



**Agreement no. 74/2014/Wn05/OA-xn-04/D concerning the Project on  
"The construction of the installation for reduction of sulphur oxide emission from Unit no. 5 at Turów  
Power Plant"  
co-financed by the funds of the Norwegian Financial Mechanism 2009-2014**

On **13 March 2014** between PGE Górnictwo i Energetyka Konwencjonalna S.A. and the Minister of Environment acting in the capacity of the Programme Operator of PL04 Programme on "Energy saving and promoting renewable energy sources", on behalf of which the National Fund of Environmental Protection and Water Management in Warsaw operates, Agreement **no. 74/2014/Wn05/OA-xn-04/D** concerning the Project on "**The construction of the installation for reduction of sulphur oxide emission from Unit no. 5 at Turów Power Plant**" co-financed by the funds of the Norwegian Financial Mechanism 2009-2014 was signed.

The amount of funding for the Project is **PLN 18,423,666.94**.

The aid received originates from the funds of the Norwegian Financial Mechanism. The aid was granted pursuant to the Agreement concluded between the Financial Mechanism Committee in Brussels and the Minister of Regional Development as the National Focal Point in relation to the Programme on "Energy saving and promoting renewable energy sources" of 28 January 2013.

Basic scope of the task: Construction of the Flue Gas Desulphurisation Installation at Unit no. 5 at Turów Power Plant will enable to reduce air emissions of sulphur dioxide and particulate matter.

Description of the task: The subject of the project is the construction of a complete, independent IOS flue gas desulphurisation installation using the MOWAP wet lime and gypsum technology, including the accompanying infrastructure enabling to reduce SO<sub>2</sub> concentration in flue gas from boiler no. 5 to the level  $\leq 200$  mg/Nm<sup>3</sup> (temperature 273 K, pressure 101.3 kPa in dry flue gas, with the 6% O<sub>2</sub> content in flue gas). As a result of the desulphurisation process, wastewater be generated which, following the pre-treatment, will be partially recirculated to the process, and the remaining part will be used in the ash spraying installation. The post-reaction product generated in the desulphurisation process will be gypsum which, after its dehydration, has a commercial value.

Total cost of the task: 181,696,237.27 PLN (including VAT)

Level of co-financing from the funds of the Norwegian Financial Mechanism: The amount of the grant is **18,423,666.94 PLN**.  
The amount of funding is transferred successively in the tranches.

Objectives and benefits arising from the implementation of the task: The basic objective of the installation modernisation is the improvement of air quality through reducing the level of SO<sub>2</sub> emission from lignite combustion installation in power unit no. 5 to the level  $\leq 200$  mg/Nm<sup>3</sup>.

Stage of The project has been completed.

implementation of the task: The wet flue gas desulphurisation system for unit no. 5 was put into operation.

Progress of the works: In accordance with the Material and Financial Schedule, the Contractor of the investments submitted the following stages for acceptance:

- ✓ development of the basic design, building plan for the building permit and submission of the complete application,
- ✓ development of detailed designs,
- ✓ construction of foundations for absorbers, pump stations and other facilities,
- ✓ construction works, supply/modernisation, assembly and start-up of flue gas fan for unit no. 5,
- ✓ adaptation of the last six-conduit chimney draught,
- ✓ equipment of the second absorber and pump station building enabling the start-up of the desulphurisation technological line,
- ✓ completion of the second flue gas desulphurisation system line,
- ✓ completion of „cold” functional tests of the second flue gas desulphurisation system line.

Photo documentation of the task:



Foundations for absorbers, pump stations and other facilities



Assembly and start-up of flue gas fan for unit no. 5



Adaptation of the last six-conduit chimney draught





Equipment of the absorber and pump station building enabling the start-up of the desulphurisation technological line



View on flue gas desulphurisation system

Link to the website: [www.eog.gov.pl](http://www.eog.gov.pl)