

قطر ستيل  
**QATAR STEEL**

QATAR STEEL

QATAR STEEL

*making steel* **matter**





## Qatar Steel's Sustainability Performance Summary

	Indicators	Performance			
		2009	2010	2011	2012
<b>Making Steel Matter</b>	Steel billets scrapped and reprocesses due to quality parameters (%)	0.1	0.16	0.27	0.06
	Steel rebar scrapped due to quality parameters (%)	0.010	0.032	0.010	0.008
	DR plant reliability, average (%) <sup>(1)</sup>	98.32	94.40	96.94	99.75
	EAF plant reliability, average (%)	95.18	94.96	96.61	98.76
	CC plant reliability, average (%)	97.54	98.25	97.49	99.37
	RM plant reliability, average (%)	88.58	90.12	92.28	96.98
	DR plant availability, average (%)	92.79	87.43	90.39	92.74
	EAF plant availability, average (%)	88.19	87.85	87.32	89.89
	CC plant availability, average (%)	90.49	91.43	88.74	90.74
	RM plant availability, average (%)	84.80	77.24	84.65	90.70
	DR plant production yield, average (%)	69.39	69.05	69.43	69.72
	EAF plant production yield, average (%)	91.52	91.31	91.30	91.34
	CC plant production yield, average (%)	97.42	98.55	98.37	98.76
	RM plant production yield, average (%)	98.51	98.25	98.35	98.66
	Customer satisfaction (%)	81.80	78.20	80.60	80.00
	<b>Contributing to Qatar's Development</b>	Qatarization (%)	11.57	12.05	11.72
Total spending on locally-based suppliers and contractors (%) <sup>(2)</sup>		38.0	30.0	61.0	42.6
Community investment (QR)		203,000	355,000	310,000	465,000
<b>Reducing Environmental Impact</b>	Environmental investment ('000 QR)	0	1,020	3,000	2,775
	Total energy used (GJ)	31,306,592	33,199,194	35,271,137	38,549,062
	Electricity (MWh)	1,473,436	1,784,160	2,053,681	2,139,289
	Total GHG emissions (mt) <sup>(3)</sup>	N/A	9,709,833	9,895,687	11,536,034
	Steel scrap used as input material (mt)	216,830	310,501	349,669	347,247
	Natural gas consumption (m <sup>3</sup> )	650,506,224	670,075,543	697,644,756	771,962,521
	Fresh water consumption (m <sup>3</sup> ) <sup>(4)</sup>	1,040,310	1,493,869	1,333,370	1,318,224
	Slag (mt)	176,715	236,982	244,534	261,037
Spills (m <sup>3</sup> )	0	0	0	0	
<b>Ensuring a Safe and Healthy Work Environment</b>	Lost Time Injury Frequency (LTIF), employees	2.67	1.02	2.69	0.48
	Number of work-related fatalities, employees	0	1	0	0
	Fire incidents	9	17	16	5
	Number of emergency response drills conducted	16	16	16	16
	Lost Time Injury Frequency (LTIF), contractors <sup>(5)</sup>	New indicator			Not Tracked
	Number of work-related fatalities, contractors	2	0	0	1

Sustainability Focus Area	Indicators	Performance			
		2009	2010	2011	2012
<b>Developing a High Performing and Motivated Team</b>	Number of employees	1,685	1,743	1,809	1,826
	Total number of training hours provided	24,385	21,603	16,270	20,767
	Average hours of training per employee per year	14.5	12.4	9.0	11.4
	Employee satisfaction (%)	89	N/A	N/A	Not Tracked
	Employee turnover (%)	8.4	3.6	4.4	3.62
	<b>Demonstrating Good Governance and Accountability</b>	Business units analyzed for corruption (%) <sup>(6)</sup>	100	100	100
GRI application level achieved by Qatar Steel's sustainability report		New indicator		B	A
<b>Achieving Profitable Growth</b>	Revenues (Million QR)	5,233 <sup>(7)</sup>	5,280	6,312	6,820
	Operating costs (Million QR) <sup>(8)</sup>	3,144	3,725	4,210	5,548
	Total spending on contractors and suppliers (Million QR) <sup>(2)</sup>	371.6	603.0	575.3	1,400.6

(1) The calculation of the maintenance's Reliability and Availability percentage values are not including the sudden production or operational delays that might occur at the operational side sometimes.

(2) Total spending on contractors and suppliers includes services, equipment, logistics, and spares and consumable items. Calculation does not include raw material procurement.

(3) The calculation of the total GHG Emitted (mt) is based on GHG emissions from Electricity consumed, total DR plant production, EAF crude steel's production, rolled steel billets' production and vehicles fleet fuel's consumption in the plant. The data for the previous years have been modified to include GHG emissions from DR production.

(4) Water consumption numbers in this table do not include seawater used for operations.

(5) Contractors' Lost Time Injury Frequency hasn't implemented yet at the company.

(6) Reference to the operating unit in State of Qatar.

(7) This value was update for accuracy purpose.

(8) Previous years' data have been changed (in comparison to the data added in Qatar Steel's Sustainability Report 2011) for the accuracy purpose.

## Update on Our 2012 Sustainability Targets and Commitment

Sustainability Focus Area	Targets and Commitments	2012 (year-end) Update
<b>Making Steel Matter</b>	<ul style="list-style-type: none"> <li>- Conduct 2012 customer satisfaction survey</li> <li>- Enhance plant productivity, availability and reliability, with an aim to achieve:                             <ul style="list-style-type: none"> <li>o DR plant - 69.10% productivity, 93.00% availability, and 97.25% reliability</li> <li>o EAF plant - 91.30% productivity, 87.50% availability, and 96.16% reliability</li> <li>o CC plant - 98.50% productivity, 87.50% availability, and 97.00% reliability</li> <li>o RM plant - 98.50% productivity, 93.50% availability, and 91.00% reliability</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- In progress</li> <li>- Completed, except for DR and RM plants availability where we achieve a very close performance to the target, the details in page 45.</li> </ul>
<b>Contributing to Qatar's Development</b>	<ul style="list-style-type: none"> <li>- Enhance the company's Qatarization rate</li> <li>- Develop community investment projects and enhance community spending</li> </ul>	<ul style="list-style-type: none"> <li>- In progress</li> <li>- In progress</li> </ul>
<b>Reducing Environmental Impact</b>	<ul style="list-style-type: none"> <li>- Reduce GHG emissions to meet the international benchmark of 1.8 tons of CO2 per ton of crude steel cast</li> </ul>	<ul style="list-style-type: none"> <li>- Pending</li> </ul>
	<ul style="list-style-type: none"> <li>- Increase scrap used as input material</li> <li>- Implement technology to recycle all by-products for use as briquetting input material for Electric Arc Furnaces</li> </ul>	<ul style="list-style-type: none"> <li>- Completed</li> <li>- In progress</li> </ul>
<b>Ensuring a Safe and Healthy Work Environment</b>	<ul style="list-style-type: none"> <li>- Build on company-wide efforts to track the safety performance of company contractors. The results will be presented in 2013.</li> </ul>	<ul style="list-style-type: none"> <li>- Pending</li> </ul>
<b>Developing a High Performing and Motivated Team</b>	<ul style="list-style-type: none"> <li>- Reinforce measurements of employee satisfaction</li> <li>- Conduct sustainability training for employees</li> </ul>	<ul style="list-style-type: none"> <li>- In progress</li> <li>- In progress</li> </ul>
<b>Demonstrating Good Governance and Accountability</b>	<ul style="list-style-type: none"> <li>- Develop a 2012 sustainability report</li> <li>- Continue to check the company's operations unit to safeguard against corruption</li> </ul>	<ul style="list-style-type: none"> <li>- Completed</li> <li>- In progress</li> </ul>
<b>Achieving Profitable Growth</b>	<ul style="list-style-type: none"> <li>- Achieve new expansion and growth through a Greenfield SMS facility (EF5), which is expected to be operational starting in the 1<sup>st</sup> quarter of 2013.</li> </ul>	<ul style="list-style-type: none"> <li>- In progress</li> </ul>

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## **Our 2012 Sustainability Report**

It is our pleasure to introduce to all our stakeholders the Qatar Steel 2012 sustainability report. This follow up report updates the company's 2012 sustainability performance and provides comparable data for the previous years, 2011 ,2010 ,2009 where available.

This report is based on the guidelines outlined in 'Guidelines on Sustainability Reporting for Energy and Industry Sector' issued by the Regulations and Enforcement Directorate of the State of Qatar and the Global Reporting Initiative (GRI) sustainability reporting guidelines G3.1. Qatar Steel self-declares this report to meet GRI Application Level A rating. This report's Level A rating has been checked and confirmed by the GRI, as shown in Appendix D.

Qatar Steel is committed to annual reporting on the sustainability issues of greatest concern to its stakeholders. Qatar Steel encourages you to share your ideas and comments via email:

- [Sustainability@qatarsteel.com.qa](mailto:Sustainability@qatarsteel.com.qa)
- [Adilhus@qatarsteel.com.qa](mailto:Adilhus@qatarsteel.com.qa)

# **Sustainability Report 2012**



## **Foreword by the Director and General Manager**

Sustainability is a critical component of Qatar Steel's business strategy. Our sustainability framework, built around making steel matter, aims to ensure we are continually addressing economic, social and environmental performance in order to maximize value for Qatar Steel's stakeholders.

Through constant innovation, new technologies and processes, we consistently achieve operational excellence with significant improvements in productivity, product quality, HSE standards, and recycling of production waste comparable to global standards.

The year 2012 was an exceptional year in terms of operational and financial performance achieved through productivity improvements and market focus. Our production, sales volumes and net profits increased over the previous year and we won a number of noteworthy international accreditations for product quality, operational standards and systems, and for excellence in strategy execution process. Through the creation of a new R&D department, we have started on a number of sustainability and recycling initiatives, such as the recycling of by-products generated from each production facility. We are also working with our neighbors to see how we could use their waste in our processes, thereby creating innovative ways to turn waste into new products.

We are also proactive in meeting customer needs and in understanding that the products we deliver are central to the physical development of the State of Qatar. We are fully committed to the well-being of our employees, as they are our greatest asset, and the company management fully supports Qatarization initiatives and local community services.

As a primary integrated steel producer in Qatar, we are well aligned to the Qatar National Development Strategy 2011-2016, the Qatar National Vision 2030, and the Energy and Industry Sector sustainability initiative or SDIR programme. It is providing a framework for the sector to move towards sustainability and Qatar Steel is committed to being a central part of that shift.

Our sustainability approach and performance for the period 2009-2011 is well outlined in our first sustainability report released in 2012. We are now committed to annual sustainability reporting and I am pleased to release this report to include our performance for the year 2012.

*Thank You*


**Ali Bin Hassan Al-Muraikhi**  
*Director and General Manager*

6/9

*Qatar steel's* **profile**







**Vision** - We endeavor to be universally recognized as a leading and constantly growing force in the steel industry of the region, to be admired for our business culture, for building value for our shareholders and customers, and for bringing inspiration to our people.

**Mission** - We will continue to be the first name in the region's steel industry by harnessing our assets and resources to achieve profitable growth, operational and organizational excellence and good corporate citizenship.

**Values** - A "Principle" player, the drivers of our ambition, trustworthy, reliable, dynamic, creative and perceptive.

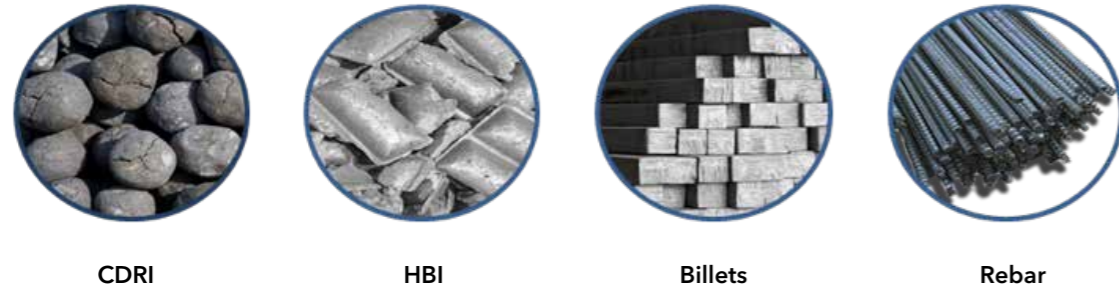
**Purpose** - To reach a league where we will matter beyond normal commercial objectives. To become the standard for quality enterprise and to exude a winning attitude in order to make a difference in our environment.

Qatar Steel is a recognized and well-established leader in the steel industry within the GCC (Gulf Cooperation Council) region. The company was founded in 1974 as the first integrated steel plant in the Arabian Gulf Area. It operates an expansive mill site located in the heart of Mesaieed Industrial City (MIC), located in the southern part of Qatar's capital city of Doha. Since 2003, Qatar Steel has been fully owned by Industries Qatar (IQ).

Qatar Steel Company has a committed and skilled workforce of over 1,800 individuals in both operational and administrative roles. Their tasks range from manufacturing, engineering, researching, marketing, selling, and distribution of the company's products throughout the GCC region and the world.

## Our Main Products and Market

Using state-of-the-art production technology, Qatar Steel produces Cold Direct Reduced Iron (CDRI), Hot Briquetted Iron (HBI), Steel Billets and Reinforcing Steel Construction Bars (Rebar).



Qatar Steel supplies approximately 98% of all reinforcing steel construction bars in the State of Qatar. As shown in the table titled "Total Sales", Qatar Steel has increased sales of most of its products over the past year, especially DRI and Rebar. Sales of by-products rose significantly as a result of a partnership with S.A.P. (Slag Aggregates Producer W.L.L.) to take slag from Qatar Steel and separate it into metallic parts to be reused by Qatar Steel, and aggregate to be used in road and other construction.

	Total Sales			
	2009	2010	2011	2012
DRI (mt) -	400,000	116,000	31,000	230,097
HBI (mt) -	282,000	238,000	155,000	156,974
Steel Billets (mt) -	240,000	419,000	471,000	468,166
Rebar (mt) -	1,517,252	1,483,505	1,569,501	1,707,926
Others-By-products (mt) (Including Iron Oxid Fines, Mill Scale, Processed Iron Ore Fines* and Raw Slag) -	136,000	108,000	219,000	1,126,000

\*Processed iron ore fines are a mixture of direct reduction of slurry, direct reduction dust, and classifier dust.

## Qatar Steel's Subsidiaries

### Qatar Steel Company FZE (Dubai, UAE)

Qatar Steel Company FZE is a company established to meet the growing demand for high-quality steel wire-rod products within the GCC as well as internationally. The company operates two primary facilities at its 60,000 m<sup>2</sup> Jebel Ali Free Zone site in the UAE. The Wire Rod Mill has a design capacity of 240,000 mt per year and the advanced VAI-POMINI Rebar Mill with a design capacity of 300,000 mt per year.



	Total Sales			
	2009	2010	2011	2012
Wire Rod and Rebar in Coil (mt)	117,000	113,000	134,000	111,523

### Qatar Metals Coating Company W.L.L (Q-Coat) (Mesaieed, State of Qatar)

Qatar Metals Coating Company W.L.L (Q-Coat) was established in 1990 as a joint venture between Qatar Steel Company and Qatar Industrial Manufacturing Company (QIMC). The production capacity of the Q-Coat facility is 100,000 metric tons per year.



Other Investments



## History and Recognition

In its three decades of operation, Qatar Steel has built an outstanding reputation for unrivalled quality, consistency and reliability. Qatar Steel celebrated its 30<sup>th</sup> anniversary in 2008, and was named by MEED organization as one of the top four steel producers in the Middle East.

1981

Qatar Steel achieves a total production of one million ton from DR, EAF, CC and RM plants.

1995

Qatar Steel receives ISO 9000 certificate for its Quality Management System. It has been updated to ISO 9001 in 2004, and renewed in 2012.

1999

Qatar Steel obtains the ISO 14001 designation for its Environmental Management System.

2006

Qatar Steel received UKCARES for Quality Management System and Steel Product Conformity.

1991

Qatar Steel obtains the Japanese Industrial Standards Certificate JIS, (currently, there is no renewal for this certificate).

1997

Qatar Steel becomes fully owned by the Government of Qatar.

2003

Qatar Steel obtains Saudi Arabian Standards Organization (SASO) Certification.

2008

Qatar Steel obtains Dubai Central Laboratory (DCL) Certification for Reinforcing Bars of ASTM and BS size varying from 10.0mm~40.0mm. Product Conformity in Steel Reinforcement of Concrete (BS 4449: 2005) and Carbon Steel Reinforcement of Concrete (BS 4449: 1997)

2011

Qatar Steel receives UKCARES Sustainable Reinforcing Steel Certification.

2012

Qatar Steel releases its first Sustainability Report which covers the company's Operational, Environmental, Social, and Economic performance from the period 2009-2011.

2013

Qatar Steel receives the Qatar Petroleum's Award for Excellence in Sustainability Reporting for its 2011 report.



## Qatar Steel's Memberships



Qatar Steel is a member of the Arab Iron and Steel Union (AISU) since 1978. In 2013, Qatar Steel hosted a meeting of the AISU at the Marriott Hotel, Doha. The meeting included a review of the General Secretary's report, the Union's activities, and updates on the state of the regional and global steel industry.



**worldsteel**  
ASSOCIATION

Qatar Steel has been a member of World Steel Association (World steel-IISI: International Iron and Steel Institute) since 1979. It is one of the largest and most dynamic industrial associations in the world and represents approximately 170 steel producers, including 17 of the world's 20 largest steel

companies, some national and regional steel industrial associations, and Steel's Research institutes. World steel provides global leadership on all major strategic issues affecting the steel industry and sustainable development.

Qatar Steel submits important statistical data for compilation in the Worldsteel's International Steel Statistics Database and the Worldsteel's Climate Change Program. These data driven programmes are driving the strategy and development of the global steel industry.

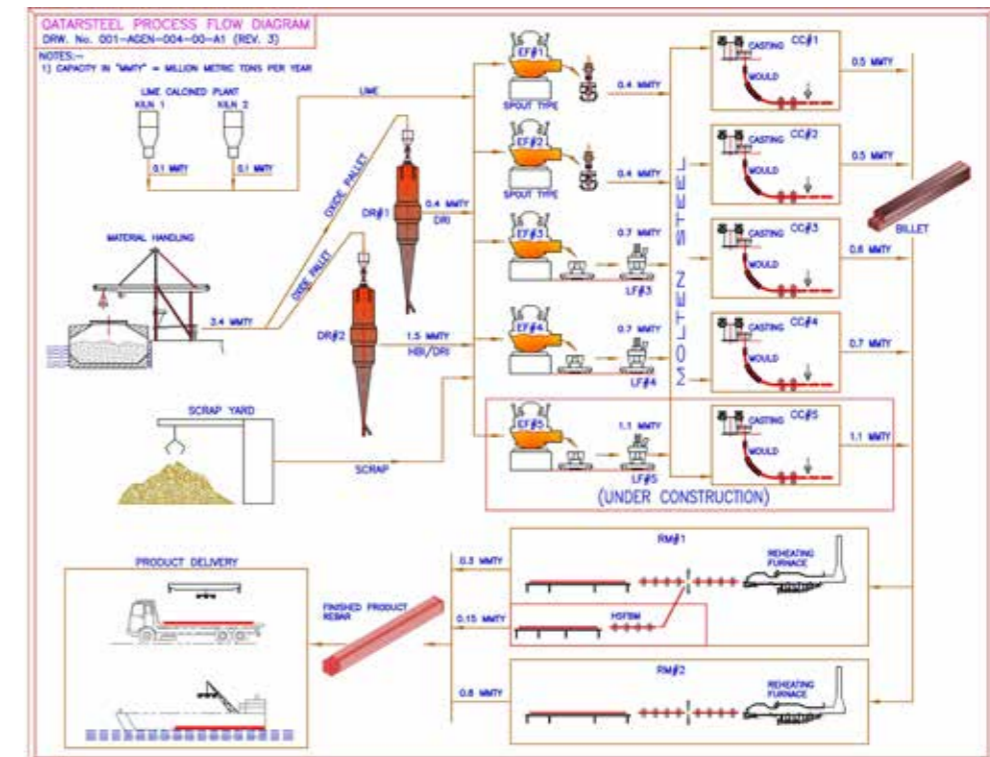


Qatar Steel has been a member of the South East Asia Iron and Steel Institute (SEAISI) since 1995. Its participation is focused on engagement with international stakeholders and contributes to the development of economic and social partnerships abroad.

## Steel Making Process at Qatar Steel

The Qatar Steel site consists of four operational plants working together in synchronization to produce a continuous stream of high quality steel products. These are:

1. Direct Reduction (DR) Plants (DR1 and DR2)
2. Steelmaking Plant consisting of:
3. Electric Arc Furnaces (EAF) and Ladle Furnaces (EAF1, EAF2, EAF3 with LF3, EAF4 with LF4, and currently under construction EAF5 with LF5)
4. Continuous Casting (CC) (CC1, CC2, CC3, CC4, and currently under construction CC5)
5. Rolling Mills (RM) (RM1, RM2).
6. Calcined Lime Plant (KILN1 and KILN2)



(Qatar Steel's main operational plants original design by Qatar Steel's Engineering Department CAD Laboratory - Updated in 2013).



### Cold Direct Reduced Iron (CDRI) and Hot Briquetted Iron (HBI)

The direct reduction process involves the transformation of iron ore pellets into metallic iron. The first step feeds the DR furnaces with imported iron ore pellets and heats them at certain operational temperature, then stabilizing them by removing their oxygen gas content through the insertion of natural gas from the DRI Reformer. This occurs naturally as a result of the composition of natural gas out of hydrogen gas (H<sub>2</sub>) and carbon monoxide gas (CO). After a long series of chemical reactions inside the DR furnaces, the result is a stable metallic iron called Directly Reduced Iron, "DRI." Circulating gas in

Original Design of Direct Reduction Shaft Furnace by MIDREX, Website: <http://www.midrex.com>

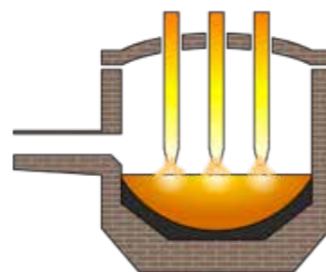
the lower part of the furnace cools the iron and the final product is stored in the yard. Qatar Steel's Direct Reduction Plant is based on the operational technology design of MIDREX® and Kobe Steel, Ltd. Direct Reduction #02 (DR-2) is a DRI/HBI Combo Mega module which can produce both DRI (Direct Reduced Iron) and HBI (Hot Briquetted Iron).

**The Flexibility of the MIDREX® DRI Plant:**

- The combination of Plants allows simultaneous discharge of the CDRI (DRI) or HBI as determined by steelmaking operation and market conditions.
- The MIDREX® plant can continue its operation when the EAF is offline.
- Use of proprietary SIMPAX® Software for process automation and quality prediction enable the plant's operators to optimize the plant's availability, efficiency and productivity.

**Steel Billets**

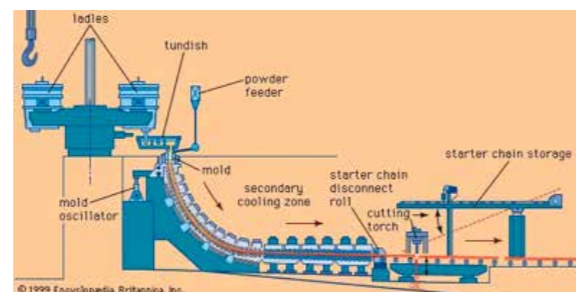
After the completion of the production process, the DRI is fed into one of Qatar Steel's four current Electric Arc Furnaces (EF) along with locally purchased steel scrap. Other additives such as Calcined Lime and Dolomite are at different stages of this process. A chemical reaction takes place inside the furnace and the final result is molten steel. More than 2.0 million tons of molten steel are produced yearly in the plant.



**Electric Arc Furnace's Tap-to-Tap Cycle:**

Furnace Charging > Melting > Refining > De-slagging > Tapping > Furnace Turn-around  
 Tap-to-Tap Time of the heat is depending on the required production of molten steel.

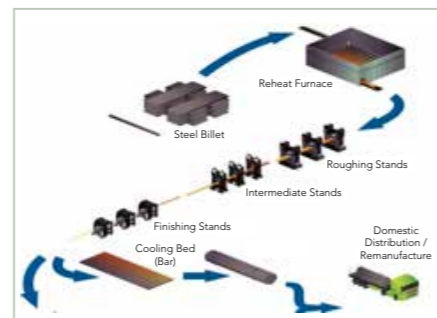
The next step is to transfer the molten steel to the continuous casting plant. At the EAF3 and EAF4 plants, the molten steel is poured into one of Qatar Steel's two Ladle Furnaces (LF3, LF4) and then flows to the Continuous Casting Units (either CC3 or CC4). These units are equipped with 4 casting machines each, comprising of 4 strands with a total annual production capacity of more than 2.0 million tons. The Molten Steel is poured into the continuous casting unit through a specially shaped mold. This process hardens the content through a quenching process while the steel moves through the rolls of the caster. This physical movement shapes the billets and makes them ready for sale.



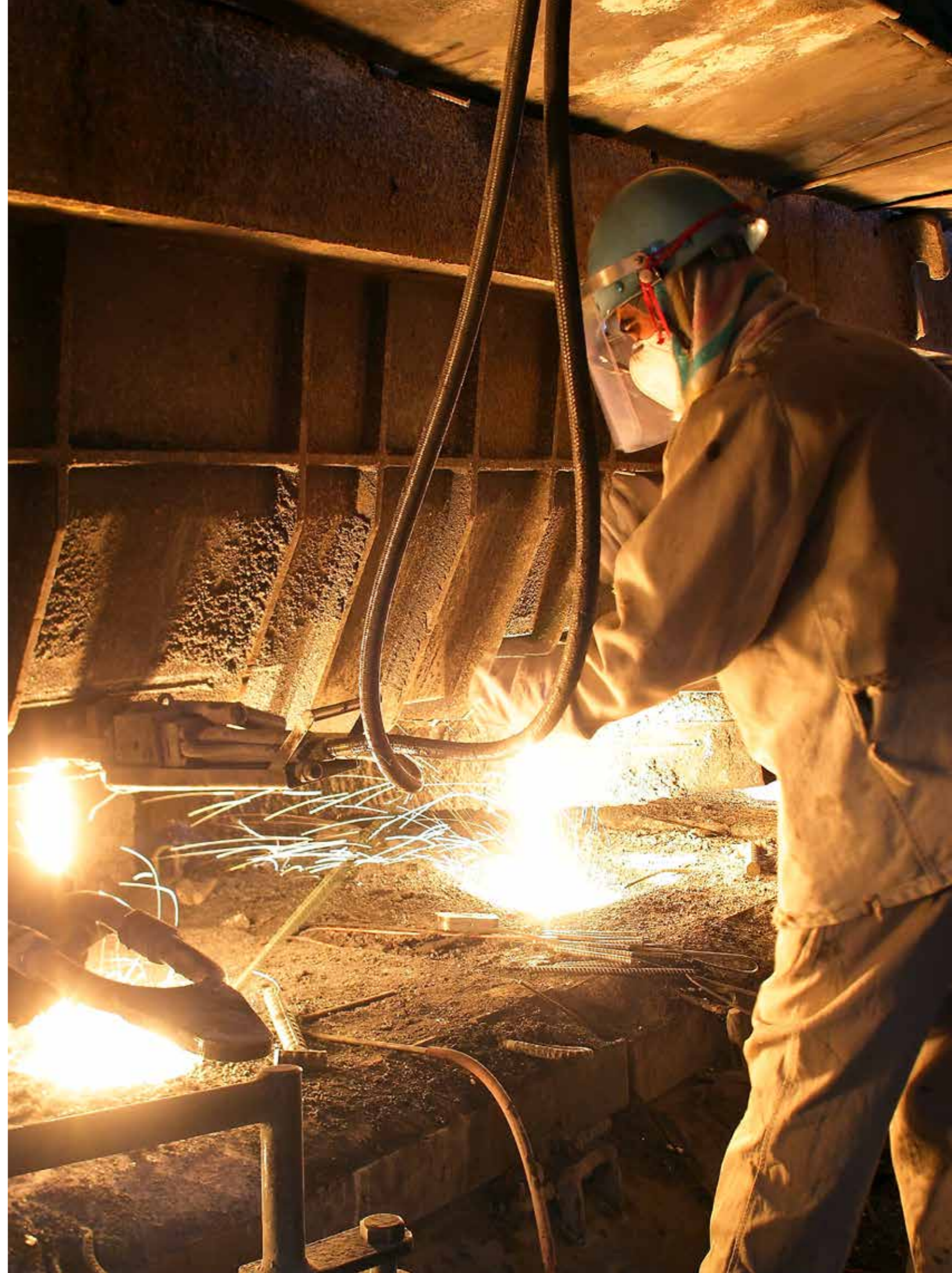
(Original Design by Encyclopedia Britannica, Inc. Website: www.britannica.com)

**Rebar**

The portion of cooled steel billets which are not sold directly to customers enter the final stage of production: rolling. In the rolling mills, the steel billets are heated on a reheating furnace and spun in to different sizes according to the specifications of the final Rebar product. To know more about Qatar Steel's rebar grade sizes, please refer to Appendix B.



(Original Design by Pacific Steel Group, Website: www.pacificsteel.co.nz/process)

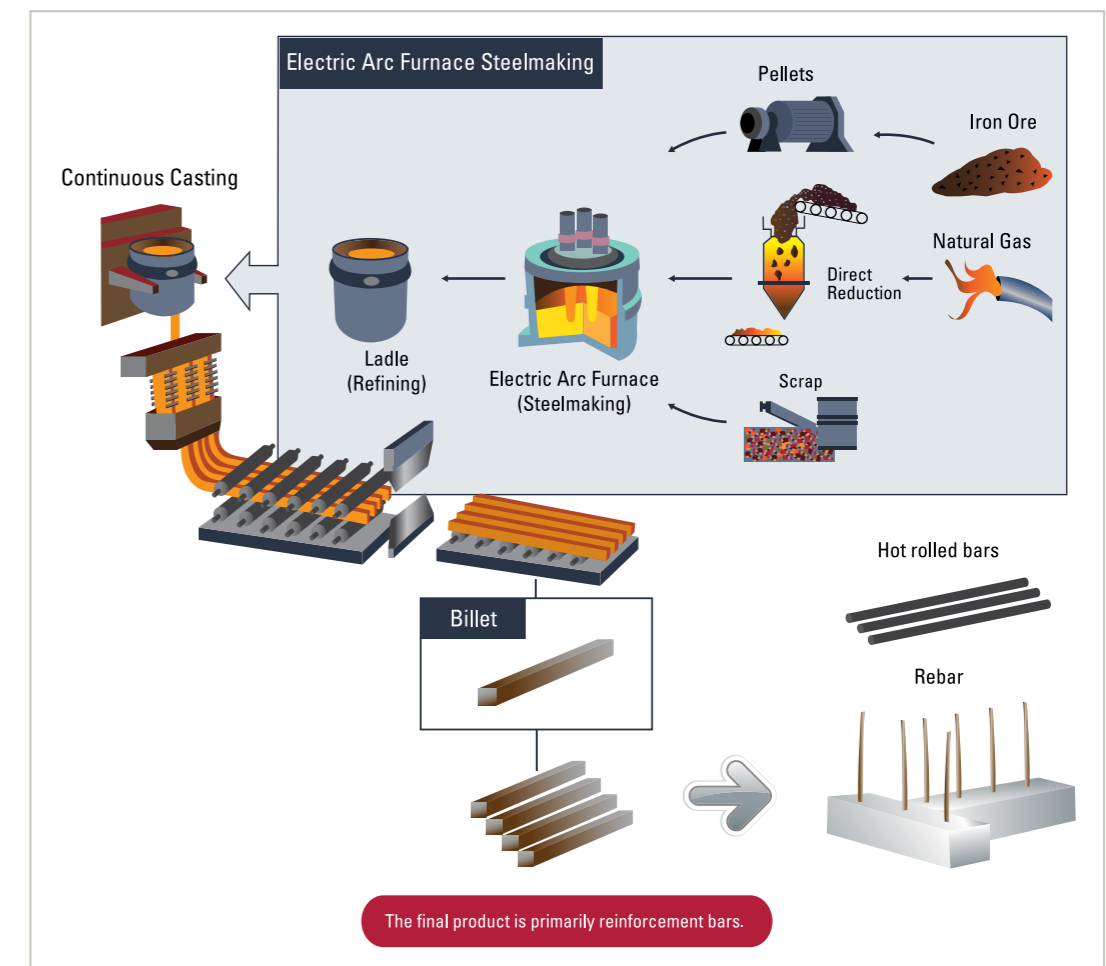






### Calcined Lime

Calcined lime is an essential additive in the electric arc furnace (EAF) blend. Its role is to act as a buffer that stabilizes the acidity of the reactants during the melting process. It protects the internal wall (refractories) of the EAF from being damaged by the acidic corrosion. The stabilizing role of the calcined lime is noticed most clearly at the stage of EAF slag; a slag layer that will be chemically stable and foamy will float to the top of the molten steel and can be separated from it without affecting its chemistry.



(Original Design by World Steel Association, Website: [www.worldsteel.org](http://www.worldsteel.org))

*Qatar steel's approach to*  
**sustainable development**





## Qatar Steel's Sustainability Context

Steel is a vital material and a key element to almost all aspects of people's lives. At the same time, our planet is facing major environmental, economic and social challenges which are significantly impacting the way the industrial sector interacts with society. As a result, sustainability considerations have become imperative to companies such as ours. To illustrate, today's steel industry is required to:

- Operate in an environmentally responsible manner that ensures efficient use of natural resources by reducing the waste generated and maximizing recycling.
- Support social development through product and service innovation and safe operations while supporting the development of communities.
- Create economic value to shareholders and the local communities while ensuring cost-efficiency.

Qatar Steel understands the challenges of sustainability and is committed to tackling these issues while building value to all key stakeholders.

## Qatar Steel's Sustainability Materiality

In addition to Qatar Steel's understanding of the sustainability context in the steel industry; Qatar Steel has developed a more focused sustainability materiality assessment that ensures a more focused approach to sustainable operations.

The materiality assessment was built upon the understanding of Qatar Steel's stakeholders' priorities, as identified under 'Accountability through Transparency' in page #100, and using the UK CARES Sustainable Reinforcing Steel Scheme Sector Report 2011/2012.

Sustainability Material Issues	
Environmental material issues	Economic material issues
<ul style="list-style-type: none"> <li>• Recyclability of steel scrap</li> <li>• Greenhouse gas</li> <li>• Emissions &amp; ambient air quality</li> <li>• Energy usage</li> <li>• Water usage</li> <li>• Waste management</li> <li>• Transport impacts</li> <li>• Ecotoxicity</li> <li>• Enhancing biodiversity of the surrounding</li> <li>• Land remediation</li> </ul>	<ul style="list-style-type: none"> <li>• Participate in the community growth</li> <li>• Ethical business practices</li> <li>• Financial transparency</li> </ul>
	Social material issues
	<ul style="list-style-type: none"> <li>• Enhancing the safety and health at the operational side</li> <li>• Equality between employees</li> <li>• Increasing training and motivate employees possess skills</li> <li>• Encouraging positive thinking</li> <li>• Fair wages</li> <li>• Reasonable working hours</li> <li>• Increasing community investments and community activities</li> <li>• Strength the community</li> <li>• Community complaints</li> <li>• Constant measuring of the employees and customer's satisfactions</li> </ul>
Other material issues	
<ul style="list-style-type: none"> <li>• ISO 14001 Environmental Management System (EMS)</li> <li>• Materials efficiency</li> <li>• Quality and Performance</li> <li>• Full product traceability</li> </ul>	

## Qatar Steel's Sustainability Approach and Framework

Based on a good understanding of the company's drivers to sustainability and the recognition of the related risks and opportunities, while taking into considerations Qatar Steel's commitment to the Qatar National Vision 2030, the National Development Strategy 2011-2016 and the Qatar Petroleum (QP) DG SDIR initiative; Qatar Steel approach to sustainability was developed in alignment with the company's Corporate Strategy Map and Sustainability Manual, which sets out Qatar Steel's Sustainability Management Systems (SMS), including the company's strategy for the sustainable production of DRI/HBI and reinforcing bars based on CARES standards.

Qatar Steel's sustainability approach is well captured in a visual framework that identifies the key areas that Qatar Steel needs to prioritize, improve, monitor and report to its stakeholders in order to enhance the overall company performance and achieve its sustainability targets.

In 2006, Qatar Steel received a CARES Sustainable Reinforcing Steel certificate, which highlights the integration of sustainability into Qatar Steel's organizational strategy and operations. Qatar Steel has successfully maintained this certificate to date.



The core of Qatar Steel's sustainability framework is 'Making Steel Matter', a company slogan which captures the essence of our sustainability objectives. *Making Steel Matter* means delivering top quality and innovative steel products that meet and exceed customer expectations in the most efficient and reliable manner.



Achieving Qatar Steel sustainability objective requires diligent measurement, management, and reporting of other supporting environmental, social and economic aspects. Qatar Steel identified six supporting sustainability focus areas:

- **Contributing to Qatar's Development:** Steel is an important component of Qatar's current physical and economic development. It also plays a vital role in the country's long-term social, human, and environmental development, as outlined in the Qatar National Vision 2030. Through its commitment to this vision, Qatar Steel aims to continue as a positive force contributing to sustainable development in this country.
- **Reducing Environmental Impact:** Qatar Steel is working to reduce its environmental impact through investment in cutting edge technology and continuous improvement of efficiency. These actions improve productivity, reduce Qatar's overall environmental impact, enhance customer loyalty, and support Qatar Steel's promise of *Making Steel Matter*.
- **Ensuring a Safe and Healthy Work Environment:** The safety of employees, contractors and physical assets are of vital importance to Qatar Steel. Placing health and safety as a top priority ensures that everyone shares in Qatar Steel's success.
- **Developing a High Performing and Motivated Team:** Qatar Steel's highly skilled team consistently delivers quality products to satisfy its valued customers, and we invest. Qatar Steel invests heavily in its employees through training and development. A satisfied and engaged workforce is major catalyst of success.
- **Instilling Good Governance and Accountability:** Maintaining a solid base of integrated management systems and an informed and experienced Board of Directors helps Qatar Steel to achieve better results, remain accountable to all relevant parties, and meet stakeholders' expectations.
- **Achieving Profitable Growth:** Profitable growth, both for Qatar Steel and the State of Qatar, is achieved by maintaining business excellence, meeting increasing consumer demand through expansion and growth, and contributing to Qatar's infrastructure development.



A



...through Quality, Innovation, Operational Efficiency and Customer Service Excellence

### Collaboration for a Sustainable Industry Community

Qatar Steel views every process as an opportunity to push the boundaries of quality and sustainability; this provides the fuel necessary to keep Qatar Steel ahead of its competition.

#### Converting Qatar Steel's by-products to sustainable input at other industries

In 2012, an agreement was signed between Qatar Steel and Slag Aggregates Producer W.L.L (SAP) through which Qatar Steel sold 1.0 million tons of the non-metallic parts of slag to SAP, which is then used for road leveling, road construction and infrastructure development of the state of Qatar. SAP will also be receiving the slag on monthly basis according to the agreement. The metallic parts of the EAF slag will be returned back to Qatar Steel plant and recycled again in the EAF. Re-utilizing of EAF slag is considered as a one vital stage in Qatar Steel's waste management and waste recycling.

#### Converting other industries waste to sustainable input at Qatar Steel's operations

A new collaboration between Qatar Steel and Qatalum Company will take place in 2013 in the area of efficient operations and waste recycling. Carbon waste is generated normally from the aluminum manufacturing and it has very limited applications in the aluminum production and waste recycling. Although, carbon is a very main source in the steel manufacturing and it must be utilized during the melting process inside the electric arc furnaces. Qatar Steel's plant is consuming lump coke and recarburizer as sources of carbon; however with this new collaboration those two carbon sources can be replaced by Qatalum carbon waste.

### Product Quality

Qatar Steel's quality assurance system has been integrated into every aspect of the company's operations from order placements to final delivery and beyond.

Qatar Steel's commitment to quality means:

- Full understanding and conformity to the requirements of customers at all times.
- Deliver defect free products and services to all customers on time.

All products, including reinforcing bars and wire-rods, are manufactured from selected raw material with defined chemical compositions and pre-tested quality at different stages of the production cycle. This includes, among others: blending ratios, temperature, composition of chemicals and flow rate of reducing gases. Inspections of samples are conducted throughout the manufacturing process, with 'sample testing' of output performed to ensure compliance with quality standards and customer requirements.

Quality Control Laboratories:

- 1) Quality Control Central Laboratory (since 1978).
- 2) Quality Control's RM2 Mechanical Laboratory (since 2006).
- 3) Quality Control Express Laboratory (since 2006).
- 4) Quality Control's RM1 Laboratory (since 2010).
- 5) Quality Control Lime Plant Laboratory (since 2010).

Qatar Steel also uses quality control laboratories equipped with the most modern computerized testing and analytical instruments, including:

- Chemical testing analyzers - such as:
  - o Optical Emissions Spectrometer, which analyzes the steel samples received from the electric arc furnaces (bath sample), ladle furnaces (bath sample), continuous casting shops (ladle sample) and rolling mills (rebar sample).
  - o X-ray Fluorescence Spectrometer (XRF), which examines samples from a wide variety of the company's products, including DRI, HBI, Iron Ore, Ferro Alloys, by-products, Limestone, Dolomite stone, Steel Slag, and others.
  - o Oxygen and Nitrogen analyzers, which determine The Quantity (Concentration) of Oxygen and Nitrogen in steel, Iron Ore, Ferro Alloys, Recarburizer, and any other irregular materials.
- Mechanical Testing Machines - such as tensile bend, rib geometric measurement, microstructure of the steel samples, grinding, cutting, crush, among other mechanical tests.

### New Technology for Enhancing Product Quality

Qatar Steel produces high strength reinforcing bars by exclusively using Thermo Mechanical Treatment (TMT) Quenching Technology in Rolling Mill plant since 2011, after replacing the Nitro Vanadium (NV), Vanadium (V) and Ferroniobium (FeNb) Alloys in the steelmaking process. The use of TMT Quenching technology in the RM plant will increase the yield strength of the deformed steel bar.

Qatar Steel uses a ladle furnace to ensure greater homogeneity of its steel, resulting in greater consistency of physical properties and a more uniform chemical composition. To improve cost efficiency, Qatar Steel uses a Thermo-Mechanical Process to produce reinforcing bars of varying standards in its new rolling mill (RM2).

### Third Party Quality Certification

As a result of the company's determination to produce high quality products, Qatar Steel has received many prestigious accreditations including the Saudi Arabian Standards Organization (SASO), Japanese Industrial Standards (JIS), UK CARES, and Dubai Central Laboratory (DCL) of Dubai Municipality for conforming to standard specifications of ASTM A615:2008. Qatar Steel guarantees that the quality of its products satisfies all local and international requirements. Qatar Steel's Quality Management System complies with the requirements of BS EN ISO 9001:2008 and the relevant CARES Quality and Operations Assessment Schedule. Qatar Steel is also certified as a quality manufacturer and suppliers of products conforming to BS 4449:1997 Grade 460B and BS 4449:2005 Grade B500B<sup>1</sup>.

Qatar Steel's comprehensive, integrated and standardized quality assurance processes allowed the company to achieve a rate of 0.008% rebar scrapped in 2011 for reason of quality. Similarly, the rate of steel billets scrapped in 2012 was very low. All scrapped rebar and billets were recycled in the plant for greater environmental and economic values.





Product Quality	2009	2010	2011	2012
% of billets scrapped due to quality parameters	0.1	0.16	0.27	0.06
% of rebar scrapped due to quality parameters	0.010	0.032	0.010	0.008

In 2013, Qatar Steel aims to acquire the ISO/IEC 17025:2005 accreditation (General requirements for the competence of testing and calibration laboratories), which would elevate Qatar Steel's laboratory standards to international level and enhance quality processes.

### Product and Service Innovation

The high demand for steel products that results from Qatar's economic boom makes it imperative that Qatar Steel completes its projects on schedule and in a cost effective manner. Qatar Steel understands that product and service innovation is the key to meeting the need of other targeted markets. It customizes and selects value added products and delivers exceptional customer service. Qatar Steel has established a state-of-the-art fully integrated and fully automated Rebar Fabrication Facility (RFF) at its existing plant at MIC.

Qatar Steel's RFF features state-of-the-art technology and is operated by a specialized team dedicated to continuous facility improvements and updates, ensuring maximum efficiency of time, money, and effort. This efficiency is passed on to Qatar Steel's customers, whose reinforced concrete design and construction projects benefit directly from Qatar Steel's expertise. Qatar Steel's rebar products are mostly utilized in the construction of large-scale institutions such as hospital, schools, houses, towers, bridges, shopping malls and many others.

As a special measure designed to support its Qatari customers, Qatar Steel developed innovative special length rebar supplies customized for the Qatari market. Instead of being uniformly cut to the standard 12.0 meter length, these special rebar are cut to various lengths ranging from 9.0 to 11.5 meters, and are produced in all grades to match customer requirements. The total quantity of special length rebar produced during 2012 was approximately 39,265 mt. Qatar Steel also sells 6.0 meter-long rebar generated during the rolling process. These alternative-length rebar are used mainly by Cut & Bend companies. Qatar Steel's own scrap quantities continue to reduce, especially large diameter rebar, such as those with 20, 25, 32 and 40 mm.

Implementation of a separate Research and Development Department is another step for creating the best operational conditions and product quality for customers. The department's responsibilities are not limited to operations, but extend to include various research activities, with the knowledge that other Qatar Steel departments are conducting their own research as well.

Qatar Steel has showed its strong commitment to product and service innovation through the successful rolling trial conducted at the company, based on an inquiry received for ASTM A615 Gr 75 rebar.

<sup>1</sup>The Numbers 460B and B500B in each of the standard represent the minimum strength required in steel.  
460 B = 460 N/mm<sup>2</sup>, 500 B= 500N/mm<sup>2</sup>

<sup>2</sup>A document issued by Qatar's MOE outlining the environmental performance, monitoring, and reporting conditions that must be met by the company

## Plant Operational Efficiency - Reliability, Availability and Productivity

Qatar Steel strives to achieve the highest levels of plant reliability and availability, in order to optimize productivity, profitability, and overall value for its stakeholders. Qatar Steel uses the most modern and efficient technology available, and implements an advanced maintenance system to prevent unplanned interruptions in the production and operational process.

Qatar Steel's maintenance department utilizes an automated maintenance schedule to ensure that the company conducts necessary proactive maintenance work on the right equipment at the right time. Such maintenance includes condition monitoring, which is performed pre-emptively to avoid future mechanical and equipment damage.

In 2012, Qatar Steel implemented several new and modification projects at different stages of operations, including the direction reduction, electric furnaces, the continuous casting and the rolling mills. More details on such projects include:

- Shaft furnace feeding system, internal feed pipes reliability improvement in DR1.
- Upper burden feeder hydraulic cylinder reliability improvement in DR2.
- Upgrading the mould oscillation drive in CC1.
- Upgrading the Cutting Torch Unit in CC3.
- Modification of the TCM Clamping System in CC4.
- Replacing the 66kV Switchgear No.2 Feeder Combined CT/VT Unit in the Electricity Station.
- Replacing of DR-1 PLC Internal Cooling Units Periodically.
- Upgrading the AS#01 Cooling Water System in the Electricity Station.
- Reducing the overlapping problem of HSFBM Cooling Bed in RM 1.
- Controlling the Bundling Machine Emergency Unit in RM 2.

Qatar Steel understands the importance of good maintenance. Furthermore, the company understands the distinction between types of maintenance, and places great emphasis on both predictive/preventive maintenance and swift and decisive reactive maintenance. Qatar Steel's strong relationships and lines of communication with its vendors ensure their regular and routine carrying out of preventive maintenance, along with updating of their equipment. Modification, upgrading and maintenance work implemented in 2012 is expected to achieve approximately 8.0 million QAR in savings for Qatar Steel over the next few years. Due to the hard efforts of the setup and maintenance projects implemented in 2012, Qatar Steel exceeded its 2012 plants reliability targets. In 2012, the average reliability of DR plant improved by 2.9% from 96.94% in 2011. Qatar Steel also improved its EAF and the CC plants average reliability by around 2% over the same period, achieving 98.76 average reliability for the EAF plant and 99.37 for the CC plant. Furthermore, the average reliability of the RM plant improved by 5.1% to 96.98% in 2012 compared to 92.28% in 2011.



	Reliability				
	2009	2010	2011	2012 - actual	2012 - target
DR1 reliability (%)	99.62	99.85	97.66	98.80	
DR2 reliability (%)	97.02	88.95	96.22	99.69	
<b>DR reliability, average (%)</b>	<b>98.32</b>	<b>94.40</b>	<b>96.94</b>	<b>99.75</b>	<b>97.25</b>
EAF1 reliability (%)	97.54	95.67	96.45	99.03	
EAF2 reliability (%)	97.20	94.86	96.69	99.19	
EAF3 reliability (%)	91.40	94.44	96.38	98.13	
EAF4 reliability (%)	94.58	94.88	96.91	98.69	
<b>EAF reliability, average (%)</b>	<b>95.18</b>	<b>94.96</b>	<b>96.61</b>	<b>98.76</b>	<b>96.16</b>
CC1 reliability (%)	98.01	98.06	96.45	99.12	
CC2 reliability (%)	97.85	97.81	96.61	99.14	
CC3 reliability (%)	96.94	98.64	98.05	99.78	
CC4 reliability (%)	97.38	98.49	98.84	99.43	
<b>CC reliability, average (%)</b>	<b>97.54</b>	<b>98.25</b>	<b>97.49</b>	<b>99.37</b>	<b>97.00</b>
RM1 reliability (%)	89.80	87.98	90.17	96.74	
RM2 reliability (%)	87.37	92.27	94.39	97.22	
<b>RM reliability, average (%)</b>	<b>88.58</b>	<b>90.12</b>	<b>92.28</b>	<b>96.98</b>	<b>91.00</b>

Qatar Steel plant's availability has improved in 2012 in comparison to 2011. In 2012, the average availability of DR plant increased by 2.6%. The average availability of the EAF and the CC plants has increased by 3.0% and 2.2% respectively. The average availability of the RM plant improved from 84.65% in 2011 to 90.70% in 2012, a 7.1% improvement/increase.

Availability					
	2009	2010	2011	2012 - actual	2012 - target
DR1 availability (%)	92.52	93.66	93.91	92.77	
DR2 availability (%)	93.06	81.21	86.87	92.70	
<b>DR availability, average (%)</b>	<b>92.79</b>	<b>87.43</b>	<b>90.39</b>	<b>92.74</b>	<b>93.00</b>
EAF1 availability (%)	94.37	90.70	87.10	89.97	
EAF2 availability (%)	91.15	89.49	87.43	90.40	
EAF3 availability (%)	83.34	85.02	87.53	90.47	
EAF4 availability (%)	83.90	86.20	87.21	88.71	
<b>EAF availability, average (%)</b>	<b>88.19</b>	<b>87.85</b>	<b>87.32</b>	<b>89.89</b>	<b>87.50</b>
CC1 availability (%)	94.98	93.22	87.32	90.14	
CC2 availability (%)	90.09	92.64	87.56	90.41	
CC3 availability (%)	90.16	89.81	90.26	92.03	
CC4 availability (%)	86.72	90.05	89.83	90.37	
<b>CC availability, average (%)</b>	<b>90.49</b>	<b>91.43</b>	<b>88.74</b>	<b>90.74</b>	<b>87.50</b>
RM1 availability (%)	88.52	73.41	84.46	90.84	
RM2 availability (%)	81.09	81.08	84.84	90.56	
<b>RM availability, average (%)</b>	<b>84.80</b>	<b>77.24</b>	<b>84.65</b>	<b>90.70</b>	<b>93.50</b>
<b>Note:</b> Some values are different than the values published in Qatar Steel's Sustainability Report 2011 due to the mistake occurred in the printing process.					

The average yield rate of DR, EAF, CC, and RM plants has slightly improved in 2012.

Productivity					
	2009	2010	2011	2012 - actual	2012 - target
DR1 yield (%)	70.64	69.91	69.59	69.66	
DR2 yield (%)	68.15	68.20	69.27	69.75	
<b>DR yield, average (%)</b>	<b>69.39</b>	<b>69.05</b>	<b>69.43</b>	<b>69.72</b>	<b>69.10</b>
EF1 & EF2 yield (%)	92.10	91.34	91.31	91.39	
EF 3 yield (%)	91.34	91.30	91.33	91.32	
EF4 yield (%)	91.12	91.28	91.26	91.31	
<b>EF yield, average (%)</b>	<b>91.52</b>	<b>91.31</b>	<b>91.30</b>	<b>91.34</b>	<b>91.30</b>
CC1 & CC2 yield (%)	95.41	98.34	98.28	98.53	
CC3 yield (%)	98.37	98.52	98.08	98.79	
CC4 yield (%)	98.48	98.81	98.76	98.90	
<b>CC yield, average (%)</b>	<b>97.42</b>	<b>98.55</b>	<b>98.37</b>	<b>98.76</b>	<b>98.50</b>
RM1 yield	98.15	97.40	97.25	97.83	
RM2 yield	98.87	99.10	99.45	99.34	
<b>RM yield, average (%)</b>	<b>98.51</b>	<b>98.25</b>	<b>98.35</b>	<b>98.66</b>	<b>98.50</b>

### The Production Material Management System (PMMS) Project

The PMMS is a continuous project that started in 2009. Prior to the implementation of this project, the production data were manually inserted in the ERP system, a process that required a great deal of time and manpower, and generated human errors. Through the implementation of the PMMS project, the company will:

- Reduce data entry time.
- Reduce manual record keeping & ERP transactions on the plant floor.
- Provide total product genealogy (i.e. track the product within each plant at different stages).
- Provide accurate real time data to manufacturing personnel, helping them perform data and quality analysis.

In 2012, Qatar Steel spent 16,339 thousand QR on plant's enhancement, research and development, in addition to 4,682 thousand QR the company spent on gunning robot projects in EAF1, 2, 3, 4 for the years 2009~2012.

Cost of Plant's Enhancement, Research and Development			
	2011	2012 - actual	2012 - target
Maintenance department - plant reliability enhancement projects (Thousand QR)	19,340	4,025	8,058
Steelmaking Department - operational enhancement in EAF and CC plants (Thousand QR)	2,025	665	7,281
Steelmaking Department - total gunning robot projects in EAF1, 2, 3, 4 for the years 2009~2012 (Thousand QR) =			4,682
Research and development (Thousand QR)	-	-	1,000

### Customer Service Excellence

Qatar Steel believes that building long-term relationships with its customers is best achieved by working closely with them and remaining attentive to their needs and wishes.

Market Share for Rebar (%)				
	2009	2010	2011	2012
Qatar	96.98	98.31	98.05	97.33
Exports (GCC)	5.37	8.39	7.47	8.70
Overall GCC	13.76	15.41	13.87	16.03

Qatar Steel consistently records high sales performance, drawing strength from the company's longstanding customer relationships, efficient communication strategies, and market intelligence. In 2011 Qatar Steel supplied 97.33% of the Qatar's rebar requirements and 16.03% of the total GCC rebar market (Qatar, United Arab Emirates (UAE), Kuwait, Oman, Bahrain and Saudi Arabia), with exports representing 50% of Qatar Steel's total production in the same year.





## Customer Satisfaction

Qatar Steel's customers include distributors who deliver products to end-users in Qatar and across the GCC regions. Qatar Steel also supplies rebar to Q-Coat and markets their finished product (fusion bonded epoxy coated rebar) through distributors. Qatar Steel also serves end-users requirements directly through its processing unit (Re-bar Fabrication Facility).

Qatar Steel strives to maintain positive relationships with its distributors. As company representatives on the ground, distributors are ideally suited to ensure that the end-user receives the highest-quality service.

In 2012, as part of the Customer Relationship Management (CRM) initiative to provide an added value to services to customers, we implemented a stud welding technique to attach product tags to the rebar bundles to ensure the tags on each bundle required for identifying the product.

Annual measurement of customer satisfaction is performed by the company's CRM to gauge Qatar Steel's performance, using customer feedback to improve operations. All of Qatar Steel's performance assessment metrics include quality, availability, prices, delivery process, communication and responsiveness to customer feedback. During 2012, Qatar Steel achieved 80.0% customer satisfaction rate, approximately the same levels as in 2011 (80.6%).

The company's customer service efforts are not limited to conventional interactions with customers and distributors. As part of on-going efforts to enhance customer experience, Qatar Steel launched an online Customer Portal system in 2009 - the first of its kind in the region. The customer portal streamlines transactions by moving the sales process to the internet, applying innovative selling strategies and utilizing new e-commerce tools and techniques. Qatar Steel's portal brings the full range of its steel products to the customers' fingertips, and is accessible online from anywhere in the world. Features include efficient tracking of orders, an interactive notification system that brings the customers and sales team closer together, and Qatar Steel's guarantee of quality, transparency, and fairness in all transactions.

In 2012, CRM Section further enhanced the customer portal facilities by adding a new feature for tracking location wise dispatch details and automated sales quantity tolerance. The printing of mill certificate and online registration of non-conformity by customers are under process.

Qatar Steel's Customer Portal is a primary example of the company's efforts to simplify the process of steel buying, making it an easy, secure, and pleasant experience for customers.

[http://xcenter.qatarsteel.com.qa:8000/OA\\_HTML/ibeCAcdLogin.jsp?a=b](http://xcenter.qatarsteel.com.qa:8000/OA_HTML/ibeCAcdLogin.jsp?a=b)

Distribution Network (No. of traders)				
	2009	2010	2011	2012
Qatar	21	24	25	25
Saudi Arabia	5	6	6	7
Bahrain	6	6	6	6
Kuwait	1	2	2	2
UAE	19	24	24	22
Oman	2	3	3	3

In 2004, to further strengthen customer service, Qatar Steel created a Customer Relationship Management (CRM) section within the marketing department. The CRM illustrates Qatar Steel's long-term commitment to constant improvement in areas such as delivery commitments, complaint handling, and other essential aspects of customer service.

Qatar Steel has developed a comprehensive and structured Traders' Performance Appraisal System whereby all Qatar Steel traders' performance, both qualitative and quantitative, are monitored through Enterprise Resource Planning (ERP) system on a monthly basis. The objective of the ERP system is to maintain an efficient distribution network through performance recognition and reward.

The success of Qatar Steel's business is built on long-standing relationships with the company's valued traders. As a result, supporting the company's traders is vital to ensuring customer satisfaction. Qatar Steel aims to be a risk-sharing partner with its traders, and works to minimize their business risks.

In the domestic market, Qatar Steel carries out the following activities to support its traders:

1. Monitoring of stocks on a weekly basis, in an effort to balance order quantities with market demand and reducing stock risks.
2. Continuous monitoring of inventory to facilitate control of retail price levels to minimize the risk of price undercutting.
3. Assurance of availability of products to all local traders based on sales agreements and eliminating the risk of running out of stock at any point during the year.
4. Ensuring continuous production of essential items, to meet the changing needs of on-going projects.
5. Adherence to all market regulations, to avoid the loss of business due to competition or regulation infractions.
6. Supporting specific projects by supplying custom-length rebar, thereby ensuring customer satisfaction and retention.
7. In some exceptional and deserving cases, Qatar Steel has adjusted prices, in some cases retrospectively, to reflect market price fluctuations.

The scenario is different for Qatar Steel's export market as its traders deal with different products from a number of competing companies in the GCC region. In general, Qatar Steel books its orders and fixes its prices on a monthly basis, responding to the dynamics of the market, and making necessary adjustments during monthly reviews.

Qatar Steel also evaluates its distributors' ability and to deliver the quality service expected of Qatar Steel. To better ensure customer satisfaction, Qatar Steel conducts annual evaluation of its distributors' performance in the following areas:

1. Equipment availability
2. Manpower availability
3. Health and safety compliance
4. Response time/mobilization

## Making Steel Matter - 2013 Commitments

Collaborate with Qatalum Company to use Qatalum's carbon waste into Qatar Steel's operations.

Implementation of the ISO/IEC 17025:2005 accreditation (General requirements for the competence of testing and calibration laboratories).

Renovation of Qatar Steel's central quality control laboratory (to start in 2013 and finish in 2014).

*Contributing to Qatar's  
development*



Qatar Steel has a direct social and economic impact on Qatar through its operations and business. The company's work is in direct support of the Qatar National Development Strategy 2011-2016, particularly the pillars on 'sustaining economic prosperity' and 'promoting human development'. Qatar Steel is also in alignment with the social, environmental, and economic aims of the Qatar National Vision 2030.



#### Outstanding Presence of Qatar Steel at Project Qatar

Qatar Steel participated in the 9th edition of Project Qatar 2012, held at Doha Exhibition Center from 30th April - 3rd May, 2012, under the auspices of HE Sheikh Hamad Bin Jassim Bin Jabor Al-Thani, Prime Minister and Foreign Minister.

"Project Qatar 2012" is Qatar's most important leading International Trade Exhibition for Constructions, Building Materials, Equipment and Technology. This year it attracted more than 2,000 exhibitors from 48 countries.

"Today the constructions sector is witnessing a great boom under the wise leadership of HH Sheikh Hamad Bin Khalifa Al-Thani, the Emir of Qatar and HH Sheikh Tamim Bin Hamad, the Heir Apparent, and that Qatar Steel is one of the leading steel companies in Qatar, and it plays a great role in supporting the economy in the country. Besides, the exhibition is held at a time Qatar is under focus, for being busy preparing for the 2022 World Football Cup, and that many infrastructural projects are to be implemented for such huge event in the next ten years" - Mr. Ahmed Al-Ansari, Qatar Steel Commercial Division Manager.

Qatar Steel provides the building blocks for many structures that support the development of Qatar. The company's high quality steel is used for infrastructure construction of schools, bridges, homes, offices, and hospitals. Qatar Steel's products allow Qatar to continue to rapidly develop and meet goals like creating infrastructure to host the 2022 FIFA World Cup. The use of Qatar Steel's products for major projects in the region helps retain the company's leading position in the Qatari market. Qatar Steel regularly sells more than half of its total inventory within Qatar, as in 2012, when 50% of production was sold in the domestic market.



#### Qatarization

Qatar Steel's Qatarization goals are in alignment with the Qatar National Vision 2030. These efforts are fully supported from by the company's senior management.

Employment by Nationality				
	2009	2010	2011	2012
Number of Qatari employees	195	210	212	207
Qatarization (%)	11.57	12.05	11.72	11.34



Our hiring criteria prioritize skilled Qatari nationals. Qatar Steel works to build Qatari human resources through development programs such as training programs for undergraduates. This and other efforts help to build a pool of talented Qatar citizens who are qualified to join the Qatar Steel workforce. Further, promoting technical education has a greater impact on the development of education in the country.

Qatar Steel is taking specific steps in order to increase the rate of Qatarization including:

- Participating in campus open houses.
- Visiting campuses.
- Partnering with technical schools, institutions and universities.
- Participating in career fairs.

Qatar Steel invests in its employees, providing development opportunities like training courses and encouraging employees to create career development plans.

In 2012, Qatar Steel participated in the 5<sup>th</sup> Qatar Career Fair.

#### Local Procurement

Qatar Steel aims to purchase raw materials and supplies directly from Qatar whenever possible, thereby contributing to the economic growth of the country.

The natural gas used for the company's operations is supplied exclusively by Qatar Petroleum. Where possible, Qatar Steel also sources materials locally, including all scrap steel, lime, and office supplies. For materials that are not available in Qatar, such as iron ore pellets, the company purchases these materials from countries where they are readily available.



Procurement				
	2009	2010	2011	2012
Spending on overseas contractors and suppliers (QR) <sup>(1)</sup>	232,208,003	425,348,224	222,947,319	803,852,249
Total spending on local contractors and suppliers (QR) <sup>(1)</sup>	139,401,073	177,701,415	352,402,597	596,743,541
Total spending on contractors and suppliers (QR) <sup>(1)</sup>	371,609,076	603,049,639	575,349,916	1,400,595,790
Spending on locally-based contractors and suppliers, as percentage of total spending	38%	30%	61%	42.6%

<sup>(1)</sup>Total spending on contractors and suppliers includes services, equipment, logistics, and spares and consumable items, and does not include raw material procurement.

In 2012, Qatar Steel's spending on contractors and suppliers was equal to 1,400,595,790 Qatari Riyal and the increasing is mainly due to the current expansion at Qatar Steel's Plant in relation to the new project of EAF5.

Community investment (QR)			
2009	2010	2011	2012
203,000	355,000	310,000	465,000

### Community Investment

Qatar Steel invests in various initiatives in the local community focusing on society, culture, health, sports, and environment. In 2012, Qatar Steel spent 465,000 QR on its community investment projects, a 50% increase from the 2011 community investment value. A community investment strategy will be implemented in 2013 to increase the rate of the community investments that contribute to the positive growth of the society.

Qatar Steel's 2012 community investment activities included, among others:

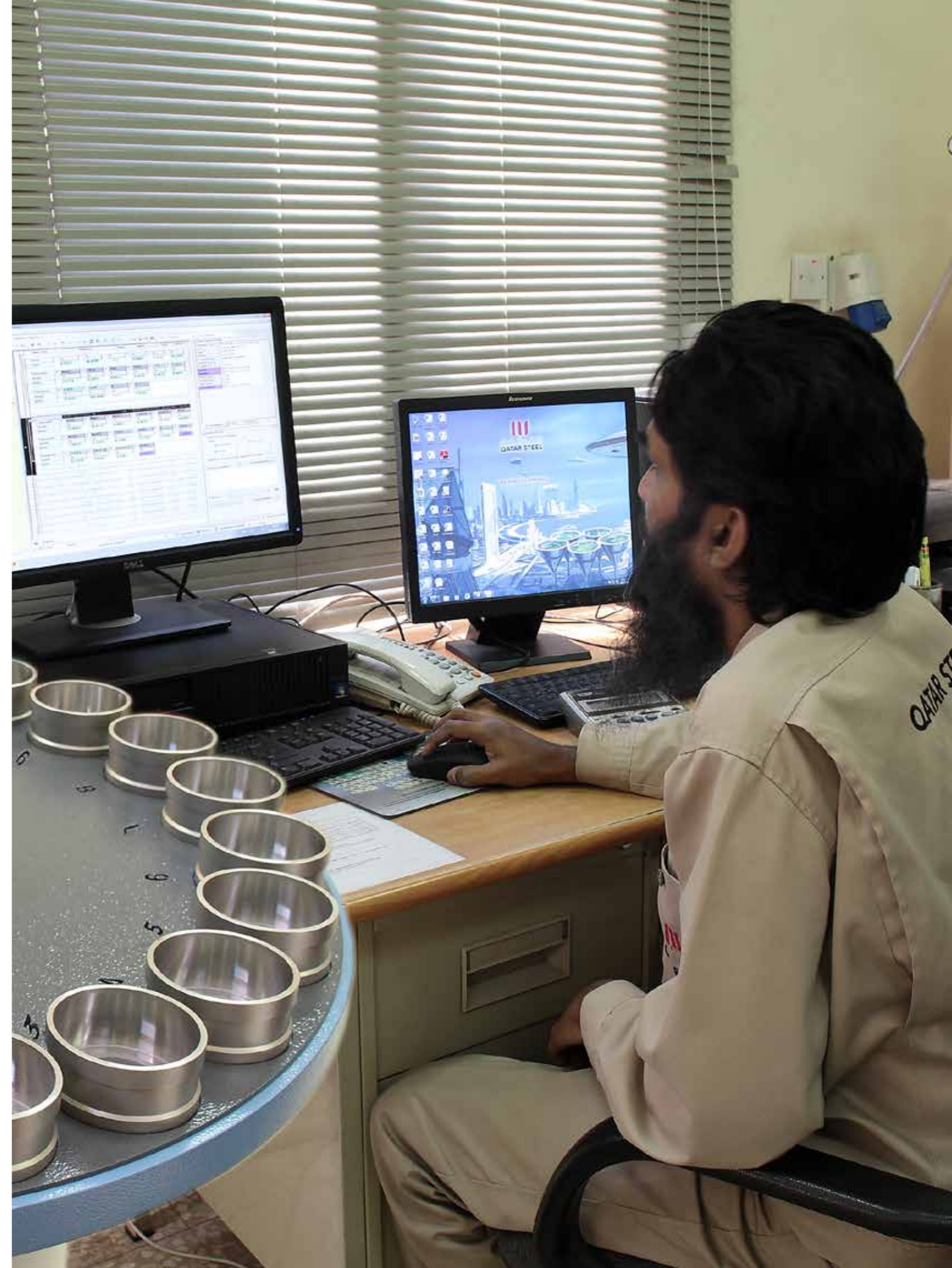
- Celebrating in the National Sport Day in collaboration with MIC management.
- Participating in the 9th edition of Project Qatar 2012.
- Holding the Qatar Steel's annual family day.
- Launch of blood donation drives and sponsoring the annual blood donors' recognition ceremony.
- Contributing to the second hand computers to Qatar charity.
- Participating in Garangou Celebrations by Distributing Garangou Bags with other institutions including Hamad Medical Corporation, Qatar Charity, Shafallah Center, Schools and Qatar Society for people with special needs.



### Contributing to Qatar's Development - 2013 Commitments

Enhance Qatarization and employment rate in various fields of the operations.

Develop a community investment strategy.





*Reducing  
environmental **impact***

*Qatar's robust economy is growing at unprecedented levels, which means that the environmental challenges faced by Qatar are also intensifying. Growing strains on Qatar's energy sources, water supply and natural biodiversity are some of the environmental hurdles Qatar must overcome. Though formidable, these challenges provide Qatar Steel with a unique opportunity for devising comprehensive strategy and taking decisive action to mitigate climate change and its potentially devastating consequences.*

As outlined in Qatar Steel's company mission and vision, Qatar Steel aspires to achieve the best results for all of its stakeholders, including those most vulnerable to environmental disruptions. Qatar Steel is fully aware of the environmental challenges faced by Qatar and the global community, and the company is committed to reducing its environmental impact, via compliance with all of Qatar's current environmental standards and regulations and proactively working to meet future legislation applicable to Qatar Steel.

As mandated by QNV 2030 and the SDI initiative, Qatar Steel is committed and is working to operate in a manner that reduces the company's environmental impact through the implementation of environmental management systems and the most eco-friendly technologies available.

### Environmental Management Approach

Qatar Steel's environmental management system has been developed in alignment with the ISO 14001 standards. Qatar Steel achieved ISO 14001 certification in 2002, and has successfully achieved the recertification every three years to date.

As part of the company's 'Identification & Evaluation of Environmental Aspects' policy, Qatar Steel undertook an extensive identification and evaluation program of all environmental aspects related to the company's activities and products. Using the Environmental Impact Assessment (EIA) Qatar Steel performed on its new plants, as well as the environmental study conducted on existing plants, Qatar Steel identified the environmental factors most at risk as a result of company operations. Qatar Steel then developed and implemented control and monitoring mechanisms, including documented procedures and training, to minimize the company's impacts continuously.

Qatar Steel diligently complies with regulations promoting environmental care. Unlike scrap-based steel plants, which often face emission-control challenges resulting from Heavy Metals and toxic chemicals present in the scrap, Qatar Steel's production is based on DRI, which is one of the cleanest raw materials available. An external accredited laboratory has confirmed the company's ability to maintain very low levels of Heavy Metal and Dioxin emissions.

Using the company's 'Environmental Monitoring Program', Qatar Steel regularly tracks its environmental performance in order to ensure compliance with applicable external requirements, such as the Ministry of Environment (MoE)'s Consent to Operate<sup>2</sup>, and to ensure that Qatar Steel's management is provided with updated information on the company's environmental impact and mitigation.

<sup>2</sup>A document issued by Qatar's MOE outlining the environmental performance, monitoring, and reporting conditions that must be met by the company

Environmental investment ('000 QR)		
2010	2011	2012
1,020	3,000	2,775

In 2012, Qatar Steel invested about 2.8 million QR in environment protection projects. The Continuous Emissions Monitoring System (CEMS) and Ambient Air Quality Monitoring System (AAQMS) were installed at different sites in 2012; however, the measurement's efficiency and operational reliability should be controlled by HSE Department for actual analytical results afterwards.

### Climate Change and Emissions

Qatar Steel's Operations emit various types of GHG, dust, and particulate matters. These emissions are controlled and monitored either automatically or manually. Knowing that Qatar Steel's plant emissions are within Qatar's Ministry of Environment limits, the company is firmly committed to continuously enhancing its environmental efficiency to better Qatari society, its people and the company's different stakeholders.

Qatar Steel's operations generate GHG emissions through the company's direct and indirect energy consumption. The main source of energy consumed at Qatar Steel is electricity, supplied from Qatar's energy grid. In 2012, Qatar Steel's electricity consumption increased by 4.1% and reached 2,139,288.1 MWh compared 2011's consumption level. This increase was due to the notable increase in production and the ongoing expansion projects at Qatar Steel's plant.

Direct and Indirect Energy Consumption				
	2009	2010	2011	2012
Electricity (kWh)	1,473,436,306	1,784,159,742	2,053,681,399	2,139,288,800
Natural gas consumed at DR plant (Nm <sup>3</sup> )	579,038,725	598,677,511	621,705,522	687,471,304
Natural gas consumed at RM reheating furnaces (Nm <sup>3</sup> )	61,839,773	57,811,405	62,786,187	65,494,422
Natural gas consumed at steelmaking operations (Nm <sup>3</sup> )	10,327,726	13,592,627	13,153,047	13,076,940
Natural gas consumed at lime plant (Nm <sup>3</sup> )	-	-	439,456(1)	5,919,854
Vehicle fleet - total diesel consumed (liters)	1,901,817	3,019,606	2,881,203	3,526,589
Vehicle fleet - total gasoline consumed (liters)	224,839	224,166	211,976	246,450

<sup>(1)</sup> Lime plant has started its operation in June 2011, therefore the 2011 data are recorded from June to December 2011





Qatar Steel's total owned vehicle fleet consists of 243 vehicles of different sizes under General Services Department and Material Control Department. Light vehicles and buses are under the contractor "KATCO Company" and they are used for employees' transportation while heavy vehicles and equipment are utilized for the various operational tasks. Qatar Steel controls the owned vehicles' fuel consumption. In 2012, the company recorded consumption of 3,526,589 liters of diesel and 246,450 liters of gasoline, which was responsible for 10,220 mt of GHG emissions. Diesel is also consumed by Qatar Steel's onsite generators which produce electricity to ensure the plant's safety during plant shutdown.

Natural gas is used for reheating the steel billets at the rolling mill reheating furnaces. In 2012, Qatar Steel's total natural gas consumed for production at the DR plant, steelmaking plant and RM plant was 766,042,666 Nm<sup>3</sup>. The natural gas consumption has increased in all production plants due to the notable increase in production; however, despite the increase in production, natural gas consumption at the steelmaking operations has slightly decreased due to operational efficiencies achieved at the electric arc furnaces.

In 2012, Qatar Steel's operations (including natural gas consumption in all plants, the vehicles fuel consumption and electricity consumption) resulted in 11,536,034 Mt of GHG emissions, compared to 9,895,687 mt recorded in 2011.

GHG Emissions (Mt)				
	2009	2010	2011	2012
GHG emissions from electricity consumed <sup>(1)</sup>	1,271,037	1,539,078	1,771,577	1,845,425
GHG emissions from DR production and crude steel of furnaces <sup>(2)</sup>	N/A	7,871,957	7,812,955	9,321,640
GHG emissions from rolled steel billets <sup>(3)</sup>	N/A	290,020	302,783	358,749
GHG emissions from vehicles fleet <sup>(4)</sup>	5,731	8,778	8,372	10,220
Total GHG emissions	1,276,768	9,709,833	9,895,687	11,536,034

<sup>(1)</sup> Calculation of GHG emissions for electricity consumption is based on US Department of Energy.

<sup>(2)</sup> Calculation of GHG emissions for total DR plant production and crude steel of the EAF is based on UKCARES's Qatar Steel Carbon Footprint Report.

<sup>(3)</sup> Calculation of GHG Emissions from steel rolled billets is based on UKCARES's Qatar Steel Carbon Footprint Report.

<sup>(4)</sup> Calculation of GHG emissions from vehicle fleet's fuel consumption is based on US EPA.

In addition to continued compliance with the MoE's emissions limits, Qatar Steel aims to reduce its GHG emissions in 2012 in accordance with the international benchmark of 1.8 tons of CO<sub>2</sub> per ton of crude steel cast.

### Air Quality

Air pollutants from operational activities are controlled at the source; this includes:

1. The ambient air measurement (gases, particulates matters and noise), at the material control area, DR plant, EAF and CC plants, and
2. The stack emissions measurement (gases and particulates matters), at the DR and RM plants, such as the power stack, pre-heater flue gas stack, the chimney and others.

Control is achieved through the use of the following:

- Best available technology such as low NO<sub>x</sub> burners,
- Automation of operation using Level-2 operating system, Human Machine Interface (HMI), and Programmable Logic Controller (PLC),
- The use of natural gas with low sulphur content.
- Installation of air pollution control equipment such as a Dust Collection and Suppression System, Bag Filters, Scrubbers, and Stacks, to ensure that atmospheric release meet regulatory limit,
- Documented and practiced operational control procedures.

Other Air Emissions (mg/Nm <sup>3</sup> )				
	2009	2010	2011	2012
Particulate matters	752	845	799	716
SO <sub>x</sub> emissions	501	405	355	231
NO <sub>x</sub>	1,925	2,641	2,887	2,824

In 2012, Qatar Steel successfully decreased its SO<sub>x</sub> emissions to 231 mt, a 35% reduction from 2011 emissions. At the same year, the particulate matters were reduced by 10.4% and the NO<sub>x</sub> emissions were also reduced by 2.2% compared to 2011 performance.

### Natural Resources Optimization

#### Material Consumption

Qatar Steel's main environmental advantage is the company's reliance on the use of Direct Reduced Iron (DRI) as the primary raw material used in the company's operations. Steel plants that use DRI operate much more cleanly than those based on scrap, owing to DRI's distinct benefits, which include:

- Fixed chemical composition, which improves working efficiency in electric arc furnaces.
- Low percentage of impurities, such as sulphur and phosphorus.
- Low volume of harmful elements, such as lead, copper, and nickel.
- Enabling of a continuous raw-material feeding system that does not require the opening of the furnace roof.
- Improved power utilization.

In 2012, Qatar Steel consumed 3,475,788 mt of iron ore pellets and 31,117 mt of Ferroalloys

While DRI is Qatar Steel's main raw material, steel scrap remains necessary for the production of new steel. Qatar Steel makes an effort to collect scrap from local markets, and to recycle all scrap generated from its operations. In 2012, 347,247 mt of total scrap has been consumed in the operation. The company's total scrap consumption in 2012 made up 14.6 % of the total raw materials used.

To the best of the company's knowledge, Qatar Steel recycles nearly 100% of all scrap generated in the State of Qatar.

Consumption of essential materials during the different operational stages can be seen through the below table:

Materials Used				
	2009	2010	2011	2012
<b>Raw materials for operations</b>				
Iron ore pellets (mt)	3,091,221	3,127,689	3,189,510	3,475,788
Ferro alloys (mt) <sup>(1)</sup>	29,956(1)	34,799(1)	29,499	31,117
Scrap (mt) (both purchased and internal generated scrap)	216,830	310,501	349,669	347,247
% of scrap of total steel input	16	14	17	14.6
Additives (mt) (i.e. Lime and Dolomite)	66,109	85,147	73,547	93,735.22
Recarburizer (mt)	1,664	2,217	2,568	2,810.11
Carbon injection (mt)	11,179	12,577	15,670	16,676.37
Total refractories (steelmaking plant and rolling mill plant) (mt)	23,540	27,879	25,625	23,535.31
<b>Gases for operations</b>				
Natural gas (Nm <sup>3</sup> )*	650,506,224	670,075,543	697,644,756	771,962,521
Total Oxygen Gas (Nm <sup>3</sup> )	43,614,474	59,333,800	58,543,167	66,608,837
Total Nitrogen Gas (Nm <sup>3</sup> )	6,543,357	6,557,161	6,311,862	5,800,526
Total Compressed Air (Nm <sup>3</sup> )	122,649,621	140,394,393	148,059,006	159,560,203
Total Argon Gas (Nm <sup>3</sup> )	176,787	214,593	241,761	250,420
<b>Utility and Maintenance Material</b>				
Utility chemicals-specialty chemical for water treatment (kg)	44,460	109,711	95,095	191,631
Utility chemical-commodity chemical for water treatment (kg)	242,369	167,113	167,113	154,879
Total lubricants-grease and lubricants' cans (kg)	74,787	92,517	92,152	53,298
Total lubricants-lubricants and hydraulic oil fluid (liters)	355,593	442,993	429,145	320,936

<sup>(1)</sup> The FeNb, NV and V Alloys have been stopped of being used in the Qatar Steel plant and replaced by Rolling Mill's TMT Quenching Technology in 2011. (From 2009-2010: FeMn, FeSi, SiMn, FeV, FeNb, NV and V), (From 2011-2012: FeMn, FeSi, SiMn, FeV).

**Note:** Some data for previous years have been changed (in comparison to the data added in Qatar Steel's Sustainability Report 2011) for the accuracy purpose.

## Water Consumption

In the face of the challenges posed by Qatar's water scarcity, Qatar Steel is committed to the most efficient utilization of water possible, by increasing the recycling level of water in the operation and by eliminating the unnecessary water discharge.

At Qatar Steel plant, seawater is used in various operations including the following main areas of consumption:

1. Direct reduction process, for cooling and cleaning of gases.
2. Cooling of main equipment in the electric arc furnace and continuous casting areas, including the furnace roof, continuous casting modules, and others components.
3. Cooling of main molten steel for quick solidification during the secondary cooling in the continuous casting process.
4. Cooling of reheating furnaces and hydraulic systems in rolling mills 1 and 2, and for spray cooling of rolling mill stands.

Qatar Steel also uses fresh water, drawn from Qatar's water grid, for administrative use within company offices. In 2012, Qatar Steel decreased freshwater consumption by 1.0% compared to 2011.

Fresh Water				
	2009	2010	2011	2012
Fresh water consumption (m <sup>3</sup> )*	1,040,310	1,493,869	1,333,370	1,318,224
Amount of money spent on fresh water consumption (QR)	4,577,364	6,573,080	5,866,888	5,800,236
* water consumption numbers in this table do not include seawater used for operations				

## Biodiversity

Qatar Steel's area is not considered as a natural ecological area or an area of environmental importance. The natural terrestrial Fauna and Flora are extremely low in it and no risk of Species' Extinction exists. The List of IUCN Red Species and National Conservation can't be applied in Qatar Steel Plant. The Species' Biological Taxonomy and Conservation States Plan can't be applied in that case too.

Although there weren't any raised reports regarding the negative impacts of Qatar Steel's plant on society or biodiversity; many improvements have been done related to the environment and new projects will be planned to increase the positive enhancement of the plant's surrounding. In addition, the future decision of the company to stop the discharging of the blown down water (processed water resulted from DR1 and DR2) to the sea and instead recycling it in some new projects at EAF3 and EAF5. In 2012, amount of the blown down water from DR1 has been used at the slag cooling area. In 2013, DR1 blown down water will be utilized in the new project of EAF3 Automated Spray Jet and the expectations that DR2 blown down water will be utilized after the completion of EAF5 construction in the Fume Treatment System.

## Waste Management

### Solid Waste

The most significant solid waste generated from Qatar Steel plant is steel scrap and the EAF slag. Scrap is collected and classified, then stored in designated areas, and finally used as raw material in the EAFs. In 2012, Qatar Steel generated and reused 99,807 mt of scrap.



Slag is considered as a by-product which was collected by a company subcontractor and sold externally. In 2012, an agreement was signed between Qatar Steel and Slag Aggregates Producer W.L.L (SAP) through which Qatar Steel sold 1.0 million tons of the non-metallic parts of slag to SAP, which is used for road leveling, road construction and infrastructure development of the state of Qatar.

Reused Scrap and Slag				
	2009	2010	2011	2012
Scrap generated from operations (mt)	73,780	83,234	110,233	99,807
Scrap purchased (mt)	143,050	227,267	239,436	247,440
EAF slag generated (mt)	176,715	236,982	244,534	261,037

**Note:** Some data for previous years have been changed (in comparison to the data added in Qatar Steel's Sustainability Report 2011) for the accuracy purpose.

Used tires are reused in Qatar Steel's EAF as a carbon source. Ratios of used tires (either full size or shredded form) are added to the EAF blend during melting process to stabilize the foamy layer of slag - after forming - from damaging the internal wall of the furnace. In 2012, Qatar Steel reused 488 full tires and 27 mt of shredded tires.

Reused Scrap and Slag			
	2010	2011	2012
Full tires (Number) <sup>(1)</sup>	239	323	488
Shredded Tires (mt)	0	370	27

<sup>(1)</sup> Full Tires' Sizes:  
 - Large Size: Each tire weights approx. 10.0-12.0 kg.  
 - Small Size: Each tire weights approx. 90.0-100.0 kg

Dust is another significant solid waste generated from the direct reduction, the electric arc furnace, the continuous casting processes, raw material handling, by-products collection, and the final stages of the production. Qatar Steel's dust collection system gathers dust and stores it in the designed yards which are found at Qatar Steel's plant. In 2012, the total dust produced from business operations amounted to 27,634 mt, a 11.2% decrease from 2011 volumes.

Qatar Steel's most significant environmental contribution is the diffusion of dust emissions, which to a large degree are the results of technology utilized in the 1970s. The revamping of the company's dust collection system in existing facilities falls within the scope of the Environmental projects.

Operational Waste				
	2009	2010	2011	2012
DRI dust (mt)	10,790	10,426	12,140	10,117
DRI oxide (mt)	57,260	56,921	73,139	75,885
DRI fines (mt)	18,905	29,514	32,720	42,223
HBI fines (mt)	1,631	3,753	5,086	4,145
DRI slurry (mt)	30,777	43,324	45,600	44,476
EF and CC dust (mt)	9,999	11,717	14,066	17,517
CC and RM scales (mt)	18,220	23,139	26,839	27,012
Used refractories (mt)	430	2,275	4,781	4,343
DR, EF, CC and RM oily sludge (mt)	N/A	N/A	N/A	100
Total lubricating oil waste (number of drums) (each drum holds 200 liters)	480	520	672	495
Total grease waste (number of drums) (each drum holds 250 kg)	30	40	60	120
Radioactive materials (kg)	N/A	N/A	320	600

Other Waste				
Office papers (mt)	N/A	N/A	31	15.9
Plastic waste (mt)	N/A	N/A	192	95.3
Wooden waste (2010-2011: m <sup>3</sup> )* ,(2012: mt)	N/A	5,011	6,448	727.45
General waste (m <sup>3</sup> ) **	6,513	1,846	2,658	4,765
Domestic waste (m <sup>3</sup> )	2,893	2,353	2,639	2,759
Bio-hazardous waste clinic waste (mt)	0.50	0.108	0.109	0.107

**\* Note:** Some data for previous years have been changed (in comparison to the data added in Qatar Steel's Sustainability Report 2011) for the accuracy purpose.  
**\*\*** Before 2010, all wood, plastic and paper waste was classified as general waste.

Recycling of Qatar Steel's dust is the next step towards environmental enhancement and operational efficiency. This stage will start after the construction of the by-products agglomeration plant or by-products briquetting plant at Qatar Steel plant. It is expected that this plant will be constructed in 2013 and be completed in 2014. Additional to the recycling of the operational dust, ratios of certain Qatar Steel's by-products will be recycled in this new plant to produce a final briquette containing a percentage of mixed by-products. By-products are including DRI oxide fines, DRI fines, HBI fines, DRI slurry, EAF alloy dust, CC and RM scales.

#### Effluents

Effluents are defined as discharges of liquid waste. Qatar Steel's effluents include cooling water discharge, sanitary wastewater, and process wastewater.

Qatar Steel plant regularly assesses the quality of its effluents to ensure that they meet the regulatory requirements. This assessment includes regular monitoring of blow-down and wastewater quality parameters, and effective chemical dosing, treatment and testing prior to discharge.

Qatar Steel's wastewater discharge to the sea comes entirely from the blow down water expelled by DR1 and DR2; DR1 discharges approximately 30.0 m3 per hour while DR2 discharges approximately 80.0 m3 per hour.

Starting May 2013, a 20.0 m3 per hour quantity of DR1 blown down water will be utilized at the EAF3 Automated Spray Jets Project to cool the fume gases. The same practice will be applied on the DR2 blown down water once the completion of EAF5 project, with expected rate of 30.0 m3 per hour of DR2 blown down water.

Currently, all domestic wastewater and sewage generated in Qatar Steel's facility is shunted through separate pipelines to the existing industrial sewage network and then collected by a company specialized in treating sewage water. All other wastewater generated from equipment maintenance cleaning and flushing activities is collected and treated by an approved service provider.

Water Discharge				
	2009	2010	2011	2012
DR1 and DR2 process wastewater discharged to the sea (m <sup>3</sup> )	564,530	862,657	784,993	856,812
Total recycled DR1 blown down water in the slag cooling area (m <sup>3</sup> )(1)	-	-	-	28,665
Sewage water discharge (m <sup>3</sup> )	52,120	63,500	62,640	60,090

(1) Recycling of DR1 blown down water in the slag cooling area has started in 2012.

Chemical waste is produced at Qatar Steel in the quality control chemical laboratory. In 2012, the company produced 540 liters of chemical waste. Currently, Qatar Steel's chemical waste is neutralized via the addition of caustic soda and then sent to the slag yard.

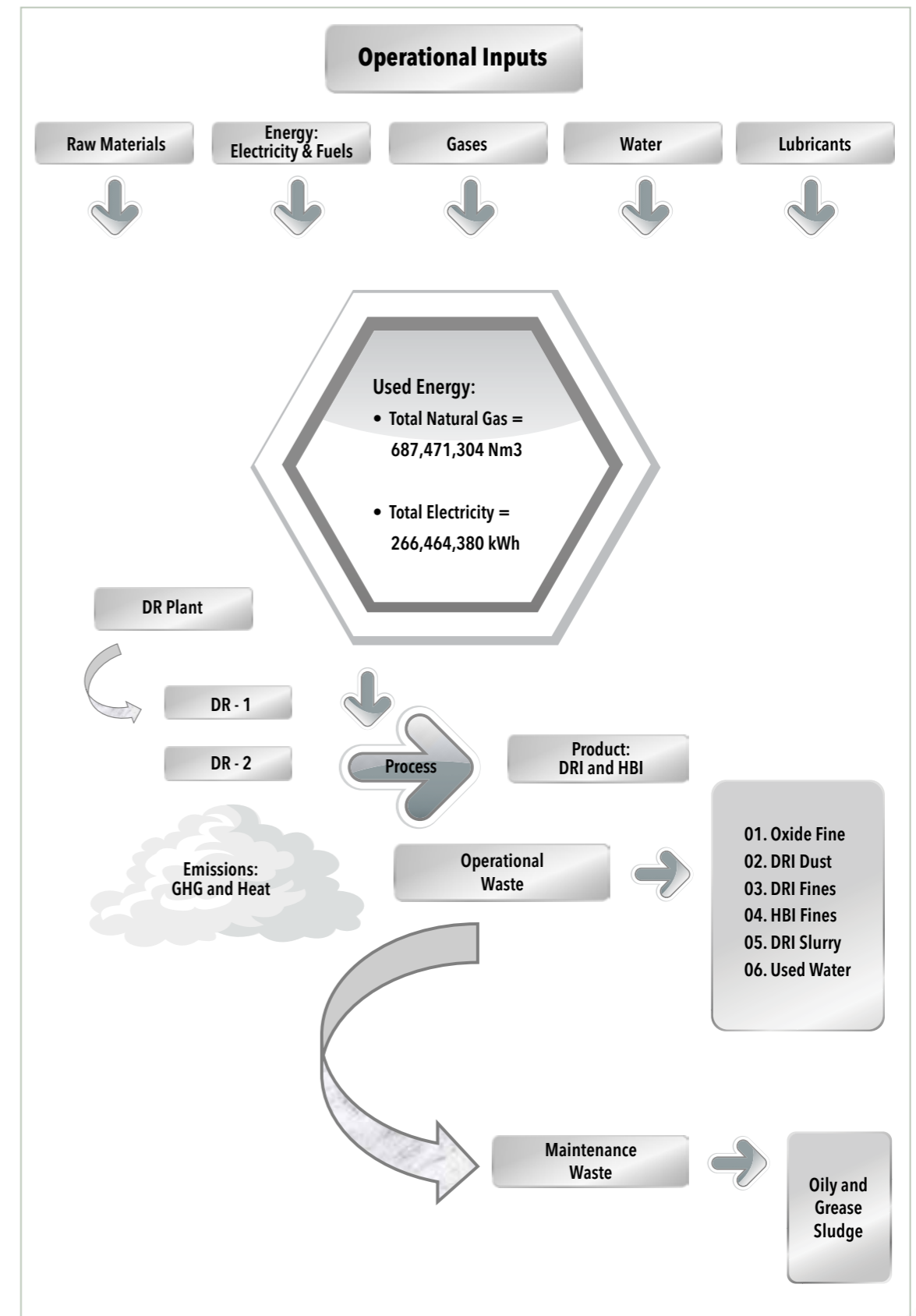
Chemical Waste				
	2009	2010	2011	2012
Chemical Waste (liters)	1,770	1,130	450	540

Qatar Steel has experienced no oil or chemical spills during the last three years, and takes all precautions to ensure that this record is maintained. Qatar Steel provides spill-related trainings and spill kits to all employees and contractors in relevant departments and conducts regular oil and chemical drills.

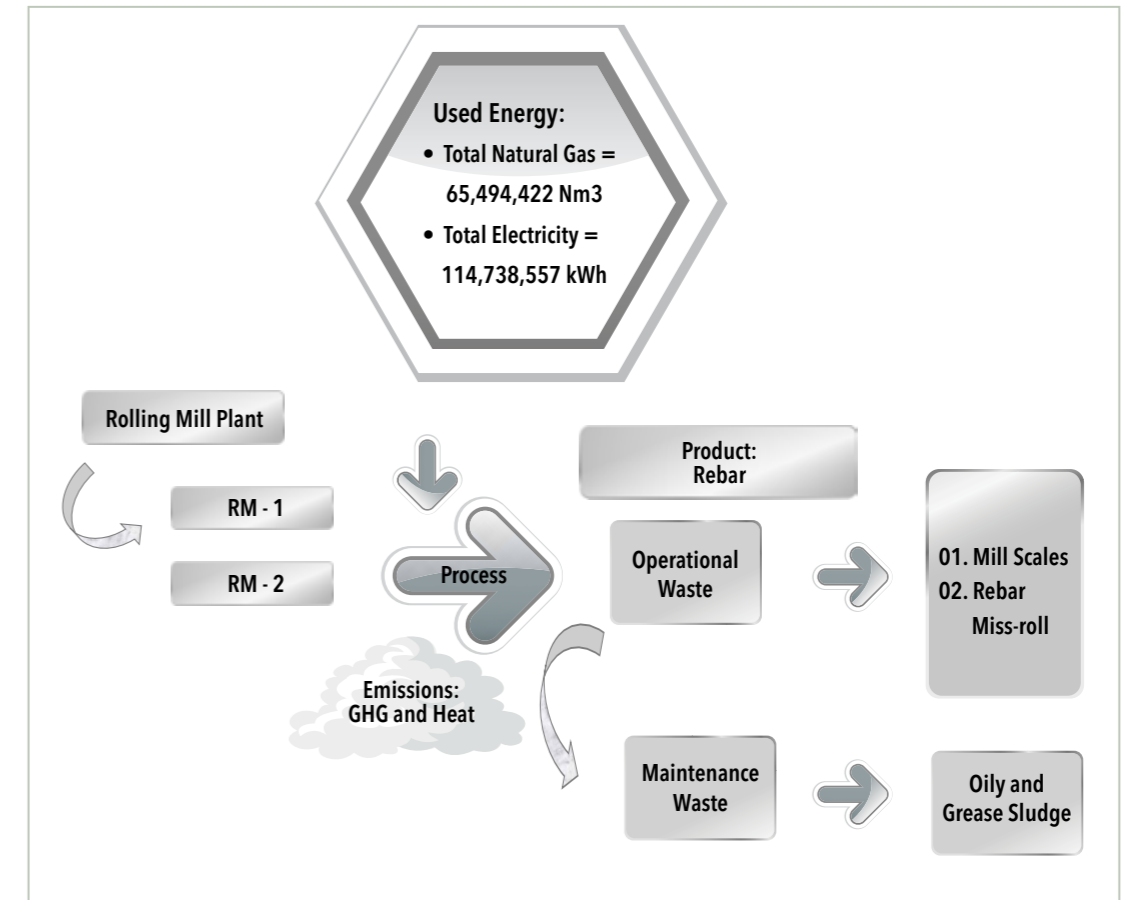
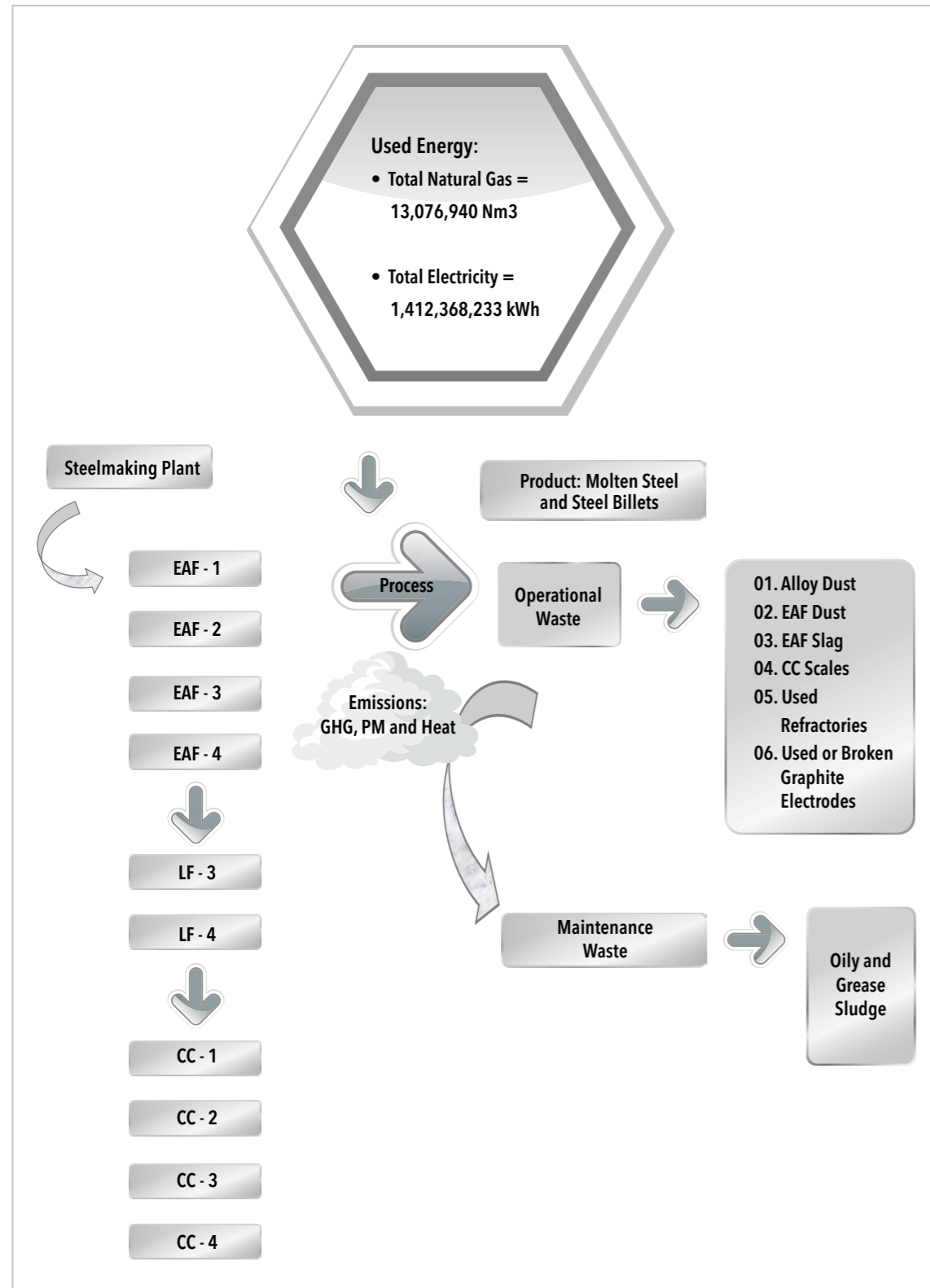
**Zero spills for the last 4 years**

Reducing Environmental Impact - 2013 Commitments	
Recycling of the processed water resulted from Direct Reduction plant in some projects in the steelmaking plants.	
Recycling of the operational by-products by using the agglomeration and briquetting technique and the consequence recycling of the resulted by-products briquettes in the Electric Arc Furnace.	

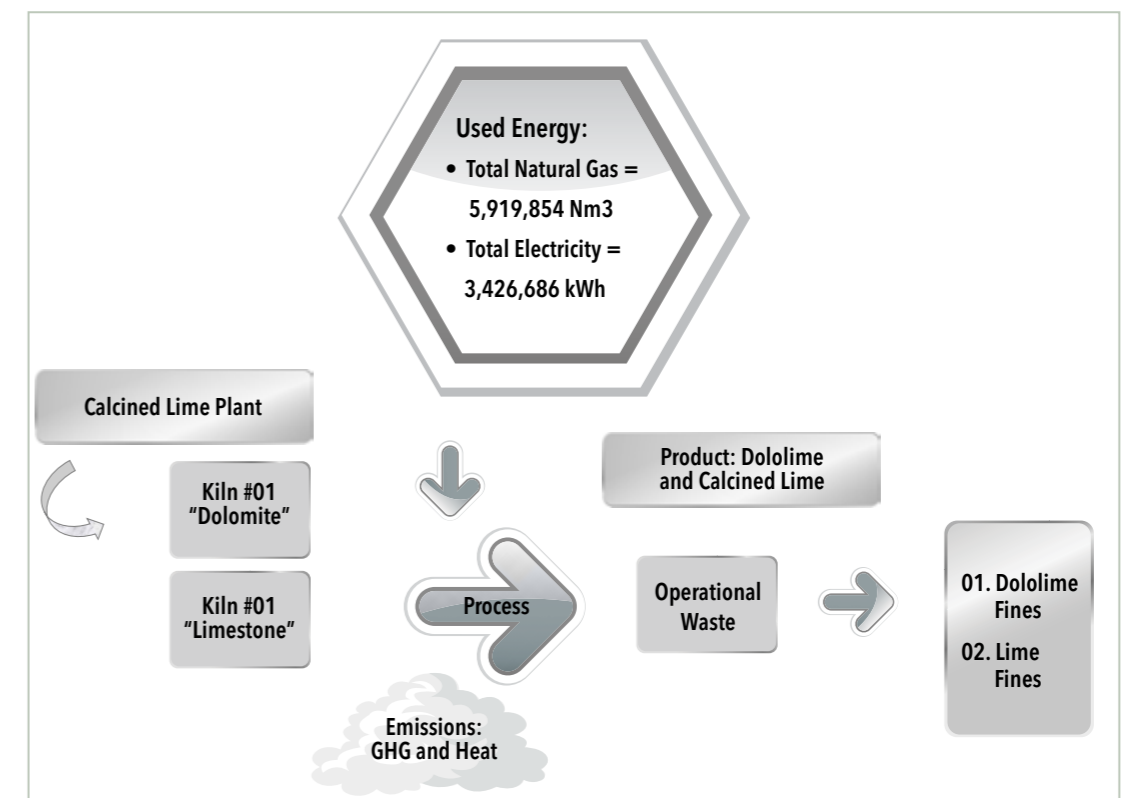
### Qatar Steel's Main Operational Diagram:







**Others:**









*Ensuring a safe  
and healthy  
work environment*

At Qatar Steel, maintaining the health and safety of employees and contractors is of great importance. To this end, Qatar Steel implements health and safety standards and procedures to mitigate or prevent risks associated with the company's operations. The Health, Safety, and Environment department oversees that staff and contractors alike follow these standards and procedures.

### A Safe Work Environment

Qatar Steel aims to create a work environment that not only supports production but is safe for all of its employees and contractors. Doing so requires that there be clear company protocols and procedures to ensure staff and contractor safety as well as maintenance of safety and performance standards at the plant.

Qatar Steel is proud to share those safety trainings and safety procedures that have already proved successful, achieving zero fatalities among the company's employees and reducing the lost time injury frequency rate from 2.69 in 2011 to only 0.48 in 2012. Qatar Steel successfully did this by reducing the lost days and lost time incidents from eleven to just two in 2012. This was also a testament to the safety commitment from the employees at all levels.

In 2011, 16 small fires were reported, all caused by employee and contractor errors and technical issues. Qatar Steel implemented several action points to prevent such incidents in the future, resulting in a 62% reduction in 2012 and a drop in the number of fire accidents from sixteen to just five.

Safety - employees				
	2009	2010	2011	2012
Lost Time Injury Frequency (LTIF)	2.67	1.02	2.69	0.48
Total Reportable Cases Frequency (TRCF)	25.3	23.6	20.0	14.8
Man-hours worked	3,751,132	3,937,530	4,096,531	4,180,455
Number of lost time injuries	10	4	11	2
Number of minor injuries reported	95	93	82	62
Number of near misses reported	8	38	36	14
Number of work-related fatalities	0	1	0	0
Number of fire incidents	9	17	16	5
Number of EHS training conducted	5	10	8	14
Number of emergency response drills conducted	16	16	16	16
Number of Loss of Containment (LOC) incidents <sup>(1)</sup>	0	0	0	0
Number of Process Hazard Evaluations (PHE) completed	140	150	150	130
Number of Process Safety Action Item Closures	140	150	150	140

<sup>(1)</sup> Loss of Containment (LOC) incidents - Number of incidents where hazardous substances are released with potential to cause harm to people or damage to assets or environment.

At Qatar Steel, the company holds itself accountable for the safety of its contractors, who are hired for low-risk support services such as cleaning, catering, security, and maintenance work. In past years, the company has been proactive in mitigating health risks by increasing training requirements, utilizing new safety technologies and equipment, and implementing additional procedures. In order to continue to provide a high level of safety for its contractor and to address any potential safety threats, Qatar Steel will continue to work with its contractors to enhance their safety performance and data gathering process.

Regrettably, there was one accident that resulted in a contractor staff fatality. A contractor staff person was injured during handling of steel bar bundles. Qatar Steel immediately took serious countermeasures to establish additional measures for handling the steel bar bundles. These measures included:

- Installation of side bar support on the bodies of all trailers carrying scrap bundles.
- Use of spreader beams to balance bars during lifting.
- Additional training for all relevant contractors on crane operation and handling of bars.
- Additional awareness training conducted by HSE department for all contractors involved in crane operation and rigging operations.
- Requiring of certification for all riggers.
- Requiring of operators confirmation that all workers are within eye-sight prior to moving of billets.

Safety - contractors				
	2009	2010	2011	2012
Number of work-related fatalities	2	0	0	1

### A Healthy Work Environment

Some health risks are inherent in the steel production process, however many of these can be mitigated and Qatar Steel does everything it can to create the safest environment for steel production. All employees and contractors participate in health and safety awareness sessions and trainings as part of their orientation. Specific awareness campaigns are also in place to help reduce the incidence of ailments such as heat stress. To protect the auditory health of its employees and contractors staff regularly survey noise in areas that present a high noise risk. An exploratory committee is also continuing to investigate ways to limit source noise levels.

Qatar Steel has onsite facilities that allow for readily available access to treatment for minor injuries. The onsite clinic also conducts pre-employment and periodical medical exams for employees. In order to better serve employees, Qatar Steel is also working on a future initiative to expand the clinic to handle more medical responsibilities.



QATAR STEEL





### HSE Committee

Qatar Steel's Health, Safety and Environment Committee consists of 53 employees representing different departments.

The HSE Committee is responsible for:

- Promoting and communicating safety issues to increase safety awareness among employees.
- Reviewing workplace safety inspections.
- Reviewing accident and injury reports.
- Promoting plant safety activities.
- Providing training on specific business activities.
- Identifying workplace hazards and instructing employees in the performance of effective accident investigation.
- Forecasting possible accidents and taking precautions to avoid them.
- Review the Safety proposals with top management.

### Emergency Preparedness

Qatar Steel's Emergency Response Contingency Plan supports the company's general HSE goal of safeguarding the health and safety of its employees and contractors. As a member of the HSE MIC Forum, Qatar Steel follows the Mutual Aid Plan (MAP) outlining emergency mutual assistance protocols to be followed by all members of the MIC. Qatar Steel is known to be one of the best integrated steel plants in MENA region for its safety performance, quality assurance, and sustainable production.

### Ensuring a Safe and Healthy Work Environment - 2013 Commitments

Update the health and safety management plan.

Enhance the tracking system of the company's contractors especially the Lost Time Injury Frequency (LTIF).



*Developing  
a high performing and  
motivated **team***



Qatar Steel's proactive and dedicated team is critical to the company's success. Employee development, via intensive engagement, training, and support, is one of Qatar Steel's highest priorities. Through the use of focused human resources management systems and planning, Qatar Steel strives to develop more skillful, motivated, and satisfied team in order to construct the desired efficient steel community.

### Management Approach

Qatar Steel's employees are integral to their outstanding performance. Qatar Steel's recruiting procedures ensure that the company hires the best available talent while giving priority to qualified Qatari Nationals and recent Qatari graduates. Qatar Steel is committed to internal promotion of suitable and qualified employees to fill vacant positions.

The company prioritizes employee development and engagement by providing training and learning opportunities and various support programs. Employees are engaged through regular feedback to ensure the quality of training and support programs.

### Our Workforce

Qatar Steel strives to maintain a diversified workforce. At the end of 2012, the company workforce was composed of 1,826 full time employees from 12 different countries, with a Qatarization rate of 11.34%. Qatar Steel is an equal opportunity employer. However, the nature of the work tends to limit the number of female job applicants.

Qatar Steel uses short-term contractors for support services within different areas of work; however, Qatar Steel also hires contractors who work full time to support different works at the plant and the main offices. The total Qatar Steel's full-time contractors in 2012 were equal to 346 individuals.

Workforce				
	2009	2010	2011	2012
Number of full-time employees	1,685	1,743	1,809	1,826
Number of full-time contractors	291	291	336	346

Workforce - by level				
	2009	2010	2011	2012
Senior Management	81	86	90	93
Middle Management	135	160	166	170
Staff	1,469	1,497	1,553	1,563
Total	1,685	1,743	1,809	1,826

Workforce - by age group				
	2009	2010	2011	2012
Age group 18-30	430	409	391	292
Age group 31-40	790	799	801	769
Age group 41-50	320	353	414	517
Age group 51-60	145	182	203	248
Total	1,685	1,743	1,809	1,826

New employee hires				
	2009	2010	2011	2012
Total	191	122	145	81
By gender				
Male	189	120	143	81
Female	2	2	2	0
By age group				
Age group 18-30	72	43	64	42
Age group 31-40	93	51	62	35
Age group 41-50	25	24	17	1
Age group 51-60	0	3	2	3
Age group >60	1	1	0	0

### Training and Development

The objective of Qatar Steel's trainings is to enable employees to be able to safely and effectively do their tasks. All employees receive orientation training so that they understand the integrated management system and their individual job requirements. Other additional trainings may include job specific training or English language training where appropriate.

Qatar Steel also provides training to its apprentices, interns, suppliers, and subcontractors. These sessions focus on developing the skills required for their work, ensuring their awareness of duties and environmental responsibilities, and health and safety.

Training				
	2009	2010	2011	2012
Average hours of training per employee per year	14.5	12.4	9.0	11.4
Total number of training hours provided	24,385	21,603	16,270	20,767
Total cost of training (QR)	1,879,189	3,124,692	1,555,417	5,345,039

In 2012, the average number of training hours per employee was 11.4 hours, in comparison with a rate of 9.0 hours in 2011. In the same year, the total cost of training was equal to 5,345,039 QR. In addition, Qatar Steel's Learning and Development Department encouraged post-course feedback and regular employee performance evaluations to gauge the effectiveness of training course and to improve the training system as necessary.

	Spec	Charge No	Length (m)	Weight (kg)
1	RBT-SSA	2013A8668	11.95m	30.34
2	RBT-AGO	2013C7654	11.95m	30.36
3	RBT-AGO	2013D5326	4.51m	11.25
4	RBT-SSA	2013A3254	4.51m	10.34
5	RBT-SSA	2013B1256	11.95	30.35
6	RBT-AGO	2013C5623	4.52	12.31
7	RBT-AGO	2013D2356		



MONTHLY SCHEDULE

Matter



Due to the vast growth of the steel industry, Qatar' Steel recognizes that is essential to develop its employees to handle more work's responsibilities and roles. Such development will increase the efficiency of the current business processes and contribute to fulfilling employees' career aspirations. Career development is promoted through the continuous improvement of Qatar's Steel human assets and therefore places utmost importance on the organization and the personal development activities. Qatar Steel has established scholarship programs in order to meet the future organization's manpower requirements. The main purpose is to develop more young Qatari Nationals to work as qualified engineers, technicians, and many other specializations. The scholarship programs will have multiple benefits for the company and the Qatari graduates, and the employees whom seeking to complete further studies in engineering, operations, and support services career.

### Performance-based Compensation

Qatar Steel uses the Balanced Scorecard system for all departments and operations, setting performance targets that are aligned with company-wide business strategy and employee capabilities. Qatar Steel helps its employees to reach these targets by developing specific and informative job descriptions, which assist employees in understanding their duties and better enable managers to correct for any deviations or misunderstandings.

To achieve a better organizational performance, Qatar Steel conducts yearly performance appraisals and rewards the best performers with salary bonuses.

Employee compensation is calculated according to a basic scheme of salary, bonuses, and awards and recognition. Additional allowances for Qatari and non-Qatari employees are granted when appropriate.

Qatar Steel provides the following benefits to its employees:

- Competitive basic salaries.
- Annual salary raises.
- Housing allowances.
- Transportation allowances.
- Mileage allowances.
- Health insurance.
- Location Allowances.
- Air Passage.
- Employee leaves, including Annual Leave, Compassionate, Haj, Marriage, Maternity, and Special leave.
- Company accommodation.
- Loans such as Furniture loans, Car Loans, Marriage Loans (for Qatari Employees only).
- Official Holidays.
- End of Service Benefits.
- Education & Transportation Benefit for children.

### Employee Satisfaction and Retention

#### Employee Engagement and Satisfaction

Engagement occupies an important part of ensuring that the employees are satisfied. Qatar Steel utilizes daily, weekly, and monthly meetings, social gatherings, and the internet (via Qatar Steel's website portal).

The company conducts satisfaction surveys measuring employee contentment in regard to their working environment, compensation and benefits, and career development opportunities. In 2009, Qatar Steel employee satisfaction was 89%. Qatar Steel is committed to measuring employee satisfaction in 2013, survey questionnaire has been reviewed and new survey will take place during Q3 2013.

#### 34th Annual Family Day

To strengthen the social ties between staff, Qatar Steel held the annual family day on 18<sup>th</sup> of May 2012 at Doha Exhibitions Center. This was a very entertaining day where staff and their families were able to enjoy various activities.

### Employees Retention

Qatar Steel's is proud to report that it continues to be a choice employer and that it has maintained a low turnover rate. In 2012, the overall turnover rate was maintained below the 4% level, while the attrition during 2012 was 3.6%.

Employee Attrition Rate				
	2009	2010	2011	2012
Total number of employees who left the organization	140	64	78	66
Turnover (%)	8.4	3.6	4.4	3.6
By gender				
Male	138	64	77	65
Female	2	0	1	1
By age group				
Age group 18-30	11	15	26	21
Age group 31-40	58	20	26	24
Age group 41-50	44	21	16	16
Age group 51-60	17	6	6	4
Age group >60	10	2	4	1

### Human Rights

Qatar Steel maintains its compliance with all laws and regulations concerning the rights of its employees. Preservation of human rights is an issue of extreme gravity and importance, and all components of this issue are outlined in Qatar Steel's Code of Ethics and Business Conduct. The Code defines 'fairness' as an area of great concern; 'fairness' refers to consistent standards of equal and equitable treatment of individuals.

Child or compulsory labor is strictly prohibited at Qatar Steel, and no cases have been reported during company operations. Similarly, in 2012 there were no reported cases of discrimination by any Qatar Steel's employee or stakeholder.

Human rights related clauses are incorporated into service contracts or orders indirectly. 100% of Qatar Steel's contracts and orders have standard clauses related to respecting human rights. Examples of human rights aspects that are insured for the contractors' include providing decent accommodation, paying contactors' fees at the scheduled time, providing proper transportation, and providing appropriate medical services as needed.

Human Rights				
	2009	2010	2011	2012
Number of agreements (service contracts) that include clauses incorporating human rights screening	272	320	345	520

#### Developing a High Performing and Motivated Team - 2013 Commitments

- Conduct the yearly satisfaction survey.
- Create a full training and career development strategy.

*Instilling good  
governance and  
accountability*



## Corporate Governance

The Board of Directors, Qatar Steel's highest governing body, is responsible for general organizational oversight and the establishment of corporate hierarchy. The board members are seven highly qualified individuals selected by the company's shareholders—Industries Qatar (IQ)—under a General Assembly resolution that ensures that those chosen have relevant and necessary experience.

Board of Directors	
H.E. Yousef Hussain Kamal	Chairman
H.E. Dr. Mohammed Bin Saleh Al-Sada	Vice Chairman
Mr. Ali bin Hassan Al-Muraikhi	Director & General Manager
Mr. Fahad Hamad Al-Mohannadi	Director
Mr. Abdel Rahman Ahmed Al-Shaibi	Director
Dr. Nasser Mubarak Shafi Al-Shafi	Director
Mr. Mohamed Hitmi Ahmed Al-Hitmi	Director

The duties of the Board of Directors are performed independently and impartially in accordance with the company's law, and its members hold positions of responsibility within other organizations. The Board is mandated to meet at least four times per a year.

The Board reviews Qatar Steel's performance during General Assembly meetings, where reports on the previous year's results and future prospects are presented for discussion. The General Assembly meeting further provides an opportunity to discuss discharging of Board members. Committees are formed by the Board in accordance with the company's strategic and organizational requirements.

Committees are formed by the Board in accordance with the company's strategic and organizational requirements. There are currently two committees in existence:

1. **Tender committee** – a permanent committee that searches for methods of procurement with prescribed financial limits.
2. **Audit committee** – a recently formed committee that reviews the effectiveness of the internal audit function.

Remuneration for the Board of Directors is determined by the General Assembly. Adherence to Qatar Steel's Code of Ethics and Business Conduct guarantees that conflicts of interest among the Board are avoided.

### Ethical Conduct

Qatar Steel requires its employees to comply with Qatar Steel's Code of Ethics and Business Conduct and all applicable laws, rules, and regulations. The company also aims to protect a "whistle blower" who reports an incident in violation of this code. It is the responsibility of the whistle blower's immediate superior, the Ethics and Business of Conduct Committee, and any other authorized person to ensure that information reported upon is handled with the utmost confidence.

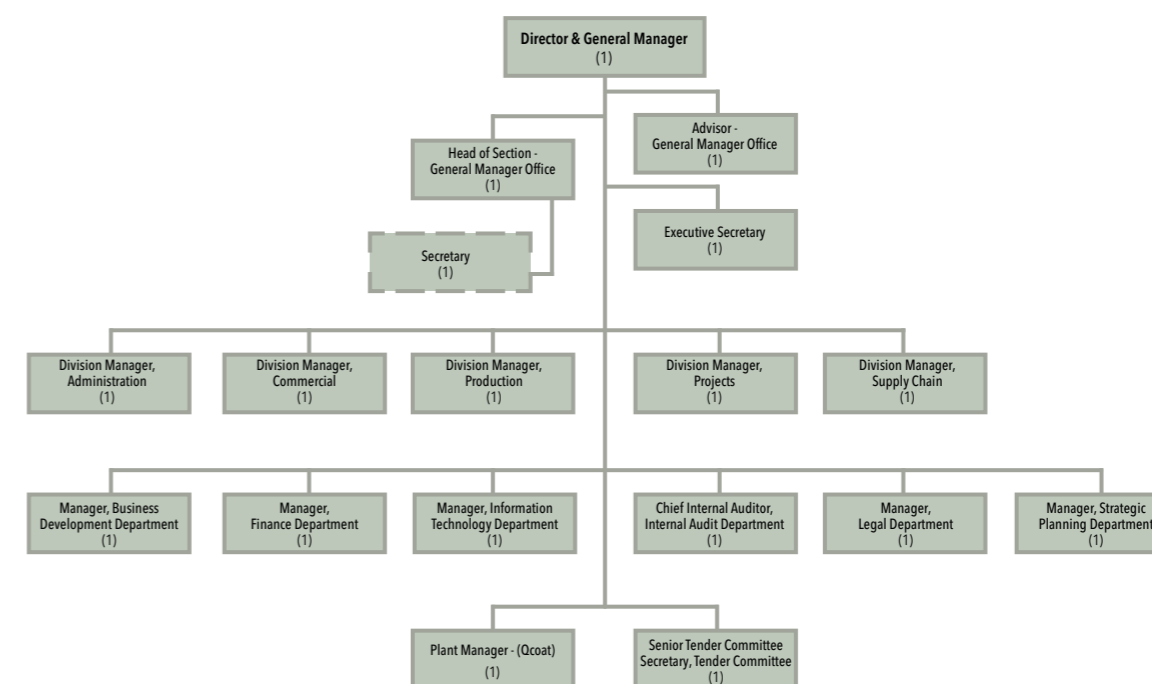
## Management Systems

Qatar Steel's management systems provide direction for the organization, ensure adequate capacity and resources for sustained development, encourage ongoing improvement, and advance the competencies necessary for the sustenance of a high level of performance.

Qatar Steel's management system has achieved two ISO certifications: ISO 14001 for its Environmental Management System (EMS) in 1999 and ISO 9000 for its Quality Management System (QMS) in 1995. The continued excellence of the company's management systems is reflected in Qatar Steel's certifications, earned in 2007, 2010 and 2011 (Following the ISO certification switched from ISO 9001: 2000 to ISO 9001: 2008).

Qatar Steel's Main Organizational Chart:

**QATAR STEEL COMPANY (QSC) PERMANENT ESTABLISHMENT MANPOWER ORGANIZATION CHART**



### Internal Audit

An essential part of Qatar Steel's management systems is its internal audit department, which is responsible for developing a risk based audit plan using the "COSO Internal Control Integrated Framework". The audit plan provides reasonable assurance that:

- There are satisfactory systems, policies and procedures in place and they are being followed to ensure that the company's assets are safeguarded and the objectives are being met.
- The financial systems, procedures and practices are in place and are being followed, to provide timely and accurate financial information which can be used by Directors, Management, and stakeholders. This will help to determine the company's financial objectives and its progressing.
- Satisfactory regulatory policies and practices are in place to monitor the company's compliance with all laws and regulations.

Qatar Steel's Internal Audit Department reports to the Audit Committee commissioned by the Board of Directors.

## Accountability through Transparency

As Qatar Steel increases the embedding of sustainability management in the core of its organization, Qatar Steel recognizes that its stakeholders are a major part of the company's accountability structure. Qatar Steel acknowledges and respects the need to maintain open and transparent lines of communication with all of its stakeholders in order to understand and respond to their expectations. The stakeholder's map, as presented in the below table, captures and organizes these elements of engagement. This map is developed continuously according to the new aspects of engagement with the company's stakeholders.

Qatar Steel's Sustainability Report is based mainly on the company's existing consistent disclosure practices. Qatar Steel's goal is to highly increase the transparency for its full range of economic, social and environmental performance metrics. Furthermore, the company is intending to augment transparency efforts and to hold the company's accountable to all of its stakeholders. It seeks to engage each and every stakeholder in new and eloquent ways as part of the company's continuing sustainability journey.

The Qatar Steel's Stakeholders Engagement Map as Below:

Stakeholder Group	Why Qatar Steel's Stakeholders Are Important to the Company	Stakeholder Priority Issues	Ways of Engaging Company Stakeholders	Qatar Steel's Response to Stakeholders Needs
<b>Customers</b>	<ul style="list-style-type: none"> <li>✓ Develop innovative partnerships for sustainable growth.</li> <li>✓ Grow business.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Quality of products safety.</li> <li>✓ Innovative technology.</li> <li>✓ Environmentally sound products.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Site visits.</li> <li>✓ Customer oriented publications.</li> <li>✓ Customer satisfaction survey.</li> <li>✓ Annual customer gathering.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Provide quality products.</li> <li>✓ Risk sharing partnerships, help customers manage their risks.</li> <li>✓ Provide innovative products that meet their needs.</li> <li>✓ Continuous efforts to maintain the plant's reliability and availability and reduce its environmental impact.</li> </ul>
<b>Employees</b>	<ul style="list-style-type: none"> <li>✓ Perform quality and productive leadership.</li> <li>✓ Most important asset to run the business.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Employees' health and safety.</li> <li>✓ Remuneration and rewards.</li> <li>✓ Working conditions and job security.</li> <li>✓ Career development and operational quality.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Internet (Qatar Steel's website's portal).</li> <li>✓ One to one meetings and annual gathering.</li> <li>✓ Training programs.</li> <li>✓ Code of Ethics.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Provide safe and healthy working environment.</li> <li>✓ Ensure training and development.</li> <li>✓ Competitive, compensation and benefits.</li> <li>✓ Secure career and experience.</li> </ul>

<b>Government and Regulators</b>	<ul style="list-style-type: none"> <li>✓ Provide fair and clear competitive trading conditions.</li> <li>✓ Business continuity.</li> <li>✓ Develop innovative partnerships for sustainable growth.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Social and community development.</li> <li>✓ Investments.</li> <li>✓ Provide employment opportunities.</li> <li>✓ Compliance.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Joint programs and partnerships.</li> <li>✓ One to one meetings.</li> <li>✓ Audit reports.</li> <li>✓ Environmental statements.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Support national strategies and plans.</li> <li>✓ Product innovation.</li> <li>✓ Economic growth.</li> <li>✓ Ensure compliance.</li> <li>✓ Policies and Procedures.</li> </ul>
<b>Investors</b>	<ul style="list-style-type: none"> <li>✓ Help us to achieve financial and economic growth.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Good corporate governance.</li> <li>✓ Profitable growth.</li> <li>✓ Adopt sustainability management and reporting.</li> <li>✓ Climate Change.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Rational meeting.</li> <li>✓ Annual investors meeting.</li> <li>✓ Conferences.</li> <li>✓ Visits.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Good return on investment.</li> <li>✓ Sustainable growth.</li> </ul>
<b>Local Communities</b>	<ul style="list-style-type: none"> <li>✓ Build confidence with local communities for business continuity</li> </ul>	<ul style="list-style-type: none"> <li>✓ Environment anxieties.</li> <li>✓ Social and community investment.</li> <li>✓ Community engagement process.</li> <li>✓ Health.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Periodical meetings.</li> <li>✓ Visits and workshops.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Provide financial and operational support for social and local community development.</li> <li>✓ Adopting sustainability management and reporting.</li> </ul>
<b>Suppliers</b>	<ul style="list-style-type: none"> <li>✓ Quality of goods and services and timely delivery as per contractual specification.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Liable sourcing.</li> <li>✓ Fair bidding process.</li> <li>✓ Product quality.</li> <li>✓ Operational excellence.</li> <li>✓ Ethical business practice.</li> <li>✓ On-time payment.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Business visits.</li> <li>✓ Vendors meeting.</li> <li>✓ Conferences and seminars</li> </ul>	<ul style="list-style-type: none"> <li>✓ Transparent business opportunities.</li> <li>✓ Swift payments.</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>✓ Business continuity with respect to the environment.</li> <li>✓ Preserve the environment by different means for the future generations.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Climate Change mitigation.</li> <li>✓ Minimize natural resources utilization.</li> <li>✓ Waste Management.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Regular environmental checks and ensuring compliance and timely reporting to concerned parties.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Monitor and reduce the company's GHG and other emission.</li> <li>✓ Ensure operational efficiency.</li> <li>✓ Monitor and manage and if possible recycle the company's waste.</li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>✓ Strongly shape reputation and promote awareness of product and operations.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Industrial development.</li> <li>✓ Environment anxieties.</li> <li>✓ Health and safety.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Business visits.</li> <li>✓ Press release.</li> <li>✓ Interviews.</li> <li>✓ Sponsorships.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Adopting the sustainability management and reporting.</li> <li>✓ Provide industrial trends.</li> </ul>

### Instilling Good Governance and Accountability - 2013 Commitments

Continuous examination of the company's operations units against corruption.

Develop Qatar Steel 2013 sustainability report.

*Achieving  
profitable **growth***



Qatar Steel takes an integrated approach to business, one that emphasizes the balance between company's economy, environment and society. Strategic growth not only benefits the company but also contributes to the development of Qatar's economy. Because of the increasing demand of steel in Qatar and across the GCC, Qatar Steel continues to seek new opportunities for strategic expansion to further enhance its strong financial operations.

### Financial Management

A well-structured management reporting process has been established that guarantees the timely transfer of the appropriate information to management personnel. Qatar Steel's Finance Department has continued to prepare regular financial reports and statements according to the International Financial Reporting Standards (IFRS), all of which are externally audited by a third party assurance firm.

In addition, the Finance Department is implementing Hyperion Planning and Budgeting Software for internal operations. This will enhance the company's budgeting process by providing a strong reporting tool and it will serve as a foundation for Qatar Steel's future Finance Dashboard.

### Economic Performance

During the past few years, Qatar Steel has experienced significant growth in its business both in revenue and volumes of product produced thanks to Qatar's booming economic conditions. The state of Qatar's economy has also led to higher levels of investment in the infrastructure segments. Compared to its peers, Qatar Steel has been able to deliver both consistent and sustained growth in all aspects of business during these years.

As a foremost player in MENA region, Qatar Steel committed to add value to its stakeholders by realizing and implementing various business opportunities. For this purpose, Qatar Steel has made several strategic investments in many steel companies on top of expanding its operations by setting up new plants. All these efforts have resulted in healthy shareholder's funds/assets over a period of time that is expected to continue into the future.

In 2012, Qatar Steel achieved revenues of 6,820 Million QR, 8% higher than 2011. Total net profit for 2012 was 1,520 Million QR against the net profit of 1,594 Million QR in 2011.

Economic Performance			
	2010	2011	2012
Revenues (Million QR)	5,280	6,312	6,820
Net profit (Unit: Million QR)	1,091	1,594	1,520
Other income (including investments' returns interest income, by-product and scrap sales and other miscellaneous income) (Million QR)	121	142	106
Operational costs (Million QR) <sup>(1)</sup>	3,725	4,210	4,548
<b>Other Financial Data</b>			
Capital expenditure (Million QR)	240	130	496
Depreciation and amortisation/impairment (Million QR)	145	152	308

Total current assets (Million QR)	3,102	3,464	4,315
Total equity (Million QR)	5,264	6,075	6,800
Total liabilities (Million QR)	2,050	1,920	2,204
Employees' wages and benefits (Million QR)	362	428	483
Interest payments made to providers of loan (Million QR)	78	70	67

<sup>(1)</sup> The amount for "Operational costs" does not include the amount for "Employees' wages and benefits".

### Strategic Expansion

Qatar Steel continues to expand its production capacity in order to meet the growing demand for steel in Qatar. This also allows the company to continue to meet the demand of steel products in various export markets. Strategic investments also help Qatar Steel grow by way of acquisitions and joint ventures in iron ore and steel related production facilities. This allows the company to secure raw materials for production and to realize opportunities for down-stream products. Qatar Steel's growth strategies are addressed in the company's 5-year business plan that is reexamined and updated annually as necessary.

Qatar Steel's current expansion efforts are focused on the Greenfield project. The project is a steel melt shop with an annual plant capacity equal to 1.1 million mt. Due to unforeseeable delays, the project was not completed in the beginning of the year as planned. However, by the summer of 2013, 80% of construction work had been completed. The plant is expected to be completed in H2-2013.



(CCM's casting platform-Ready for Refractory work)

### Investments and Joint Ventures

<b>Qatar Steel Strategic Investment in Foulath, Hidd Industrial Area, Kingdom of Bahrain</b>	Bahrain Steel BSC (Previously GIIC), maker of direct reduction pellets in the Hidd Industrial Area achieved production of 5 million tonnes in 2012.
<b>SOLB Steel company previously South Steel Kingdom of Saudi Arabia</b>	Qatar Steel has increased its share in SOLB Steel from 29.74% to 31.03% in 2012. In the same year, SOLB Steel has successfully commissioned its melt shop and rolling mill plant with total steel billets production of 152,921 mt
<b>Algerian JV Steel Project "Bellara Steel Project"</b>	In early 2013, a joint venture agreement was signed between SIDER Company and National Investment Fund and Qatar Steel International, a



<b>Algeria</b>	joint venture company between Qatar Steel and Qatar Mining. The Plant's production capacity of rebar is 1.5 million mt and the production capacity of wire rod is 0.5 million mt. This will meet the requirements of the Algerian market for steel; a market which is currently importing 3.0 million mt of rebar and wire rod yearly.
<b>Qatar Ferro Alloys Project - Mesaieed, Qatar</b>	In June 2012, Qatar Steel Board has approved a starting of a joint venture between Qatar Steel and Qatar Ferro Alloys Project. The permit license of this project has been obtained. The project formal agreement has been completed and its formal documentations are under processing.
<b>Sphere Minerals - Mauritania</b>	Qatar Steel owns 7.52% of Sphere Minerals Ltd. Xstrata has bought the major share of Sphere Minerals Ltd. in a public offering and it is currently finalizing its developing mine plan to produce high quality iron ore in the future.

<b>Qatar Steel's Current Investments</b>	
<b>Organization</b>	<b>% of holding</b>
Qatar Metals Coating Company (Q-Coat)	50.0%
SOLB Steel Company (Previously South Steel Company)	31.03%
Gulf United Holding Company (Foulath)	25.0%

Qatar Steel also has shares in Qatar Navigation, Qatar Electricity and Water Company (Kharama), Barwa Real Estate, and Vodafone.

<b>Achieving Profitable Growth - 2013 Commitments</b>
Proceed with the current expansion project of the new Greenfield SMS Facility (EAF5) with a production capacity of 1.1 Million ton of molten steel yearly.





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## Appendices

### Appendix A - Summary of Our 2013 Sustainability Commitments

<b>Making Steel Matter</b>
Collaborate with Qatalum Company to use Qatalum's carbon waste into Qatar Steel's operations.
Implementation of the ISO/IEC 17025:2005 accreditation (General requirements for the competence of testing and calibration laboratories).
Renovation of Qatar Steel's central quality control laboratory (to start in 2013 and finish in 2014).
<b>Contributing to Qatar's Development</b>
Enhance Qatarization and employment rate in various fields of the operations.
Develop a community investment strategy.
<b>Reducing Environmental Impact</b>
Recycling of the processed water resulted from Direct Reduction plant in some projects in the steelmaking plants.
Recycling of the operational by-products by using the agglomeration and briquetting technique and the consequence recycling of the resulted by-products briquettes in the Electric Arc Furnace.
<b>Ensuring a Safe and Healthy Work Environment</b>
Update the health and safety management plan.
Enhance the tracking system of the company's contractors especially the Lost Time Injury Frequency (LTIF).
<b>Developing a High Performing and Motivated Team</b>
Conduct the yearly satisfaction survey.
Create a full training and career development strategy.
<b>Instilling Good Governance and Accountability</b>
Continuous examination of the company's operations units against corruption.
Develop Qatar Steel 2013 sustainability report.
<b>Achieving Profitable Growth</b>
Proceed with the current expansion project of the new Greenfield SMS Facility (EAF5) with a production capacity of 1.1 Million ton of molten steel yearly.

### Appendix B - Product Specifications

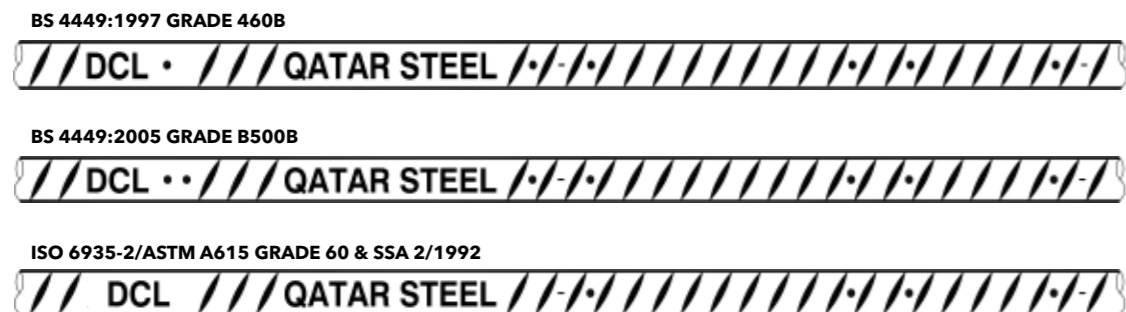
DRI Specifications			HBI Specifications		
Chemical Composition			Chemical Composition		
	Guaranteed	Expected		Guaranteed	Expected
Total Iron (T.Fe)	91.5% Min	92.00%	Total Iron (T.Fe)	91.0% Min	91.50%
Metallic Iron (M.Fe)	85.5% Min	86.00%	Metallic Iron (M.Fe)	85.0% Min	86.00%
Metallization	93.0% Min	94.00%	Metallization	93.4% Min	94.00%
Phosphorous (P)	0.055% Max		Phosphorous (P)	0.055% Max	
Sulphur (S)	0.005% Max		Sulphur (S)	0.005% Max	
Total Gangue CaO+Al2O3+MgO+SiO2	4.8% Max	4.50%	Total Gangue CaO+Al2O3+MgO+SiO2	4.8% Max	4.50%
Physical Analysis			Physical Analysis		
Bulk Density (ton/m3)		1.6 ~ 1.9	Bulk Density (ton/m3)		2.4 ~ 2.7
Size Under 5 mm at Loading Port		5.0 % Max	Apparent Density (ton/m3)		4.9 Min
			Average Size (mm)		106 X 48 X 32
			Size Under ¼ Inch at Loading Port		5.0 % Max

Billets Specifications						
Chemical Composition: (As below or as per customer requirement)						
Chemistry	%C	%Si	%Mn	%P	%S	N (ppm)
	0.18~0.24	0.15~0.20	0.60~0.80	0.035 max	0.035 max	120 max
<b>Note:</b> Tramp Elements (Ni + Cr + Cu + Mo) = 0.30% max						
Physical Parameters:						
Sr.No.	Item	Acceptance Criteria				
1	LENGTH	4 meter to 12 meter (+ 50mm)				
2	SECTION	150 X 150 mm <sup>2</sup> or 130 X 130 mm <sup>2</sup>				
3	FACE LENGTH	± 3 mm				
4	RHOMBODITY	3 % Max				
5	DIAGONAL DIFFERENCE	≤ 10 mm				
6	CORNER RADIUS	8 mm				
7	STRAIGHTNESS	Camber 5mm/meter				
8	BENDING	Not more than 5mm in 1 meter Not more than 30mm in 6 meter Not more than 60 mm in 12 meter				
9	ANGULAR TWIST	Not more than 1 degree per meter and not more than 6 degrees over 12 meter length.				
10	CUTTING	Both ends will be Gas Cut				
11	IDENTIFICATION	At the end of each billet cast number will be stamped.				

12	SURFACE	The billets will be free from surface imperfection which impair the product Quality such as longitudinal cracks, transverse cracks, Deep Ripple mark, Scab & thick scale, slag Patches, surface blow holes etc.,
13	PIPE	No Existence

Nominal, Dimensions, Weight & Tolerance Knots											
Designation	Nominal Dia. (d) (mm)	Nominal Cross Sectional Area (mm <sup>2</sup> )	Unit Mass (Kg/m)	Maximum Average Knot Space (mm)	Height of Knots (mm)	Ltgd/Ri Width (mm)	Nominal Mass Kg/Piece				
							Max (mm)	(mm)	6 m	9m	12m
D8	08	50.3	0.395	5.6	0.3	0.6	3.1	2.37	3.56	4.74	
D10	10	78.5	0.617	7.0	0.4	0.8	3.9	3.70	5.55	7.40	
D12	12	113.0	0.888	8.4	0.5	1.0	4.7	5.33	7.99	10.66	
D14	14	154.0	1.21	9.8	0.6	1.2	5.5	7.26	10.89	14.52	
D16	16	201.0	1.58	11.2	0.7	1.4	6.3	9.48	14.22	18.96	
D18	18	254.5	2.00	12.6	0.8	1.6	7.1	12.00	18.00	24.00	
D20	20	314.0	2.47	14.0	1.0	2.0	7.9	14.82	22.23	29.64	
D22	22	380.0	2.98	15.4	1.1	2.2	8.6	17.88	26.82	35.76	
D25	25	491.0	3.85	17.5	1.3	2.6	9.8	23.10	34.65	46.20	
D28	28	615.8	4.83	19.6	1.4	2.8	11.0	28.98	43.47	57.96	
D30	30	707.0	5.55	21.0	1.5	3.0	11.8	33.30	49.95	66.60	
D32	32	804.0	6.31	22.4	1.6	3.2	12.6	37.86	56.79	75.72	
D36	36	1018.0	7.99	25.2	1.8	3.6	14.06	47.94	71.99	95.88	
D40	40	1257.0	9.86	28.0	2.0	4.0	15.7	59.18	88.78	118.32	

Requirement for rib geometry		The projection of transverse ribs shall extend over at least 75% of circumference of the product which shall be calculated from the nominal diameters. <b>Longitudinal rib:</b> Where longitudinal ribs are present, there height shall not exceed 0.10d, where d is the nominal diameter of the product
<b>Height of transverse ribs</b>	0.03d to 0.15d	
<b>Rib spacing, c</b>	0.03d to 0.15d	
<b>Rib inclination, β (Beta)</b>	35° to 75°	



## MARKING

Deformed bars produced at Qatar Steel conform to various national and international standards such as BS4449:1997 Grade 460B & BS4449:2005 Grade B500B (British), SSA 2/1992 (Saudi High Tensile), ASTM A615 Grade 40/Grade60 (American Standard) ) and ISO 6935-2:2007.

The registered trade mark "QATAR STEEL" is rolled on every deformed bar at an interval of about one meter along with all identification marks.

International Rebar Specifications Produced at Qatar Steel's Plant:					
Characteristics	BS 4449:1997 Gr460B	BS 4449:2005 GrB500B	ASTM A615 Gr60	ISO 6935-2:2007 Grade B500B-R	SSA 2/1992
<b>Chemical Composition</b>					
Carbon (C) %	0.25 Max	0.22 Max	--	--	0.33 Max
Manganese (Mn) %	--	--	1.80 Max	--	1.80 Max
Phosphorous (P) %	0.05 Max	0.05 Max	0.05 Max	0.06 Max	0.050 Max
Sulphur (S) %	0.05 Max	0.05 Max	0.05 Max	0.06 Max	0.050 Max
Nitrogen (N) ppm	120 ppm	120 ppm	--	120 ppm	--
CE (%)	0.51 Max	0.50 Max	--	--	0.54
<b>Mechanical &amp; Physical Properties</b>					
Yield Strength	460.0 N/mm <sup>2</sup> Min	500.0 MPa Min	420.0 N/mm <sup>2</sup> Min	500.0 N/mm <sup>2</sup> Min	460.0 N/mm <sup>2</sup> Min
Tensile Strength	496.8 N/mm <sup>2</sup> Min	540.0 MPa Min	620.0 N/mm <sup>2</sup> Min	540.0 N/mm <sup>2</sup> Min	506.0 N/mm <sup>2</sup> Min
Elongation (%)	14 Min	14 Min	9 Min	14 Min	12 Min
Agt (%)	5	5	--	5	--
Weight Tolerance (%)	±4.5	±4.5	-6	6.0~8.0mm = ± 8.0 10.0~12.0mm = ± 6.0 >14.0~20.0mm = ± 5.0 >20mm = ± 4.0	10.0~20.0mm = + 4.0 >20.0~32.0 = + 3.5 >32.0mm = + 3.0
Bend	45°	90°	180°	180°	180°
Re-bend	From 45° Back to 23°	From 90° Back to 20°	--	From 90° Back to 20°	180° to 45°
<b>Weldability</b>					
Weldable/Non-Weldable	Weldable	Weldable	Non-Weldable	Non-Weldable	High Tensile Non-Weldable

#### Technical Comments :-

- BS 4449:1997 Gr460B, BS4449:2005 GrB500B rebar are produced with low carbon equivalent & Weldable, whereas
- BS 4449:1997 Gr460B, BS4449:2005 GrB500B rebar are produced with low carbon equivalent & Weldable, whereas ASTM A615 Gr60 rebar are Non-Weldable.
- BS 4449:1997 Gr460B, **BS4449:2005 GrB500B** rebar have High Strength Compared to ASTM A615 Gr60 rebar reduce steel consumption & congestion in structure, in turn reduces overall cost of project.
- BS 4449:1997 Gr460B, **BS4449:2005 GrB500B** rebar have High Yield Strength i.e., minimum 460N/mm<sup>2</sup> & 500 respectively compared to ASTM A615 Gr60 rebar, without compromising on ductility.
- BS 4449:1997 Gr460 & **BS4449:2005 GrB500B** rebar have better bend performance, due to severe bend & re-bend angle.



## Appendix C - Scope of the Report

**Profile:** This is Qatar Steel's follow up sustainability report; it reflects the company's updated sustainability performance for the year 2012 and provides comparable data for the years 2009, 2010, and 2011, where available. The report covers a number of environmental, social, and economic aspects.

**Scope and boundary of the report:** Qatar Steel has analyzed the sustainability issues within Qatar, the industry, and the region, and has identified its sustainability material issues in all environmental, social, and economic areas, taking into considerations the QNV 2030, the National Development Strategy 2011-2016 and the SDI initiative. Qatar Steel prioritized the key material and sustainability issues to develop its sustainability approach. This report covers Qatar Steel's Qatar performance and does not reflect subsidiaries performance in the environmental, social and economic aspects.

This report was developed based on the Global Reporting Initiative (GRI) framework and indicators, aiming to achieve Level **A** of the GRI application levels. Qatar Steel also added an index for the International Petroleum Industry Environmental Conservation Association (IPIECA).

**Stakeholder inclusiveness:** Based on Qatar Steel's understanding of the importance of stakeholder engagement, the company developed its stakeholder map identifying key stakeholder groups, their priority issues, how the company engages with them and Qatar Steel's response to their input. Qatar Steel believes that this report covers and communicates with all of the company's key stakeholders and Qatar Steel believes that all the identified stakeholders would be interested in reading the company's sustainability report. Qatar Steel also encourages you to provide feedback on the company's sustainability performance by contacting us via emails: [Sustainability@qatarsteel.com.qa](mailto:Sustainability@qatarsteel.com.qa), [Adilhus@qatarsteel.com.qa](mailto:Adilhus@qatarsteel.com.qa).

**Comparability and balance:** This report provides data that covers Qatar Steel's performance in the years 2009, 2010, 2011 and 2012. This report also presents Qatar Steel's successes as well as main challenges in the economic, environmental and social areas. This report uses the GRI G3.1 guidelines which provide clear comparisons.

**Accuracy and reliability:** Qatar Steel has made all the efforts to ensure that all information provided in this report is of the highest level of accuracy and reliability. Qatar Steel relied on its Balanced Scorecards, meetings with concerned departments, and other management systems to gather the information in this report.

**Clarity of information:** Qatar Steel has put its sustainability information in this report in a clear and easy way to communicate framework, besides using the GRI framework which helps ease the report reading and understanding.

**Assurance:** This report has not been externally assured (third party assurance), however, it was checked by the GRI and achieved level **A**.

## Appendix D - GRI Application Level Statement



### Statement GRI Application Level Check

GRI hereby states that Qatar Steel Company has presented its report "Qatar Steel 2012 Sustainability Report" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A.

GRI Application Levels communicate the extent to which the content of the G3.1 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3.1 Guidelines. For methodology, see [www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf](http://www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf)

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 30 September 2013




**Nelmara Arbex**  
Deputy Chief Executive  
Global Reporting Initiative

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. [www.globalreporting.org](http://www.globalreporting.org)

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 24 September 2013. GRI explicitly excludes the statement being applied to any later changes to such material.

## Appendix E - GRI index

1. Strategy and Analysis		Page (s)
1.1	Statement from the most senior decision-maker of the organization.	11
1.2	Description of key impacts, risks, and opportunities.	11, 28
2. Organizational Profile		
2.1	Name of the organization.	12-15, Qatar Steel Company
2.2	Primary brands, products, and/or services.	16, 17
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	17, 99, 105
2.4	Location of organization's headquarters.	Qatar Steel headquarter is in Doha
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	16, 17
2.6	Nature of ownership and legal form.	100% owned by Industries
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	16, 17, 45
2.8	Scale of the reporting organization.	4, 5, 95-98
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	No major changes
2.10	Awards received in the reporting period.	18-20
3. Report Parameters		
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	105
3.2	Date of most recent previous report (if any).	105, 2011 report
3.3	Reporting cycle (annual, biennial, etc.)	09
3.4	Contact point for questions regarding the report or its contents.	09, 134
3.5	Process for defining report content.	07
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	105
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	117
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	105
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	64
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	65, 66, 67
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	No significant changes
3.12	Table identifying the location of the Standard Disclosures in the report.	112
3.13	Policy and current practice with regard to seeking external assurance for the report.	101
4. Governance, Commitments, and Engagement		
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	86
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	86
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	86
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Employees can provide their feedback through proper channel; they may communicate to any Department's or Division's Manager whom reports to Directors & General Manager.



4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	86
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	86
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	86
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	12-15
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	12-15, 17, 86
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	86
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	86, 88-90
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	17-20
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic.	20
4.14	List of stakeholder groups engaged by the organization.	96-99
4.15	Basis for identification and selection of stakeholders with whom to engage.	96-99
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	96-99
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	96-99
<b>Economic</b>		
Management Approach		
100-101		
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	101
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	11, 28-30
EC3	Coverage of the organization's defined benefit plan obligations.	Per country law
EC4	Significant financial assistance received from government.	Qatar Steel is tax exempt
EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	Not applicable, no minimum wage per law in Qatar.
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	53-56
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	50
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	50
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	4, 5-56
<b>Environmental</b>		
Management Approach		
58-77		
EN1	Materials used by weight or volume.	66
EN2	Percentage of materials used that are recycled input materials.	61
EN3	Direct energy consumption by primary energy source.	61
EN4	Indirect energy consumption by primary source.	61

EN5	Energy saved due to conservation and efficiency improvements.	The overall energy consumption has increased due to the notable increase in production, however, the efficiency has increased and savings were made in specific operations.
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	34-36, 42-44 1-Upgradation of carbon and oxygen jets in the burner mode of EAF3. 2-Installation of the online temperature monitoring through the wall of EAF3 and EAF4. 3-Implementation of the electrode regulation system at EAF3 and EF4.
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	42-45
EN8	Total water withdrawal by source.	67
EN9	Water sources significantly affected by withdrawal of water.	There were not any water sources (natural or preserved sources) that have been affected. The amount of water is used according to the processes and employees' requirements only.
EN10	Percentage and total volume of water recycled and reused.	72
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	67
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	67
EN13	Habitats protected or restored.	67
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	67
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	67
EN16	Total direct and indirect greenhouse gas emissions by weight.	64
EN17	Other relevant indirect greenhouse gas emissions by weight.	65
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	34-36, 42-44, 70
EN19	Emissions of ozone-depleting substances by weight.	Not applicable
EN20	NOx, SOx, and other significant air emissions by type and weight.	65
EN21	Total water discharge by quality and destination.	72
EN22	Total weight of waste by type and disposal method.	67-71, 73-77
EN23	Total number and volume of significant spills.	72
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	zero
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	67
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	65
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	Not applicable
EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	Zero
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	61-65
EN30	Total environmental protection expenditures and investments by type.	61
<b>Social: Labor Practices and Decent Work</b>		
Management Approach		
88		
LA1	Total workforce by employment type, employment contract, and region.	90

LA2	Total number and rate of employee turnover by age group, gender, and region.	95
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	94
LA4	Percentage of employees covered by collective bargaining agreements.	No trade unions allowed at Qatar
LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.	Unions do not exist in Qatar, however, Qatar Steel notice period is identified per internal policy and vary from 1 month to 3 months, based on the employee service period at Qatar Steel.
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	80
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	82
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	Risk control programs and HSE training are being conducted for the plant's operators yearly. HSE training is conducted to the all contractors as well. Currently Qatar Steel does have initiatives targeting employees' families and the public. However, we have certain objectives to involve them in various educational programs in near future.
LA9	Health and safety topics covered in formal agreements with trade unions.	No trade unions allowed at Qatar
LA10	Average hours of training per year per employee by employee category.	91 Average training hours per employee gender and category is not available as we are working on developing our internal system for tracking this data. We are committed to report on this indicator in its full details in Qatar Steel's 2013 sustainability report.
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	86-91
LA12	Percentage of employees receiving regular performance and career development reviews.	91
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	90-91 All Board members are male. In 2012, the Board members per age group were as follow: • 41-50 = 2 • 51-60 = 4 • Above 60 = 1
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.	1:1
<b>Social: Human Rights</b>		
Management Approach		88
HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	95
HR2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken.	Zero
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	Zero, In 2013, Qatar Steel is planning Qatar Steel's to give training course related to the Human Resources' Policy including Human Rights aspects, policies and procedures. The first session will be on October 2013 and will include 120 participants.

HR4	Total number of incidents of discrimination and actions taken.	Zero
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	No operations or significant suppliers were identified to have human rights significant risks
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	No operations or significant suppliers were identified to have human rights significant risks
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	No operations or significant suppliers were identified to have human rights significant risks
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	Zero. The majority of Qatar Steel's security staff is contracted. In 2013, Qatar Steel is committed to provide training to all security staff on human resources policies and procedures, including human rights aspects.
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	Zero
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	Zero Human rights review/impact assessment is not implemented at Qatar Steel operations. However, in 2013, Qatar Steel will look into incorporating human rights aspects into its studies for operations expansion. A human aspects (or human resources) management plan can be developed in 2014.
HR11	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	Zero
HR12	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.	Zero
<b>Social: Society</b>		
Management Approach		50-57
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	Only environmental impact assessments were conducted.
SO2	Percentage and total number of business units analyzed for risks related to corruption.	Zero
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	Zero
SO4	Actions taken in response to incidents of corruption.	No incidents reported
SO5	Public policy positions and participation in public policy development and lobbying.	Qatar Steel participates in public policy through its Board members who are ministers, and through sharing statistics, and through setting Qatar Steel standards.
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	Not applicable in Qatar.
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	Zero
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	Zero
SO9	Operations with significant potential or actual negative impacts on local communities.	None, 128
SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	No significant impact on local communities, 128
<b>Social: Product Responsibility</b>		
Management Approach		45-49
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	28-37
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	Zero





PR3	Type of product and service information required by procedures and percentage of significant products and services subject to such information requirements.	Qatar Steel provides its customers with a mill certificate which contains chemical and physical characteristic of the product. Whereas for HBI/DRI Qatar Steel provides Material Safety Data Sheet (MSDS) to customers as part of safety measures.
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	Zero
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	41
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	41
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	Zero
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	Zero
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	Zero
<b>Mining and Metals Sector Supplement</b>		
MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.	Within the Mesaieed Industrial City, Qatar Steel's Plant occupies an area of approximately 900,000 m2. It operates an expansive mill site located in the heart of Mesaieed Industrial City (MIC), located in the southern part of Qatar's capital city of Doha.
MM2	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.	67
MM3	Total amounts of overburden, rock, tailings, and sludges and their associated risks.	Extraction is not part of Qatar Steel operations, however, waste is managed as explained in pages: 67-71
MM4	Number of strikes and lock-outs exceeding one week's duration, by country.	Zero
MM5	Total number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples' communities.	Not applicable
MM6	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples.	Not applicable
MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and Indigenous Peoples, and the outcomes.	Not applicable
MM8	Number (and percentage) of company operating sites where artisanal and small-scale mining (ASM) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks.	Not applicable
MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process.	Not applicable
MM10	Number and percentage of operations with closure plans.	Not applicable
MM11	Programs and progress relating to materials stewardship.	34-36, 61-64 Qatar Steel provides its customers with a mill certificate which contains chemical and physical characteristic of the product. Whereas for HBI/DRI Qatar Steel provides Material Safety Data Sheet (MSDS) to customers as part of safety measures

## Appendix F - IPIECA index

Environmental indicators		Page(s)
E1	Greenhouse gas (GHG) emissions	64-65
E2	Energy use	61, 66
E3	Alternative energy sources	N/A
E4	Flared gas	N/A
E5	Biodiversity and ecosystem services	67
E6	Fresh water	67
E7	Other air emissions	65
E8	Spills to the environment	72
E9	Discharges to water	72
E10	Waste	67-72
Health and safety indicators		Page(s)
HS1	Workforce participation	80-86
HS2	Workforce health	80-86
HS3	Occupational injury and illness incidents	83
HS4	Product stewardship	34-49
HS5	Process safety	34-49
Social and economic indicators		Page(s)
SE1	Local community impacts and engagement	50-56
SE2	Indigenous peoples	N/A
SE3	Involuntary resettlement	N/A
SE4	Social investment	53-56
SE5	Local content practices	53-56
SE6	Local hiring practices	53
SE7	Local procurement and supplier development	53-56
SE8	Human rights due diligence	95
SE9	Human rights and suppliers	95
SE10	Security and human rights	N/A
SE11	Preventing corruption	95
SE12	Preventing corruption involving business partners	95
SE13	Transparency of payments to host governments	N/A
SE14	Public advocacy and lobbying	Qatar Steel participates in public policy through its Board members who are ministers, and through sharing statistics, and through setting Qatar Steel standards.
SE15	Workforce diversity and inclusion	88-91
SE16	Workforce engagement	88
SE17	Workforce training and development	91-95
SE18	Non-retaliation and grievance system	91-95

## Appendix G - Glossary

- **Qatar National Vision 2030:** A long term national vision which was built on the guiding principles of Qatar's Permanent Constitution. It reflects the aspirations of the Qatari people and the resolve of their political leadership. It envisages a vibrant and prosperous country in which there is economic and social justice for all, and in which nature and man are in harmony.
- **Climate Change:** A significant and lasting change in the statistical distribution of weather patterns over periods ranging from decades to millions of years.
- **Qatarization:** An initiative by the government of the Qatar to increase the number of Qatari nationals in all joint venture industries and government departments.
- **Corporate Governance:** The system by which companies are directed and controlled. It involves regulatory and market mechanisms, and the roles and relationships between a company's management, its board, its shareholders and other stakeholders, and the goals for which the corporation is governed.
- **Sustainability:** A state where current generation can meet their needs without comprising the ability of future generations to meet their own.
- **Sustainability Management:** The integrated management of economic, social and environmental issues in a manner that maximizes value for all stakeholders.
- **Sustainability report:** an organizational report that gives information about economic, environmental, social and governance performance.
- **Global Reporting Initiative (GRI):** A network-based organization that produces a comprehensive sustainability reporting framework that is widely used around the world with the aim of the mainstreaming of disclosure on environmental, social and governance performance. GRI is committed to the Framework's continuous improvement and application worldwide.
- **Gulf Cooperation Council (GCC):** Is a political and economic union of the Arab states bordering the Persian Gulf and located on or near the Arabian Peninsula, namely Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates
- **Greenhouse Gas Emissions:** Gas emissions, which contribute to the trapping of heat inside the atmosphere (resulting in the Global Warming phenomenon).

## Appendix H - Acronyms

<b>AAQMS</b>	Ambient Air Quality Monitoring Systems	<b>mg/Nm3</b>	Milligram per normal cubic meter
<b>AISU</b>	Arab Iron and Steel Union	<b>MT</b>	Metric ton.
<b>CC</b>	Continuous Casting	<b>mm</b>	Millimetres
<b>CEMS</b>	Continuous Emissions Monitoring System	<b>MWh</b>	Megawatt hour
<b>EAF</b>	Electric Arc Furnace	<b>m3</b>	Cubic meter
<b>EIA</b>	Environmental Impact Assessment	<b>PLC</b>	Programmable Logic Controller
<b>EMS</b>	Environmental Management System	<b>PHE</b>	Process Hazard Evaluations
<b>CRM</b>	Customer Relations Management	<b>ppm</b>	Parts per million
<b>DCL</b>	Dubai Central Laboratory	<b>Q-Coat</b>	Qatar Metals Coating Company W.L.L.
<b>DG</b>	Regulations and Enforcement Directorate	<b>QR</b>	Qatari Riyal
<b>DR</b>	Direct Reduction	<b>QMS</b>	Quality Management System
<b>DRI</b>	Direct Reduced Iron	<b>RM</b>	Rolling Mill
<b>ERP</b>	Enterprise Resource Planning	<b>SDI</b>	Sustainable Development Industry
<b>Foulath</b>	Gulf United Holding Company	<b>SEAIISI</b>	South East Asia Iron & Steel Institute
<b>GCC</b>	Gulf Cooperation Council	<b>SMS</b>	Steel Melting Shop
<b>GIIC</b>	Bahrain, Gulf Industrial Investment Co.	<b>SMS</b>	Sustainability Management Systems
<b>GJ</b>	Gigajoule	<b>SASO</b>	Saudi Arabian Standards Organization
<b>GRI</b>	Global Reporting Initiative	<b>TRCF</b>	Total Reportable Cases Frequency
<b>HBI</b>	Hot Briquetted Iron	<b>UAE</b>	United Arab Emirates
<b>HSE</b>	Health, Safety, and Environment	<b>worldsteel</b>	World Steel Association
<b>HMI</b>	Human Machine Interface	<b>XRF</b>	X-Ray Fluorescence Spectrometer
<b>IQ</b>	Industries Qatar	<b>FZE</b>	Free Zone Establishment
<b>IFRS</b>	International Financial Reporting Standards	<b>UKCARES</b>	Certification Authority for Reinforcing steels
<b>JIS</b>	Japanese Industrial Standards	<b>MPa</b>	Megapascal
<b>kWh</b>	Kilowatt hour	<b>QNV</b>	Qatar National Vision 2030
<b>Kg</b>	Kilogram	<b>ISO</b>	International Organization for Standardization
<b>LTIF</b>	Lost Time Injury Frequency	<b>ASTM</b>	American Society for Testing and Materials
<b>LOC</b>	Number of loss of Containment	<b>MoE</b>	Ministry of the Environment
<b>MAP</b>	Mutual Aid Plan	<b>SO</b>	Sulfur Monoxide
<b>MIC</b>	Mesaieed Industrial City	<b>NOx</b>	Nitrogen Oxide
<b>MoU</b>	Memorandum of Understanding	<b>NDS</b>	National Development Strategy 2011-2016



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Location #01: Mesaieed Industrial City (MIC), State of Qatar

Location #02: Qatar Steel Company Branch-Al-Hilal City, State of Qatar

All sculptures shown in this document are amazing creations by renowned French sculptor **Edouard Martinet**, who craft astoundingly detailed, life-like sculptures from pieces of discarded junk. Photographed by **Ian Sanderson**.

Assistance:

**Sustainability Excellence Organization**

Photography of Qatar Steel's Plant:

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