# The "Green" Assessments in China's Energy Industry

## Driving the Green Transition through New Evaluation Systems


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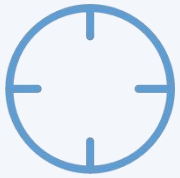
# 01. Background: The Need for Change

## Limitations of Traditional Environmental Impact Assessment (EIA)

### Static

Focuses on ex-ante prediction, lacking ex-post monitoring.



### Narrow Focus

Concentrates on terminal pollution control, ignoring upstream and process greening.

### Compliance-based

Aims for legal conformity, lacking ambition for superior environmental performance.

### Fragmented Governance

Siloed management across departments hinders policy coherence.

# 01. Background: The Need for Change

## The Shift: From Compliance to Performance

### Dynamic

Evaluation criteria are based on annual industry averages (e.g., carbon emissions), allowing the system to adapt to changing circumstances.

### Holistic

Looks beyond individual projects to evaluate the entire factory or mine as a complete system.

### Performance-led

Sets ambitious goals and encourages companies to aim for excellence, asking "What's the best we can achieve?"

### Collaborative

Recognizes environmental challenges are cross-cutting, pushing different government departments to work together towards a common goal.

# 02. The New Assessment: Green Mines

## Reshaping Resource Extraction

**CORE GOAL:**Achieving Sustainable Mining Development

This model aims to balance economic development with environmental protection and social responsibility.

Ecological Environment

Scientific Extraction

Efficient Resource Use

Standardized Management

Harmonious Community Relations

# 02. The New Assessment: Green Mines

The Evaluation Standard (2024)

### 20% Resource Utilization

Optimizing extraction efficiency and minimizing waste in mineral production.

### 18% Green & Low-Carbon (New!)

Addressing carbon emissions, energy efficiency, and transition to clean energy.

### 22% Eco-Environment

Land reclamation, biodiversity conservation, and strict pollution control.

### 15% Work Safety

Comprehensive safety management systems and zero-accident performance.

### 10% Tech Innovation

Adoption of smart mining technologies, automation, and digitalization.

### 15% Management & Community

Standardized corporate governance and positive social responsibility.

# 02. The New Assessment: Green Factories

## Leading the Low-Carbon Transition

### CORE GOAL

To establish a comprehensive **benchmark for green manufacturing** across the industry

*Green Factories are pivotal demonstration units for advancing the green manufacturing system.*

**Land Intensification**
Efficient use of space & layouts

**Harmless Materials**
Eco-friendly, non-toxic inputs

**Clean Production**
Zero discharge & pollution-free

**Waste Recycling**
Maximizing resource reuse

**Energy Low-Carbon**
Renewable energy adoption

# 02. The New Assessment: Green Factories

## The Evaluation Standard (2025)

The evaluation is highly quantitative and data-driven, ensuring transparency and accountability.

### Renewable Energy

**> 20%** usage

Mandatory renewable power adoption for manufacturing operations

### Resource Efficiency

**> 90%** waste utilization

High rate of recycling and reuse of industrial by-products

### Carbon Intensity

**< 20%** below benchmark

Significantly lower than the average industry carbon footprint

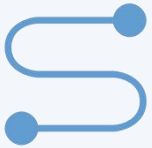
### Data-Driven

**IoT Monitoring**

Real-time tracking of all key metrics to ensure transparency

# 03. Core Features: A Shift in Policy

From "Document Review" to "Data Verification"



## Tech Empowerment

Driven by IoT and Big Data technologies, the process is fully digitized to ensure traceability and accuracy.

## Objective & Fair

Reduces human bias through data-driven assessment, creating a level playing field for all participants.

## Dynamic Management

Implements a strict "Up or out" mechanism to maintain high standards and vitality within the system.

## Continuous Improvement

Incentivizes ongoing effort and development, rewarding sustained excellence rather than one-time achievements.

# 03. Core Features: A Shift in Policy

From "Mandatory Constraints" to "Incentive Guidance"

## EIA:
## The "Red Lines" (Constraints)

new projects must meet the EIA document and environmental standards

## The Green Assessments:
## The "Bonuses" (Incentives)

- Direct financial rewards for achieving environmental targets
- Favorable tax incentives for green technology R&D
- Comprehensive green financial support (loans, etc.)

# 04. Achievements: Evidence of Transformation

## Macro-Level Progress

-36%

### Energy Efficiency

A 36% reduction in industrial energy consumption per unit of value added over the past decade.

*Doing more with less.*

>5,500

### Green Mines

Over 5,500 mines certified at or above the provincial level for meeting green mine standards.

*A growing network of responsible mining.*

>3,600

### Green Factories

Over 3,600 national-level green factories established as demonstration leaders.

*Pioneers showing the path forward.*

# 04. Achievements: Case Study - CHN Energy

## A Model of Green Mine Construction

### Eco-Restoration

**>90%**

Land reclamation rate exceeds 90%, effectively restoring degraded mining areas.

### PV + Mine

**300 Million**

300 million kWh of clean energy generated annually from solar projects on reclaimed land.

### Low-Carbon Power

**4.7 g/kWh**

A 4.7 g/kWh reduction in coal consumption for power generation, enhancing power plant efficiency.

# 04. Achievements: Case Study - Sinopec

## A Benchmark for Green Management in the Energy Sector

### Full Value Chain Strategy

The "Green Enterprise Action Plan" integrates green management across the entire value chain.
*Green is part of their DNA.**

### Carbon Reduction Impact

Achieved a cumulative $CO_2$ reduction of12.6 million tonsin Phase 1.
*Demonstrating effective emission control.**

### Industry Recognition

Recognized as a "China Low-Carbon Model" for 15 consecutive years.
*Establishing itself as an industry leader.**

# 05. Conclusion: The Future of Green Evaluation

## KEY TAKEAWAYS

### Systemic Shift

A fundamental shift from a passive compliance model to a proactive performance-oriented model.
*A fundamental change in mindset.**

### Powerful Tool

An integrated policy instrument combining regulatory mandates with market-based incentives.
*The right mix of stick and carrot.**

### Key Engine

A critical driver for accelerating the comprehensive green transition of China's energy sector.
*The driving force behind the change.**

# 05. Conclusion: The Future of Green Assessment

## Future Outlook

### Digital Integration

Integration with digital technologies will enhance the intelligence and efficiency of evaluation systems.

### Scope Expansion

The scope will expand to cover product lifecycle carbon footprints and biodiversity considerations.

### Market Mechanism

Stronger integration with market mechanisms such as carbon trading and green finance.

# Let’s continue the conversation!

**Message me your questions or comments in the IAIA26 app.**

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