# Steel in 2025: quo vadis?

The steel market of the future – strategies for success in a competitive global environment.

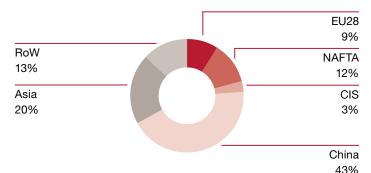




# Moderate rise in global demand for steel: PwC forecast for 2025

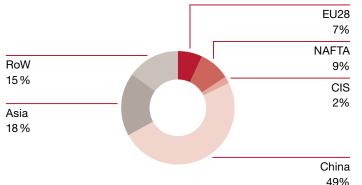


2012: 1,545m tonnes



Increase in demand for steel 2012-2025: CAGR 3.3% p.a.

#### 2025: 2,351m tonnes



In this year's steel forecast, we expect global demand for steel to be approximately 2.35 billion tonnes by 2025. That is two percentage points down from the previous year's forecast (2.39 billion tonnes) and is equivalent to an average global growth of 3.3% per annum from 2012 to 2025.

#### China consolidates its dominance

Based on its current low steel growth rates, one might well assume that China is principally responsible for this downward adjustment. In fact, economic growth in China is expected to average 4.7% per annum between 2015 and 2025, slightly above the previous year's forecast. This increase is due to a slight rise in forecast overall economic growth to 2025. We assume that growth will be constant in the future. However, it will be lower than present levels. China will therefore continue to consolidate its dominance in the global steel market and within just ten years will be consuming almost as much steel as the rest of the world put together. Even so, our view is that the growth in Chinese and global demand for steel will slacken year on year. On this basis we can expect Chinese demand for steel to peak around 2030.



is the compound average growth rate (CAGR) for steel demand to 2025, according to PwC's forecast.

#### Stagnation in the CIS countries

A major reason for the decline in 2025 demand for steel is to be found in the Commonwealth of Independent States (CIS) countries. The tense political situation and economic sanctions against Russia along with the devaluation of the rouble have dealt a major blow to demand for steel in the region. We do not expect a rapid recovery or a lifting of the sanctions, at least in the medium term. But the apparently unwelcome drop in steel demand could prove an advantage for the Russian steel export sector. This is because the depreciation of the rouble is making commodities purchased in roubles cheaper, which is due to Russia's high level of selfsufficiency thanks to its domestic raw materials. This price advantage could have a direct impact on international steel markets and allow extremely competitive price levels to be achieved.

# ... and in Europe

The European steel market is also stagnating. Expected steel demand for 2025 for the EU 28 has also fallen a full two percentage points from the previous year and is now around 162 million tonnes. This is equivalent to an annual average growth rate of less than 1%. For comparison, we assume economic growth in Europe will be around 1.8% over the same period. Based on the slackening of demand and the challenges posed by the increase in imports from Eastern Europe and Asia, the steel market in Europe will remain fraught in the foreseeable future, too. Structural overcapacities and efforts to restructure the steel industry will therefore continue to dominate the scene in Europe. As our analysis confirms, Germany will continue to be the driver for growth in Europe. The German steel market and German demand for steel remain stable, buoyed by positive performances in major client industries such as the automotive industry and a slight easing on the commodities market. The market positioning of German companies is also proving to be relatively robust due to its high-value goods and integrated value chain.

# Increased demand for steel in North America

The news from the North American Free Trade Agreement (NAFTA) region is positive. The resurgence of industrialisation, driven by shale gas deposits in the USA and access to cheaper energy, is already impacting on economic data and forecasts. For the NAFTA countries, we are assuming that annual growth in steel demand will match economic growth (around 2% per annum over the next few years). Expected demand for steel in 2025 has therefore risen by around 1.5% to approximately 215 million tonnes. Demand for steel is stabilising at a higher level than could have been expected just a few years ago.

In the rest of the world (and Asia too, if we exclude China), there are only slight changes in the demand for steel. Economic prospects and expected trends in steel demand remain positive for the core countries of South Korea and India, for example. India in particular has shown aboveaverage growth in demand for steel due to its industrial development. We are assuming that this increase in demand for steel to generate economic growth in India will be sustained in coming years.

# Who benefits most? China and Eastern Europe

Although it is still too early to make an assessment of the risks in Russia and performance in steel demand in the NAFTA region, we expect global demand for steel to continue its moderate growth, but with major differences between individual regions and countries. Europe is unlikely to recover in the medium term despite huge efforts to restructure the industry. Chinese and East European manufacturers, who can consolidate their market share or expand it at the expense of European manufacturers, have the potential to gain from this market trend.

# Global competition: capacities for the future

On the basis of the 2025 forecast, the following five competences are essential if European steel manufacturers are to exploit the changes in the market as an opportunity to optimise their internal business model.

# Efficient use of materials and effective investment

Improving the cost basis is, and continues to be, the focus for the European steel industry over the medium term. The key lever here is steadily increasing the effective use of materials and investments. The highly complex nature of steel production and processing means that it is vital to ensure continuous material flows. Balancing peaks in capacity and managing bottlenecks to ensure sufficient supplies of materials whilst avoiding supply shortfalls requires continuous production planning supported by Advanced Planning Systems (APS).

Based on the current overcapacities in Europe, further structural adjustment of the asset and production network is advisable. Shifting and bundling production volumes at single locations achieve economies of scale manifested in terms of material, staff training and experience as well as shipping and logistics costs.

# Delivery service and flexibility

High levels of delivery service, short lead times and flexibility over volume are not only of benefit internally but also help customers to increase their own value chain efficiency. Geographical proximity, high levels of flexibility and a reliable delivery service are specific competitive advantages, particularly versus overseas competitors. Supply chain management is essential within the value chain to identify the optimum compromise between delivery service, flexibility, costs and inventory.

The outcome is a delivery service, lead times and flexibility over volume that matches customer needs, leading to increased customer satisfaction which in turn increases sales. In situations where full capacity is reached, it is advisable to define delivery service and flexibility in line with internal parameters.

# Product quality and innovation

Technology and innovation cycles have become much shorter in recent years. Not just for steel manufacturers but above all for steel processors. This has been matched by rapid changes to product and market segments. What just a few years ago were still technological niche products with very good margins are now high-volume markets hotly contested by cost leaders. But in order to ensure the European steel industry continues to lead in terms of innovation and quality in coming years too, the product portfolio needs to be reviewed regularly and aligned with the overall strategic objective.

# Commodity management

The changes in global commodity and steel markets have caused prices to fluctuate widely and have led to limited scope for product differentiation. Business processes need to be pegged to fluctuations in commodity prices, which can be used as control parameters to ensure they are in synch with commodity market performance. Controlling financial and material flows based on an integrated commodity management model can achieve not just process efficiencies but also purchase prices and sales margins.

# Digitalisation

There are many different ways of using IT and digitalisation services systematically to increase and speed up the responsiveness of product range, pricing and delivery service to customer requirements. Any digitalisation strategy needs to focus on designing processes that are more efficient overall and integrate the customer's planning and purchasing processes. This includes joint demand forecasts, supply planning, shipping notifications and after-sales services. However, digitalisation needs to be anchored in a strategic approach that goes well beyond simply operating a simple web shop. It needs to encompass business analytics, by which we mean detailed analysis and understanding of all core processes and functions. For example, analysing pricing components as a function of demand and purchasing patterns can help to optimise pricing. Another example would be using periodic analyses of sales volumes, fluctuations in demand and margin by specification and customer to achieve demandoriented segmentation of supply chains. These analyses involve systematically evaluating data obtained from a wide range of sources based on empirical findings.

Digitalising business transactions provides the purchaser with an analytical tool, which allows a comprehensive picture of needs and requirements to be built up and any up-selling or cross-selling opportunities (offering high-value or additional products/services) to be identified. It provides them with a basis for improving and aligning their inventories by recording customer-specific needs and information. By providing the customer with regular information on current developments and trends, it also offers them the opportunity to position themselves as trendsetters.

# Our services at a glance

# Productivity: getting things right means increasing process efficiency.

The services we offer in this area are:

- supply chain performance optimisation
- working capital and inventory optimisation
- · commodity and risk management
- sourcing and purchasing excellence
- · supplier management

# Profitability: getting things right means increasing the value contribution for customers.

The services we offer in this area are:

- operation and market supply strategies
- product portfolio optimisation
- supply chain network and footprint optimisation
- integrated business and supply chain planning
- operational excellence
- · research and studies

# Transformation and implementation: getting the implementation of changes right.

The services we offer in this area are:

- supply chain assessment and benchmarking
- business model and project reviews
- supply chain technology implementation support
- *Transform* our global approach for transformation projects

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