



## PHOSPHATE SEGMENT – DOWNSTREAM (SDG 3, 12)



### Performance

In 2019, PhosAgro's output of phosphate-based fertilizers was up by 6.1% y-o-y to 7.3 mt. The growth was due to several factors. First, the completion of investment projects to modernise key production capacities in Cherepovets and Balakovo helped to boost the output of basic semi-finished products (sulphuric and phosphoric acid) and mineral fertilizers. Second, efforts to reduce the number of major overhauls and eliminate downtime, resulted in a significant increase in working time. Finally, production flexibility post modernisation helped expand the fertilizer range, among other things by adding less concentrated grades, and switch from one grade to another with virtually no downtime.

Sales of phosphate-based fertilizers went up by 9.4% y-o-y to 7.3 mt. The European market showed the strongest growth (+28.6%), with shipments to the CIS and Russia steadily trending upward, as well (+16.1% and +13.9%, respectively).

**6.1%**  
increase in production  
of phosphate-based fertilizers  
compared to 2018

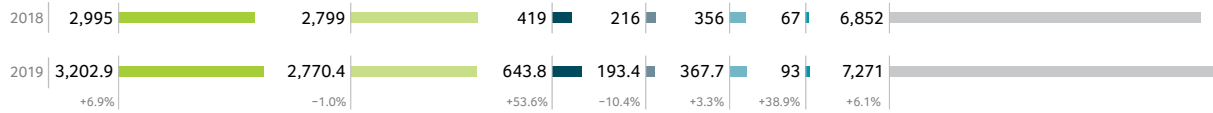
**9.4%**  
increase in sales of phosphate-  
based fertilizers compared  
to 2018

The approved production plan  
for 2020

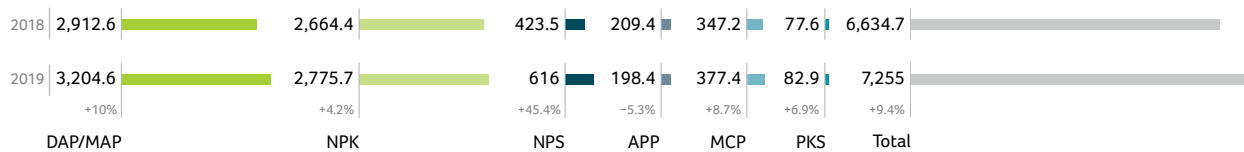
**7.3**  
mt



### Phosphate-based fertilizer and MCP production, kt



### Phosphate-based fertilizer and MCP sales, kt



### Outlook

We continue with our efforts to increase fertilizer production and enhance self-sufficiency in key feedstock to ensure sustainable growth and strengthen our cost leadership among global peers. We expect to benefit from the completion of several major investment projects that will allow us to increase self-sufficiency in key inputs and achieve sustainable cost savings in our upstream operations. These include a 135 kt nitric acid plant, a 300 kt ammonium sulphate plant, and a 1.1 mt sulphuric acid production line, intended to replace the volumes currently purchased from third parties.

As part of this effort, we plan to achieve a 100% self-sufficiency in phosphate rock, an 80% self-sufficiency in ammonia, and a 91% self-sufficiency in sulphuric acid.

In 2019, we launched a project to build a modern facility for making phosphate-based fertilizers, and a power plant at Apatit's Volkhov branch.

Due in 2023, it will be financed from both the Company's own resources and borrowed funds and is estimated to cost around RUB 27 bn.

The project includes construction of an 800 ktpa sulphuric acid facility, a facility to produce over 840 ktpa of mineral fertilizers, including more than 40 ktpa of water-soluble MAP, liquid ammonia and end-product warehouses, and a 25 MW combined heat and power plant. In addition, wet-process phosphoric acid units will be upgraded to reach a capacity of 500 ktpa.

According to PhosAgro's CEO Andrey Guryev, this initiative is a key element of PhosAgro Group's Strategy to 2025. Essentially, it involves building a new complex that will boost the Group's phosphate rock processing capacity by 1 mtpa (the Volkhov branch currently can process 300 ktpa) and increase the output of phosphate-based fertilizers – a high-margin category thanks to the branch's logistic strengths.

This investment project is set to embrace best available technologies, as well as solutions developed by major Russian and global companies and institutes, including the NIUIF, Russia's only and one of Europe's leading agrochemical research institutes. Construction and installation will be performed by Russian contractors.