

Challenge

This Serbian producer of cereals, leguminous crops, and oil seeds had an old silo with a drying chamber supplied with thermal energy from a natural gas combustion system. Since the cost of natural gas was becoming more expensive, the company decided to introduce a renewable energy solution.

Solution

In order to decrease its energy costs, the company invested in two agri-pellet powered systems: the first furnace of 2.5 MWth was installed in 2016, while the other furnace of the same capacity was installed in 2017. These two biomass dryers together produce 14,280 MWhth per year, which is then used in the crop-drying process.

Energy Production – 14,280 MWhth

Investing in two crop drying chambers with a total installed power of 5 MWth and the auxiliary equipment enabled production of 14,280 MWhth of thermal energy per annum. Other benefits include a 100% decrease of CO₂ emissions, improved product quality and, what was especially important for the investor, utilization of its own agricultural waste as a biomass energy source.



Implemented through the EU/EBRD WeBSEFF program

Company

Country	Serbia
Sector / Asset type	Agricultural
Project type	RE
Main business activity	Growing of grains

Project Facts and Benefits

Investment value	EUR 443,691
Loan amount	EUR 360,000
Energy production	14,280 MWhth/yr
Decrease of CO ₂ emissions	2,760 tonnes/yr
Equivalent cars removed	560
Equivalent trees planted	71,530
Annual monetary savings	EUR 255,600/yr
Payback period	1.7 years
ROI	58%