million tons of steel, with a significant share coming from electric arc furnaces (EAF)

Over 60% of the nation's coking coal consumption is used in the steel industry

Around 70% of all steel is produced using recycled scrap, yet coke remains essential for primary steelmaking

U.S. STEEL INDUSTRY

Focused on Innovation and Domestic Security

Competitive Advantages:

Technological Leadership: Broad use of digital systems, process control, and automation

Robust Domestic Logistics: A well-developed network of railroads and ports ensures reliable delivery of raw materials and finished goods

Government Support: The industry benefits from subsidies and grants for green initiatives and modernization efforts

Investment Opportunities:

Growth in structural and specialty steel production for aviation, nuclear energy, and defense

Increased infrastructure spending under the Bipartisan Infrastructure Law is driving demand for steel and raw materials

U.S.-grade coking coal continues to see steady demand both domestically and in export markets

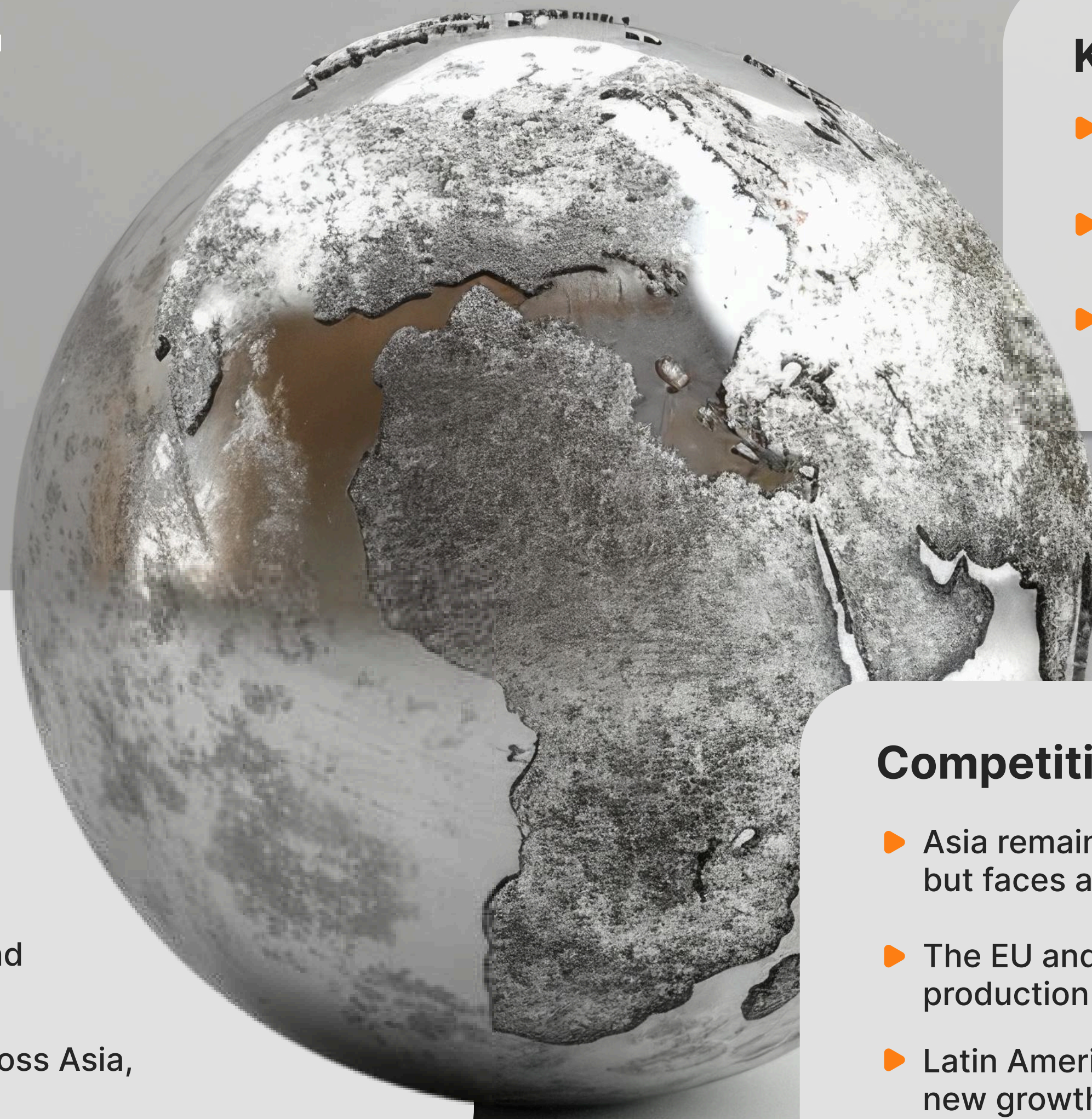
The American steel industry is not just an economic powerhouse—it's also a key driver of national industrial security

GLOBAL COMPETITION IN THE STEEL INDUSTRY

Today's steel market is highly competitive, with supply stability, technological adaptability, and environmental responsibility playing decisive roles. In this landscape, Del Mar Energy holds a strategic position as a supplier of critical raw material—coking coal

Del Mar Energy's Advantages:

- ▶ Long-term contracts with major steel producers
- ▶ Strict quality control and compliance with international standards
- ▶ Investments in eco-friendly coal mining and processing technologies
- ▶ Logistical flexibility with supply routes across Asia, Europe, and North America



Key Challenges for Producers:

- ▶ Raw material price volatility and supply chain disruptions
- ▶ Rising costs tied to CO₂ reduction requirements
- ▶ The need to secure resilient and sustainable supply chains

Competitive Landscape:

- ▶ Asia remains the global leader in steel production but faces a shortage of high-quality raw materials
- ▶ The EU and the U.S. are prioritizing greener production and supply chain diversification
- ▶ Latin America and Africa are emerging as new growth hubs for the steel industry

KEY FUNCTIONS OF COKING COAL IN STEELMAKING:

Metallurgical Coke as a Reducing Agent:

Enables the reduction of iron from ore in blast furnaces at temperatures exceeding 1,000°C

Heat Source:

Coke combustion generates the high, stable temperatures required to melt the charge material

Formation of Pig Iron's Porous Structure:

Ensures gas permeability and optimal physical and chemical characteristics throughout the process

ADVANTAGES OF USING COKING COAL:

High coke strength and low impurity content improve smelting efficiency

Reduces the specific cost of steel production by maintaining process stability and product quality

Versatile: used in both traditional and modern iron and steelmaking technologies

ALTERNATIVES AND LIMITATIONS:

Currently, there is no full substitute for coking coal in traditional metallurgy

Electric arc furnaces and hydrogen-based “green steel” are emerging but represent less than 15% of the market today

Transitioning to alternatives requires multi-billion-dollar investments and decades of infrastructure transformation

The Role Of Coking Coal In The Steel Industry

Coking coal is the foundation of high-quality steel production. It is used to produce metallurgical coke, a critical component in the efficient smelting of pig iron in blast furnaces



STEEL VALUE CHAIN

From Coal To Infrastructure

1

COAL MINING AND PROCESSING

Selection based on coking potential, sulfur, and ash content

Coal enrichment and degassing to meet metallurgical standards

Production of consistent-quality coke for efficient smelting

2

STEEL PRODUCTION

Use of coke in blast furnaces as a reducing agent

Smelting pig iron and converting it into steel

Adjusting chemical composition and mechanical properties to meet industry-specific needs

3

INDUSTRIAL AND EXPORT LOGISTICS

Transport of coal and steel via established channels (rail and seaports)

Integration with national infrastructure projects and private investments

Participation in global supply chains—from construction sites to heavy machinery manufacturing

4

FINANCIAL EFFICIENCY

Value added at every stage of the chain

Margin potential in processing and finished product segments

Flexible business model: from raw materials to steel structures and specialty components

► Del Mar Energy ensures a stable raw material supply and strong partnerships across all stages of the value chain, creating synergy between the coal and steel industries

THE FUTURE OF STEEL: TRANSITIONING TO GREEN METALLURGY AND THE ONGOING ROLE OF COKING COAL

The global steel industry is on the brink of transformation, with the rise of low-carbon technologies and increasing pressure from investors and regulators. Yet, coking coal remains a critical component in this transition

CURRENT REALITIES:

70% of global steel is still produced via blast furnaces, where coke plays an essential role

Replacing coke with alternatives like hydrogen or biomass will take decades of technological and infrastructure development

Coal companies investing in environmental upgrades are becoming part of the “green” transition



WHY COKING COAL WILL REMAIN ESSENTIAL:

It ensures not only iron reduction but also mechanical stability of the process

High-quality coke directly affects smelting efficiency and cost-effectiveness

There is currently no widely available alternative that matches its properties and scalability

TRANSITION PATHWAYS:

Using coal in hybrid systems: blast furnaces combined with hydrogen-based technologies

Adoption of CCUS (carbon capture, utilization, and storage) at steel plants

Growth in electric arc furnace steelmaking using recycled scrap metal

DEL MAR ENERGY'S ROLE IN THE SUSTAINABLE DEVELOPMENT OF THE STEEL INDUSTRY

Del Mar Energy is more than a raw material supplier—it's a strategic partner to the global steel industry, committed to the values of sustainability, technological advancement, and social responsibility



ENVIRONMENTAL RESPONSIBILITY

- ▶ We use advanced coal enrichment technologies to reduce sulfur, ash, and moisture content—helping lower emissions during coking
- ▶ We implement closed-loop water treatment and waste management systems to minimize environmental impact
- ▶ We support land reclamation and ecosystem restoration projects in mining areas



SOCIAL PARTNERSHIP

- ▶ We create jobs in coal-producing regions and invest in local healthcare, education, and transportation infrastructure
- ▶ We offer workforce training and skill development programs
- ▶ We engage with local communities and support small business initiatives



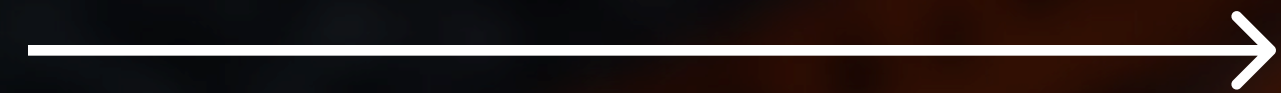
INNOVATION AND DIGITALIZATION

- ▶ We employ automated quality control systems at every stage of coal extraction and processing
- ▶ We are integrated into the digital logistics chains of leading global steel producers
- ▶ We participate in joint R&D aimed at reducing carbon footprints and adapting coke to next-generation steelmaking technologies

ENVIRONMENTAL TRANSFORMATION OF THE STEEL INDUSTRY

Modern steelmaking is actively adopting sustainable technologies to minimize its environmental impact. While the role of coking coal is evolving, it remains essential to the process

Key Areas of Environmental Transformation:



REDUCING CO₂ EMISSIONS

Implementation of carbon capture and storage (CCS) technologies, partial replacement of coke with alternative energy sources, and hybrid coal-hydrogen systems

PRODUCTION MODERNIZATION

Upgrading blast furnaces, automating operations, and digitalizing emission and energy efficiency monitoring systems

RECYCLING AND REUSE

Processing byproducts (slag, coke oven gas), reusing thermal energy, and minimizing industrial waste

PARTICIPATION IN ESG INITIATIVES

Adopting international environmental and social responsibility standards, obtaining certifications, and engaging in green investment and environmental fund programs

DEL MAR ENERGY'S ROLE IN THE TRANSFORMATION

We supply enriched coking coal with reduced sulfur and ash content, tailored to meet clients' environmental requirements. We also actively participate in blast furnace modernization projects and initiatives to lower the carbon footprint of the steel industry

FACTORS DRIVING INVESTMENT APPEAL:

► Sustained Demand for Steel

Ongoing infrastructure, energy, and transportation development across Asia, Africa, and Latin America continues to drive demand for structural and specialized steel grades

► Growth in Premium Product Output

Rising demand for stainless, alloyed, and high-performance structural steel with added value. Product diversification strategies are increasing profit margins and project returns

► Industrial Transformation

Digitization, automation, and AI-based process control are reducing costs and improving profitability

► Export Potential and Global Reach

Broad market access, strong international trade relationships, and integration into global supply chains

► Government Support Programs

Incentives for modernization, subsidies for green technology adoption, tax breaks, and export benefits

INVESTMENT POTENTIAL OF THE STEEL INDUSTRY AMID GLOBAL SHIFTS

The steel industry remains one of the core sectors of the global economy, showing resilience and growth potential—even as it works to transition to a low-carbon model

Investor returns:

Average project ROI: 15–25% annually

Payback period: as low as 5 years with high operational efficiency

Strong capitalization potential fueled by growing global demand and ESG-driven market strategies

The steel industry remains one of the most promising areas for capital investment—especially with reliable raw material partners like Del Mar Energy

MONETIZATION MODELS IN THE STEEL INDUSTRY: EFFICIENCY AND DIVERSIFICATION

The investment efficiency of steel production largely depends on how strategically and flexibly a company approaches monetizing its products

KEY REVENUE STREAMS:

CONTRACTS WITH INDUSTRIAL BUYERS

Long-term agreements with construction, energy, and manufacturing companies ensure consistent capacity utilization and predictable revenue

EXPORT SUPPLY TO EMERGING MARKETS

Geographic diversification and growing demand in Asia, Africa, and the Middle East provide a stable flow of foreign currency

PREMIUM PRODUCTS AND SPECIALIZATION

Producing steel for high-tech industries—such as aerospace, shipbuilding, and renewable energy—drives higher profitability due to the greater value of specialized products

VERTICAL INTEGRATION

Controlling the entire value chain—from raw materials (including coking coal) to rolled and processed steel—reduces costs, boosts margins, and shortens delivery cycles

PARTICIPATION IN GOVERNMENT PROJECTS

Involvement in national infrastructure, defense, and construction programs secures large-scale, protected sales volumes

FINANCIAL TOOLS AND NEW OPPORTUNITIES:

Hedging risks through commodity exchanges and long-term forward contracts

Accessing green financing by meeting ESG requirements

Leasing and investment programs with international development institutions

STRATEGIC HUB FOR STEEL CONSUMPTION AND PRODUCTION U.S.

The United States remains one of the largest players in the global steel market, demonstrating steady demand, high quality standards, and an active investment policy focused on modernizing the metallurgical sector

KEY FIGURES IN THE U.S. STEEL INDUSTRY:

- ▶ In 2023, the U.S. produced over 80 million tons of steel, a significant portion of which was made in blast furnaces using coking coal
- ▶ The steel sector supports over 375,000 jobs and contributes more than \$130 billion annually to the U.S. GDP
- ▶ The U.S. leads in adopting environmentally friendly technologies, with more than \$20 billion in planned investments over the next five years
- ▶ Over 60% of domestic blast furnace steel production depends directly on the supply of high-quality coke

WHY THIS MATTERS FOR RAW MATERIAL SUPPLIERS:

- ▶ The U.S. market is open to partnerships with suppliers that meet ESG standards
- ▶ Government programs promote investment in localized supply chains
- ▶ Coking coal remains an irreplaceable resource—even as alternative technologies advance

DEL MAR ENERGY'S ROLE:

- ▶ We have proven experience in direct supply to the U.S. and can adapt our product quality to meet the specific needs of American steelmakers
- ▶ Our production capacity and logistics network ensure consistent deliveries that meet technical specifications
- ▶ Partnering with American producers means reliability, growth, and access to one of the most stable steel markets in the world

COKING COAL IN THE TRANSITION TO “GREEN” METALLURGY

Despite global efforts to reduce carbon emissions, coking coal remains a critical component in steel production. Its unique properties allow it to adapt to new environmental requirements while maintaining the efficiency and reliability of steelmaking processes

GLOBAL TRENDS:

- ▶ Over 70% of steel worldwide is still produced via blast furnaces using coke
- ▶ According to the World Steel Association, even with the active adoption of electric furnaces and hydrogen technologies, demand for coking coal is expected to persist at least until 2050
- ▶ Hybrid production systems are being introduced: combining traditional technologies with “green” solutions, such as partial coal substitution with biomass or hydrogen injection

ENVIRONMENTAL INNOVATIONS INVOLVING COKE:

- ▶ CCS Technologies (carbon capture and storage) help reduce CO₂ emissions while still using coke
- ▶ The use of low-sulfur and low-ash coal reduces overall pollution levels
- ▶ The production of carbon-neutral coke from sustainable energy sources is currently in scalable testing

INDUSTRIAL CASES:

- ▶ Pilot projects in the U.S. and EU are exploring the use of coke in combination with hydrogen to lower the carbon footprint without sacrificing productivity
- ▶ Companies like ArcelorMittal, US Steel, and Tata Steel are investing billions of dollars to adapt coke to new technological standards

OPPORTUNITIES FOR INVESTORS AND SUPPLIERS:

- ▶ The demand for coal with improved environmental characteristics creates new pricing advantages
- ▶ Companies investing in the environmentalization of coal mining and processing are prioritized in partnerships with leading steel producers
- ▶ Support for ESG financing and green bonds for coal projects that meet new sustainability standards

INVESTMENT PROPOSAL FROM DEL MAR ENERGY

by opening a deposit with the minimum amount of
\$750,000, your balance will reach **\$3,078,000 after 190 day**



DEPOSIT TERM: 190 days

TOTAL ROI: 404%

DEL MAR ENERGY INC.

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

Having started out with just
a few oil rigs in

2002

We began developing and manufacturing
with our own technologies in

2012

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



91%

of our products are
exported to more than
40 countries
worldwide

LEADERSHIP TEAM



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

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



STEFAN RUSSO
**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

THOMAS LIEBERMAN
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