INDONESIA
COUNTRY REPORT
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PT KRAKATAU STEEL

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1. Economy

- GDP growth exceeded 5% started in 2004 continually and is forecasted to increase.
- Inflation started in 2005 trend decreased, 2009 was lowest.

Source, BPS – Statistics Indonesia
- * = 1st Semester
2. Rapid growth of steel consumption

Historical and projected of Indonesia steel consumption

- Steel consumption has increased rapidly after the economic crisis with an average CAGR 03-14 of 9.4%.
- However, consumption in 2006 slowed down due to a decline in the consumption of bar, wire rod and flat products.
- The figure show a recovery trend in 2007, which was due to the increase of production activities in automotive sectors, electronics, and shipping yards.
- Consumption in 2012 slightly increased compare to 2012 due to economic crisis in europe. It is expected that the consumption in 2014 will increase to become 12,563 thousand tons, mainly driven by the growth of infrastructure, construction and shipbuilding sectors.
A. Government Regulation

1. Legal Aspects

- Environmental Management Law No 32/2009
- Air Pollution Control Law No 41/1997
- Marine Pollution Government Regulation No 19/1999
- Management of Water Quality & Water Pollution Government Regulation No 82/2002
- Water Resources Law No 7/2004
- Government Regulation of the RI No. 18 / 1999 Jo. PP No. 85 / 1999 regarding “Hazardous waste management” is being revised to accommodate the development of business, industries and people/environment interest.

There are also numbers of government regulation and decision of State Minister of Environment.
2. Policies (Commitment to Climate Change)

- Indonesia’s government commits to cut emissions by 26 percent in 2020 from “business as usual” (BAU) levels.
- With international support could cut emissions by as much as 41 percent.
- The policy would be a mix of stepping up investment in renewable energy, such as geothermal power, and will change the status the forest from that of a net emitter sector to a net sink sector by 2030.
- Implementation of REDD Plus.

“This target is entirely achievable because most of emissions come from forest-related issues, such as forest fires and deforestation.”
3. National Priority in Environmental Program

a. Control of Pollution and Environment Damage:
   1. Maintain environmental sustainability and improve the quality of environmental carrying capacity
   2. Clean River Program (PROKASIH), Corporate Performance Rating Program (PROPER), Blue Sky Program, Adipura etc..
   3. Maintaining coastal and marine ecosystems in order to maintain the sustainability of fish resources and other biota; in the year 2010 has made the rehabilitation and conservation of coastal resources, marine and small islands.

b. Disaster management: preparedness for disasters and forest fire control.

c. Early Warning System: maintain of Weather Early Warning System (MEWS) and Climate Early Warning System (CEWS); Improved quality of human resources and delivery of information related to climate and weather (agriculture)

   1. In the regulation.
   2. In developing management mechanisms funding for climate change programs, Indonesia have been established the Climate Change Trust Fund (ICCTF)
   3. Improvement in conservation and rehabilitation of forest resources as well as increased functionality and carrying Watershed (DAS)
EXTERNAL INFLUENCES

Improvement of Company Performance in Control of Pollution and Environmental Damage

![Graph showing compliance levels and number of companies from 2005 to 2011.](image-url)
EXTERNAL INFLUENCES

**REDD Plus**
- REDD plus Program is one of the implementation of the Indonesia-Norway partnership in forestry.
- The main goal will provide a grant of US $1 (one) billion to reduce deforestation and forest degradation, with stage payments based on the ability of Indonesia to reduce emissions.
- South Kalimantan (Kalimantan) is selected to be pilot provinces early stages of Reducing Emissions from Deforestation and Forest Degradation (REDD plus) in Indonesia.

**Implementation**
- Phase 1, is the preparation and establishment of REDD plus Task Force in September 2010, pursuant to Presidential Decree No. 19/2010, with the task of preparing a national REDD plus strategy and design agency REDD plus.
- Phase 2, is the establishment of the agency of REDD plus Indonesia, reporting, monitoring and verification (MRV), the implementation of the pilot provinces, and implementation of the moratorium for two years.
President's commitment at the G-20 and COP 15 Pittsburg
To reduce greenhouse gas emissions by 2020

Own Efforts

<table>
<thead>
<tr>
<th>Sector</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry</td>
<td>14%</td>
</tr>
<tr>
<td>Energy</td>
<td>6%</td>
</tr>
<tr>
<td>Garbage</td>
<td>6%</td>
</tr>
</tbody>
</table>

Own efforts and international support

Through the development of new renewable energy and implementing energy conservation by all sectors

Source: EBTKE KEESDM 2010
EXTERNAL INFLUENCES: Energy Policy Direction

Source: EBTKE KEESDM 2010
B. Local

- During construction of joint venture Krakatau Posco project, local governments and people surrounding area has been involved in relation to implement of community social responsibility, environmental regulations and occupational health and safety.

- Initiatives, involvements and supports local government programs for greenery/reforestation of coastal area and urban area near the project.
C. Public, Non-Government Organizations (NGOs), Pressure Groups.

International & national programs:

- CO2 reduction
- Clean Development Mechanism (CDM)
- Stockholm convention
- Community & Social Responsibility (CSR)
1. Safety initiatives

<table>
<thead>
<tr>
<th>Safety initiatives</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal safety induction course</td>
<td>Required for project and new recruits</td>
</tr>
<tr>
<td>Annual safety training programs</td>
<td>Conducted internally every year</td>
</tr>
<tr>
<td>Routine certification for operators and internal safety auditors</td>
<td>Required for relevant personnel, conducted regularly</td>
</tr>
<tr>
<td>Safety inspections</td>
<td>Conducted internally regularly involved contractors and third party</td>
</tr>
<tr>
<td>Certification</td>
<td>In 2011 has been certified OHSAS18001</td>
</tr>
<tr>
<td>Random inspections</td>
<td>Conducted at random time table</td>
</tr>
<tr>
<td>Job safety analysis</td>
<td>Identification and verification to ensure proper job safety implementation</td>
</tr>
<tr>
<td>Emergency response teams</td>
<td>Emergency response teams are established at company and business unit levels</td>
</tr>
</tbody>
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2. LTIFR performance

- Lost Time Injury Frequency Rate (LTIFR) is the number of lost-time per million hours worked, within 2 x 24 work hours, due to injuries.

Awards in safety performance

- Certified OHSAS18001 in year 2011
- Golden Flag Certificate of EHS management system from The Ministry of Manpower and Transmigration since 2000
a. Overview.

- PT Krakatau Steel (PTKS) is continuing to increase the production capacity up to 3.5 million tons by developing a new plant and joint venture with strategic partner.
- PT Indoferro (Iron & Steel Mill), a manufacturer of steel which is a joint venture between the Singapore company, Lee Metal Group Ltd, and national companies Growth Steel Group, has build steel mills 'pig iron' first phase capacity of 500 thousand tons in Ciwandan, Banten. Steel mill blast furnaces has started in this year.

b. Process stages.

- The ground breaking of PT Krakatau Steel's blast furnaces has been started in September 2012 with design capacity of 1.2 million tons per year and will be completed in first or the second quarter of 2014.
- Construction progress of Krakatau Posco project is on schedule at 40%.
- The PTKS partnership with PT Antam Tbk, named PT Meratus Jaya Iron & Steel (MJIS). The project has finished and will start producing direct reduced iron (DRI) at the end of 2012.
OVERVIEW PROJECT

Project Name: PT Meratus Jaya Iron & Steel
Capacity Output: + 300,000 Ton/year of DRI
Product Off taker: PT. Krakatau Steel (Persero)
Location: South Kalimantan Province
Progress: Finish

Will be operated at the end of this year
Project Name: PT. KRAKATAU POSCO
Capacity Output:
- 3 Million Ton per year (at 2014)
- 6 Million Ton per year (at phase 2)

Product:
- Slab
- Plate
- Hot Rolled Coil (HRC)

Location: Cilegon, Banten, Indonesia
Progress: 40%
Start Up: Year 2014
Investment Cost: USD 2.66 Billion until year 2014
Indonesia’s GDP growth exceeded 5% started in 2004 continually and is forecasted to increase every year. In the other side the inflation is under control. This condition is good for investment.

Indonesia’s steel demand is also continually increase rapidly after the economic crisis with an average CAGR 03-14 of 9.4% (in year 2003 – 2012). For anticipation, some of steel plant has built a new plant and increase the capacity and will be operated in year 2014.

Indonesia has done consistently to improve environmental management through some programs i.e. adaptation to climate change, renewable energy policy and the implementation of REDD Plus.

PT Krakatau Steel has started to build a new plant to increase capacity, and the contraction progress of JV company-KRAKATAU POSCO reach 40%.