

A3-2

Severodvinsk Combined Heat and Power Plant (CHPP-2)

12th BEAC meeting of environment ministers
Sortavala, 24-25.11.2015

KDS
2008



Severodvinsk CHPP-2



The main source of air pollution was the smokestack (with the adjacent 4 energy boiler units N 1,2,3,4 of TGME-464 type, 4 water heating boilers N 1,2,3 of KVGM-100 type and N 4 of KTK-100 type).

Until 2012 M-100 mazut was the main fuel used. The combustion of this fuel caused the emissions of sulphur dioxide and nitrogen oxides which exceeded the maximal allowable emission levels (MAEL).

Based on the 2010 monitoring (mazut was 100% fuel) the total pollutant emissions reached 21.3 thou.t, considering that the main share of pollutants belonged to SO₂ - 89.9% (19.2 thou.t). The share of NO₂ was 8.3% (1.8 thou.t), NO_x – 1.3% (0.3 thou.t)



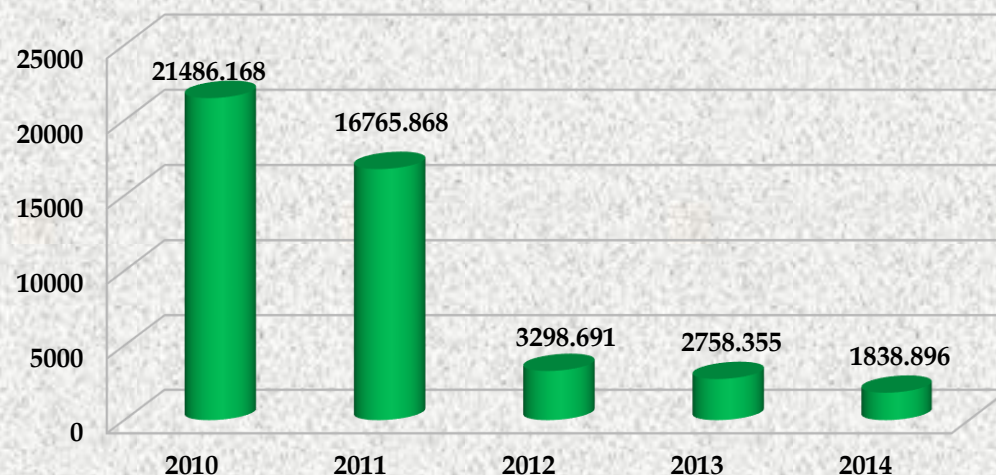
Мероприятия по охране атмосферного воздуха

In 2011-2012 the energy boiler units N 1,2,3,4 and water heating boilers N 1, 2 were transferred to the natural gas combustion (the cost was 499 mln. RUB, own means).

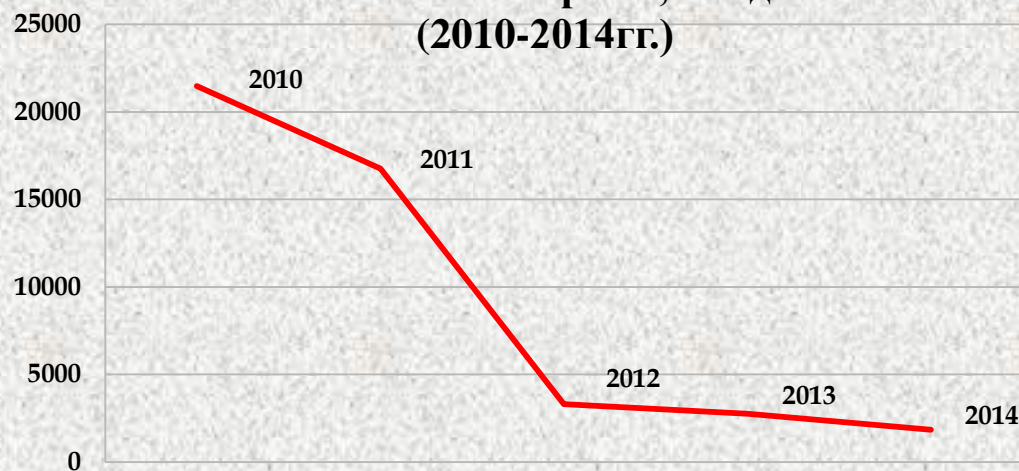
As a result in 2012-2014 the share of natural gas in used fuel was not less than 90%.

The environmental activities resulted in the 91,4% decrease of the total emissions at Severodvinsk CHPP-2 from 2010 to 2014.

**валовые выбросы, т/год
(2010-2014 гг.)**



**валовые выбросы, т/год
(2010-2014 гг.)**



The emissions of SO₂ and mazut ash decreased by 99.9% from 2010 to 2014

**выбросы диоксида серы, т/год
(2010-2014 гг.)**

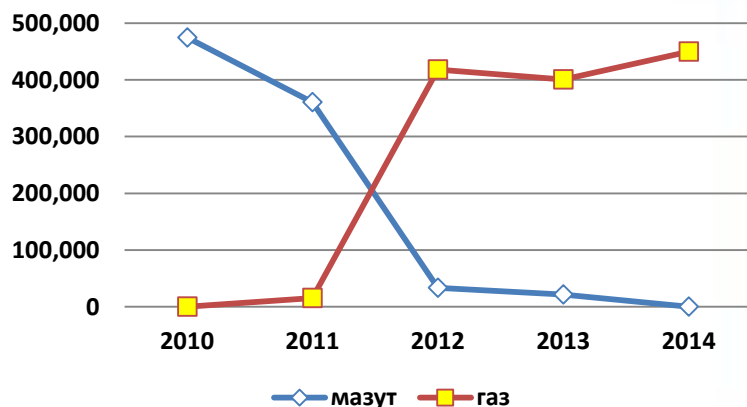


**выбросы мазутной золы, т/год
(2010-2014 гг.)**

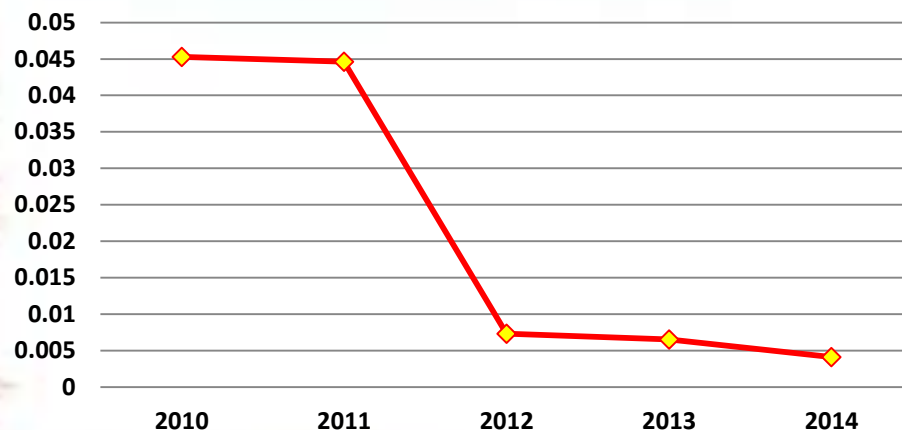


The total emissions of pollutants per one t of the combusted fuel in 2010-2014 decreased 11 times (from 0,0453 to 0.0040 t)

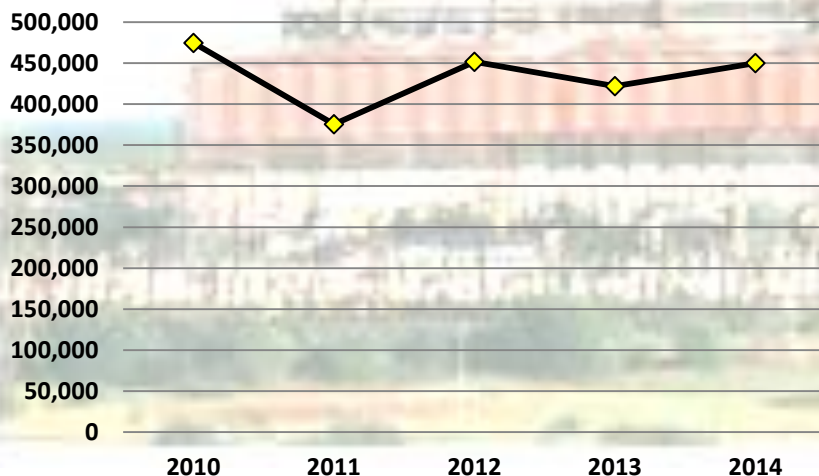
топливный баланс, тут
(2010-2014 гг.)



Валовый выброс загрязняющих веществ на
1 т сожженного топлива, т/1 т (2010-2014 гг.)



расход топлива, тут (2010-2014 гг.)



TEC2.RU

Severodvinsk CHPP-2 was transferred to the combustion of more ecological type of fuel - natural gas. The natural gas share in the fuel balance is not less than 90% (in fact 99.99% in 2014).

In 2010-2014 the total air pollutant emissions of CHPP-2 decreased by 91.4%, and the share of pollutants emissions per the production unit decreased by 92.6%.