## NOVOLIPETSK METALLURGICAL COMBINE: THE LONG-TERM GROWTH STRATEGY

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On November 7th, it will be 80 years since the first ton of pig iron was tapped at the Novolipetsk Metallurgical Combine. Over its eight decades, the combine has gone from being the site of the only blast furnace in Russia to Russia's largest producer of high-added-value steel and metal rolled products – it accounts for 21% of all steel made in Russia.

This anniversary year of the Novolipetsk Metallurgical Combine (NLMK) is critical not only for the combine but also for the NLMK Group. The challenges that international metallurgy has had to face have compelled the company to take decisive steps in order to stabilize its business operations. Given the ongoing surplus of steel in the world, the only companies that can function successfully are those that use every available means to lower product costs and produce competitive, quality products. The strategy that a company adopts should be focused in these directions and help realize the company's potential.

The priorities of the NLMK group are to be a leader in manufacturing efficiency, strengthen its position in strategic markets, develop a world-class resource base, and assume leading positions in the areas of stable growth and safety. These goals can be achieved by making the combine's production operations more efficient and making maximum use of its available resources. In essence, this is a qualitatively new stage in the growth of the company.

The projects that are pending at the combine can be conditionally divided into two groups.

The first group consists of investment projects that continue to help implement the programs instituted in previous years to upgrade the production facilities. These are the projects which are aimed not at increasing production capacity but at making existing equipment more productive and environmentally safer. Among them are projects concerned with modernizing the combine's sintering machines, coke ovens, blast furnaces, and basic oxygen furnaces. As much as 80% of the company's production costs are incurred in the course of operation of these four types of equipment and their auxiliary facilities. These are large-scale investment projects that will allow the company to significantly reduce operating costs and minimize the load on the environment.

In contrast to the first group of investment projects, the second group does not require sizable investments but is equally important to the long-term prospects of the company. The key components of these projects are optimizing business operations and introducing new methods of managing technologies and product quality in each conversion that is part of the overall production process at the NLMK.

While working on optimizing operations, the NLMK has developed a mechanism for interacting with its suppliers and customers within a single technological space – an approach that makes it possible to align these entities into a smoothrunning vertically integrated enterprise. One example is the successful joint operation and planning of the NLMK and the Altai-Koks company. The linkage with Altai-Koks has quickly given the combine access to the coke that is rated the highest in Russia for hot strength. Positive results have also already been obtained from the combine's interactions with other Russian

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companies in the NLMK Group – the Stoilenskii Mining-Concentration Combine, Stagdok, and Dolomit, as well as with the groups' foreign member-companies.

Thus, by using higher-quality resources in the first conversion, we are able to apply the savings that are realized to increase the production of specialized grades of steel. That allows the combine to quickly respond to customers' requests.

In particular, successful cooperation with our partners in Belgium has allowed the NLMK to provide Russian machine-builders with thick plate made of Quend-grade wear-resistant low-alloy steel. This steel was designed to make equipment and machines used in construction and mining. Such plate is used by leading machine-building companies: Liebherr, Caterpillar, Volvo, JCB, BYG, and Metso. The transition to steels Quard and Quend will allow machine manufacturers in Russia to improve the environmental and performance characteristics of their products and thus make them more competitive.

Equally important to the Russian economy has been the collaboration with the United Metallurgical Company to deliver slabs that can be used to obtain semifinished products which meet higher standards on chemical composition, surface quality, and dimensional accuracy and can be used to make large-diameter line pipe for service under extreme conditions. This joint project has allowed the NLMK to quickly set up a highly efficient production line to make 355-mm-thick, 2200-mm-wide 60-ton slabs that can take the place of imports. This excellent example of replacing imported products with Russian-made products is strategically important for the nation.

The combine's achievements for the year were recognized by analysts at World Steel Dynamics, who now rate the NLMK as one of the five most efficient steel plants in the world.

The Novolipetsk combine is a unified, well-coordinated enterprise that is undergoing dynamic growth in keeping with the tenor of the times. There was no doubting that the goal we set to be a world leader in ferrous metallurgy was achievable. To reach this goal, the NLMK relies on high-technology production facilities, a continually improving system to manage and conduct business, and a highly skilled workforce which strives to develop new technologies, new manufacturing systems, and new methods of improving efficiency which can help the company realize its full potential.