



**European Bank**  
for Reconstruction and Development

## Environmental and Social Action Plan

### TEŠ Power Plant

Prepared by:



**MWH**

*BUILDING A BETTER WORLD*



October 2009

## Environmental and Social Action Plan

This Environmental and Social Action Plan (ESAP) has been developed to address key problem areas identified for TEŠ Power Plant to substantially decrease environmental pollution and to improve quality output, cost and energy efficiency of the Power Plant.

The planned investments (notably the construction of Unit 6 endowed of FGD plants and cooling tower, the reconstruction of the existing conveyor belt of Unit 4 and the construction of new conveyor leading to Unit 6, and the installation of a new decarbonisation plant) the Bank is considering to finance are structured to meet the National and EU Standards. New installations will comply with the BAT ecological specifications, and also to improve output quality, cost and energy efficiency.

The ESAP includes the assessed environmental investments needed to bring the remaining existing plants into compliance with BAT and national and EU environmental standards.

No	Environmental Action	Environmental and Social Risks / Benefits	Reference standard (i.e. legislation, best practice)	Investment Needs Resources	Target Date (by year end)	KPI	Comments
<b>BAT</b>							
1.1	<b>Decommissioning of Units 1 – 2 – 3 – 4 – 5 and Unit 4 in cold reserve</b>	Closure of older units not fully compliant with BAT requirements	BAT	The investment need is already included in the Investment Programme	2009 (U.2) 2014 (U.1-3-4) 2028 (U.5)	Decommissioning of Unit 1-2-3-4-5 and Unit 4 in cold reserve	-
1.2	<b>Ensure future compliance of the Power Plant (Unit 5 and 6) with the future European Directive on Industrial Emissions (IED)</b>	The proposed IED will replace the existing IPPC Directive (96/61/CE) and enforce new air emission standards	BAT IED European Directive	The investment need is already included in the Investment Programme	2016	Compliance with the following air emission limits: SO <sub>2</sub> < 200 mg/Nm <sup>3</sup> NO <sub>x</sub> < 200 mg/Nm <sup>3</sup> Dust< 20 mg/Nm <sup>3</sup>	

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1.3	<b>Ensure compliance of Unit 6 with BAT performance standards for Large Combustion Plants</b>	Maximise plant efficiency (same energy output with reduced coal consumption) and reduce impacts on the environment (reduced waste generation and air pollution)	BAT	The investment need is already included in the Investment Programme	2015	<p>Emissions and efficiency compliant with BAT. Unit 6 pollutants emission values are the following:</p> <ul style="list-style-type: none"> <li>- SO<sub>x</sub>: 100 mg/Nm<sup>3</sup> (limit is 200 mg/Nm<sup>3</sup>)</li> <li>- NO<sub>x</sub>: 150 mg/Nm<sup>3</sup> (limit is 200 mg/Nm<sup>3</sup>)</li> <li>- Dust: 20 mg/Nm<sup>3</sup> (limit is 30 mg/Nm<sup>3</sup>)</li> <li>- CO: 100 mg/Nm<sup>3</sup> (limit for Slovenian legislation is 250 mg/Nm<sup>3</sup>; for BAT is 200)</li> <li>- HCl: 3 mg/Nm<sup>3</sup> (limit is 10 mg/Nm<sup>3</sup>)</li> <li>- HF: 3 mg/Nm<sup>3</sup> (limit is 1-5 mg/Nm<sup>3</sup>)</li> <li>- NH<sub>3</sub>: 3 mg/Nm<sup>3</sup> (BAT limit is 5 mg/Nm<sup>3</sup>; for Slovenian legislation is 30)</li> </ul> <p>Efficiency: 42-45%</p>	

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1.4	<b>Ensure compliance of Unit 6 with BAT performance standards for Cooling Systems</b>	Maximise plant efficiency (same energy output with reduced coal consumption) and reduce impacts on the environment (reduced waste generation and air pollution)	BAT	The investment need is already included in the Investment Programme	2015	Technology in compliance with BAT requirements: - Open by-pass (wet) cooling systems	-
1.5	<b>Ensure compliance of the Power Plant with BAT performance standards for Emissions from Storages</b>	Maximise plant efficiency (same energy output with reduced coal consumption) and reduce impacts on the environment (reduced waste generation and air pollution)	BAT	The investment need is already included in the Investment Programme	2015	Methodology of coal transport and storage compliant with BAT	-
<b>Environmental Management</b>							
1.6	<b>Maintenance of the existing integrated quality, environmental and health and safety management system</b>	Integrated control over quality, environmental and health and safety issues; continuous improvement	ISO 9001, ISO 14001 and OHSAS 14001 standards	Internal resources	Already in place (to be maintained throughout the whole project)	ISO 9001, ISO 14001, OHSAS 18001 certification	-
1.7	<b>Definition of new environmental aspects/impacts to be monitored during Unit 6 construction</b>	Effective monitoring of potential environmental aspects associated to the construction of Unit 6	ISO 14001:2004 (section 4.3.1)	Internal resources	2010	Updated environmental aspects identification	-

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<b>Environment</b>							
1.8	<b>Enforce noise mitigation measures (noise mufflers and protective housing for generators, installation of equipment inside closed structures, sound insulation)</b>	Reduction of noise impacts on the surrounding properties, to comply with regulations and minimize the risk of claims from neighbours	National regulation (UL RS No. 45/95, 70/96, 45/02, 66/96).	The investment need is already included in the Investment Programme	2010	Noise levels below regulatory limits	Noise mitigation measures already defined in the EIA study
1.9	<b>Ongoing monitoring of the content of solid particles in the atmosphere, radioactivity, meteorological conditions of the subsidence reconstruction area where “stabilizat” is used</b>	Monitoring to exercise control and prevent impact on the environment	Best practices	The investment need is already included in the Investment Programme	2010	Register with updated data about solid particles in the atmosphere, radioactivity and meteorological conditions regarding subsidence reconstruction area	Provide update in each annual report to Bank
1.10	<b>Geodetic survey of the subsidence reconstruction area where “stabilizat” is used</b>	Monitoring to exercise control and prevent impact on the environment	Best practices	The investment need is already included in the Investment Programme	2010	Geodetic data and soil parameters regarding subsidence reconstruction area	Provide update in each annual report to Bank

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1.11	<b>Monitoring of waters quality in the subsidence reconstruction area where “stabilizat” is used</b>	Monitoring of water quality to exercise control and prevent impact on the environment	Best practices	The investment need is already included in the Investment Programme	2010	Water quality data regarding subsidence reconstruction area	Provide update in each annual report to Bank
1.12	<b>Separate system for leachate collection and for the drainage of water accumulating on the surface in the subsidence reconstruction area</b>	Protection of surface water and groundwater	Best practices	The investment need is already included in the Investment Programme	2010	Separate collection of leachate and superficial water in the subsidence reconstruction area	-
<b>Health and Safety</b>							
1.13	<b>Monitoring of subcontractors’ compliance with health &amp; safety requirements</b>	Periodic surveys to verify subcontractors’ compliance with TEŠ/EBRD H&S policy/procedures and contract requirement	EBRD PR2 guideline  Best practices	Internal resources	2010	Number of inspections performed.  Number of non compliances detected (e.g. subcontractors not wearing required PPEs or nor using required collective protective equipment)	Provide update in each annual report to Bank

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1.14	<b>Qualified subcontractors</b> – insert in the register of qualified subcontractors a penalizing system for those found not to be compliant with H&S requirements	Control and improvement of H&S operations executed in the Plant	EBRD PR2 guideline  Best practices	Internal resources	2010	Updated register of qualified subcontractors	-
1.15	<b>Health &amp; Safety monitoring</b> - creation of a register including also near-misses events and subcontractors' accidents	Monitoring of happened accidents and of critical situations/events that could lead to accidents.	EBRD PR2 guideline  Best practices	Internal resources	2010	Number of accidents per typology of gravity and place of occurrence (both for TEŠ employees and subcontractors)  Number of near-misses events per typology of gravity and place of occurrence (both for TEŠ employees and subcontractors)	Provide H&S statistics in each annual report to Bank
<b>Social</b>							
1.16	<b>Definition of a formal procurement policy</b>	Even if anti-bribery recommendations are present in contracts, definition of a clear and shared procurement company policy	Best practices	Internal resources (HR department)	2010	Procurement policy accessible to employees, clients and contractors	-

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1.17	<b>Development of a Stakeholder Engagement Plan</b>	Definition of a clear framework for stakeholder engagement and consultation	EBRD PR10 guideline Best practices	Internal resources/ external consultants	2009	Stakeholder Engagement Plan agreed with the Bank	-
1.18	<b>Creation of a stakeholder register</b>	Systematic identification of all stakeholders involved, to be used for defining communication strategies	EBRD PR10 guideline Best practices	Internal resources (PR department)	2010	Updated stakeholders register available (including stakeholders involved in the Unit 6 project)	-
1.19	<b>Creation of a register of external communications, including the minutes of the meetings held with the public</b>	Systematic collection and analysis of communications with external stakeholders, in order to provide more effective response to all enquiries	EBRD PR10 guideline Best practices	Internal resources	2010	Updated external communication register available	-

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1.20	<b>Creation of grievance management system in accordance to ERBD PR10</b>	Grievance system accessible and monitored, in order to prevent possible problems with internal and external stakeholders	EBRD PR10 guideline	Internal resources (allocate HR staff to grievance management)	2010	Grievance system regarding both community and workers  Total number of community grievances, and number of unresolved grievances  Total number of labour grievances, and number of unresolved grievances	Provide update in each annual report to Bank.