

Climate change aspects within EIA proceedings

Croatia: Establishment of a new block in the
Plomin Power Plant

Case Study

Justice and Environment 2012

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CROATIA

Art. 3 (b) and Annex No. IV. of the Directive of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (EIA Directive - 2011/92/EU) laid down that environmental impact assessments shall identify, describe and assess in an appropriate manner direct and indirect effects on climate, and shall include a description of the aspects of the environment likely to be significantly affected by the proposed project, in particular – and inter alia - climatic factors, and the inter-relationship between all the factors mentioned therein. Climate relevant impact of a plan should be assessed but in practice it is very limited and formal without deeper evaluation.

1. Title of the case

Environmental Impact Assessment of a coal fired 500 MW thermal power plant, Plomin C (Kršan municipality, Istria county)

2. Description of the project

2.1. Features of the project, location, likely environmental impacts etc.

Plomin TPP consists of two units (125 MW unit I and 210 MW Unit II) and the planned construction, so called Plomin C, would be a third 500 MW unit. Since unit I started working in 1970 it is planned to be discontinued after the construction of the Plomin C unit. Unit II started operations in year 2000 and is co-owned by HEP and German RWE.

Unit C is planned to be constructed by a foreign investor. Due to the vicinity of Slovenia the Espoo Convention consultations with the Slovenia have been conducted. The existing units use coal as a fuel and the planned unit C unit is also envisaged as the coal fired TPP.

Plomin TPP is located on the eastern banks of Istria peninsula at the mouth of the Plomin bay (45°08'13"N 14°10'52"E). The total area of Istria is about 2813 km², and stretches from the border with Slovenia in the north to mountain ridge Uèka and Æiæarija in the west. Istria has 206,000 inhabitants according to the 2001 Census. Within a 20 km radius of the planned TPP there are approximately 50 000 inhabitants spread across two counties (Istria and Primorsko-goranska), 12 municipalities and two towns (Pazin and Labin). The influence on the nearby island Cres should also be taken into account. Due to the vicinity of Slovenia the Espoo Convention consultations with the Slovenia have been conducted.

Within a radius of 20 km around Plomin TPP there are two internationally relevant bird habitats and eight special areas of conservation for other wild species and habitat types. In addition to these there are 37 localities of the National Ecological Network. Within the radius of 20 km there is also a part of the nature park Uèka.

2.2. Does the project have likely harmful impacts on the environment, especially on climate?

According to the project EIS, the annual greenhouse gas emissions from the Plomin 'C' Unit will amount to 2 644 068 t CO₂eq. Considering the EU's long term objectives to reduce greenhouse gas emissions by 80-95 percent by 2050, the construction of Plomin 'C' would render it impossible for Croatia to proportionately contribute to this goal. Assuming that the base year is 1990, when Croatia emitted 31 322 000 t CO₂eq., then 80 percent emissions reductions would mean 6 264 400 t CO₂eq. as the emissions total for the whole country in 2050, and 95 percent reductions would mean 1 566 100 t CO₂eq.

Thus Plomin 'C' would account for a minimum of 40 percent of Croatia's total emissions- thus limiting policy choices extremely severely in other sectors and energy sub-sectors - in the former case, or even more than Croatia's total emissions in the latter case.

- Replacing a 125 MW unit I with a 500 MW unit C will increase particles, NO_x, and SO₂ emissions by four times. The explanation that the emission prevention technology used (scrubbers and filters) will allow for the overall improvement of the emissions record is

unacceptable because installing such a technology is not dependent on the construction of the new unit and would be mandatory for the existing unit anyway. The increases in emissions are even more severe if taken into account that unit I is planned to be discontinued in near future regardless of the new construction. This could be viewed as using climate change to justify environmentally dubious projects (though it is more aimed at air quality).

- There has been scientific research in the 80's claiming connection in burning of coal in the Plomin TPP and impact on pregnancies and the newborns. Health impact research used for the purposes of the EIA admits its scope, and the conclusions thus reached, are limited.

- The EIA and IPPC study both mention carbon capture and storage but only superficially mention storage sites, do not analyze whether they are really suitable or not, nor do they assess how the CO₂ would be transported.

- Seawater warming

3. Applicable national regulation

3.1. Which are the main national provisions transposing the EIA Directive?

In Croatia implementation of environmental impact assessment is prescribed pursuant to the Environmental Protection Act (Official Gazette No. 110/07) (EPA) and Regulation on environmental impact assessment (Official Gazette No. 64/08, 67/09) (REIA). Through the adoption of these regulations the procedure has been systematically regulated and harmonized with the corresponding EU directives: Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, amended by Council Directive 97/11/EC of 3 March 1997 and by Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003. Furthermore, the adopted regulations are based on the provisions of the international treaty which was ratified by the Republic of Croatia through the adoption of the Act on the Ratification of the Convention on Environmental Impact Assessment in a Transboundary Context (Official Gazette IT No. 6/96).

The environmental impact assessment, its evaluation and acceptability are assessed by the Advisory expert committee for the environmental impact assessment procedure (further: Committee) on the basis of the Environment Impact Study (EIS). The committee is appointed by the Ministry for projects determined in the List of projects from Annexes I and II of the Regulation on environmental impact assessment (Official Gazette No. 64/08, 67/09), and by the administrative body in the county or the City of Zagreb for projects from Annex III of the REIA. Committee members are appointed among scientific and expert professionals, representatives of bodies and/or persons determined pursuant to a special regulation, representatives of local and regional self-government units, and representatives of the Ministry. The committee performs its work in sessions and upon having established that the EIS is complete and well-founded in expert terms, it proposes to the competent authority that the public hearing on the study should be carried out. After the conducted public hearing, the committee delivers its opinion on project acceptability and submits it to the competent body for issuance of a decision which is the mandatory content of future permits for project implementation.

3.2. Does the national regulation on EIA demand taking climate change aspects into consideration in the procedure?

In annex IV point 4 of the REIA climatic factors are mentioned as one of the elements to be taken into account in the assessment, quote:

"4. Description of the effects impacts on the environment during the development and/or use of the project, including in particular: – effects on population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors and in relation to the project".

4. Description of the impact assessment procedure

4.1. Type of procedure, competent authorities, claimants and other participants involved

The EIA request was filed in December 2010 and the Advisory expert committee was convened in March 2011 holding three sessions altogether (one session was held in two meetings). The competent authority (The Ministry of Environment and Nature Protection) reached a decision on 7 September 2012 which was published on 26 September 2012.

During the impact assessment procedure the procedure for issuing the Integrated Pollution Prevention and Control permit (IPPC) was adjoined and the two procedures were carried out as one (under article 70 of Croatian Environment Protection Act). Though this practice is not unknown, it was carried out in a nontransparent manner resulting in the confusion of the public involved. Part of the reason for the confusion created is the fact that HEP has tried to present the planned construction as an extension and reconstruction rather than the building of new installation. During the one month public consultation period, from 19 October to 18 November 2011, many comments were received from the public (citizens, NGOs, and local government). These were summarized and published as part of the permit with a short description as to why they were not taken into account.

Following the Espoo Convention the public hearing was conducted in the neighboring Slovenia as well. Permit did not substantially explicate the comments taken a board during these consultation and how they were addressed.

4.2. Does the project have likely harmful impacts on climate?

Some of the shortcomings of the EIA procedure for "Plomin C" project are as follows:

- The construction is in opposition to the provisions of the Istria county and Kršan municipality spatial plans. Bot of these plans cap the strength of the TPP on the location to 335 MW and mandate the use of natural gas as fuel should the third unit be constructed. HEP maintains that these barriers were put because of concern for the quality of the surrounding environment and that since the planed technology will improve the existing conditions that criteria is met and the barriers do not apply. HEP also claims that the building of the 500 MW Plomin C is in fact not a new unit, but rather a reconstruction of the existing 125 MW unit I which will be closed as the construction finishes;

- The only alternative to coal even slightly analysed in the EIA is natural gas – with no analysis of biomass (even for co-firing) or other renewable energies at all. The study brushes off the lower CO2 impacts of gas with complete disregard to the effect on climate change: *“A gas power plant would have fifty percent lower emissions of the greenhouse gas CO2. This is a global problem and is not relevant from the aspect of impact on health in the surroundings of the plant or Croatia”*;
- The competent authority refused to take into account the impact of CO2 emissions on climate change arguing that the installation will purchase its emission allowances in the European Trading Scheme market and that therefore the CO2 emissions are of no concern to the state;
- Confronted with the argument that the Plomin 'C' would account for a minimum of 40 percent of Croatia's total emissions- thus limiting policy choices extremely severely in other sectors and energy sub-sectors - if the 80% reduction in greenhouse gas emissions by 2050 is accepted, or even more than Croatia's total emissions if the 95% reduction in greenhouse gas emissions by 2050 is accepted, the competent authority invokes the Common But Differentiated Responsibility (CBDR) principle claiming that Croatia's reduction obligations will not be as high as to that being a real problem;
- The EIA does not give any data more recent than 2006 as to where the coal burnt in Plomin I and II is currently coming from;
- The EIA does not contain any information about the decommissioning of the plant at all, nor what the effects of the decommissioning on the environment will be and how these will be minimized;
- The EIA does not contain adequate information about how seawater warming will be kept within acceptable limits. This was one of the issues raised by the assessment commission. However the only measure being recommended by the commission is monitoring of the situation for three years after the plant is built – so if warming in the Plomin Bay is found to be taking place it is not clear what will be done about it, and presumably it will be too late by then to make major changes to the project;

4.3. Did the assessment meaningfully evaluate the likely impacts of the project on climate?

We would argue that merely citing figures for GHG emissions, talking about the Kyoto protocol (which is anyway not relevant for the lifetime of this project) and then later concluding that greenhouse gas is a global problem that is not relevant to Croatia is not only incorrect - as Croatia is already suffering from the impacts of climate change - but does not constitute “– description of the proposed environmental protection measures envisaged in order to prevent, reduce or mitigate adverse effects on the environment” (Annex 4 point 5 of the REIA).

Provisional translation of REIA available at the following link:

<http://hidra.srce.hr/arhiva/263/60762/www.mvpei.hr/zakoni/pdf/420.pdf>

- 4.4. Had the claimant or other participants stressed the priority of preventing climate change? If yes, had been these arguments taken into account?

The priority of preventing climate changes was stressed. These arguments were not taken into account. The competent authority refused to take into account the impact of CO₂ emissions on climate change arguing that the installation will purchase its emission allowances in the European Trading Scheme market and that therefore the CO₂ emissions are of no concern to the state;

5. Outcome of the proceedings / content of the final decision

Ministry of Environment and Nature Protection, the competent authority, issued a permit on 7th September 2012 allowing the project in question to proceed

6. Obstacles/Challenges generated in this case

The case is now being reviewed by the Administrative Court in Rijeka based on the 29 October 2012 lawsuit raised by plaintiffs Zelena akcija, Zelena Istra and the local plaintiffs.

Injunctive relief for future actions based on the EIA permit was requested due to likely harm to health and livelihood of the local population, and due to likely damages the investors would suffer if they proceeded with the investment and the EIA permit is revoked.

The decision on the injunctive relief is still pending. The court sent a law suit to the Ministry for an official answer to the charges raised and once this answer is obtained the first court date can be expected (end of 2012, beginning of 2013).

The permit was challenged on five main points, leaving the possibility to raise other points of fact and/or law during trial:

1. Building of new 500 MW unit which will replace the existing 125 MW unit cannot be treated as reconstruction and extension but is in fact a new facility. This is important because of the competent authorities' interpretation that the ban on coal fired power plants in power in Croatia refers only to new projects and not to the reconstruction and the extension of the existing ones;

2. Spatial plans cannot be overruled by "free interpretation" by the competent authorities and existing procedures of changing the spatial plans must be adhered to. This is important because EIA can be conducted only for projects in conformity with spatial plans;

3. Point of law:

The EIS for Plomin claims that it has assessed five different alternatives for the firing of coal (PC, FBC, Oxy-fuel, IGCC, SCPC). This does not meet the requirements of choosing between alternatives in terms of Article 5/3 of the EIA Directive and in terms of Annex IV of the same Directive (i.e. the relevant provisions of Croatian law). Our claim is - partly based on document "Guidance on EIA - scoping", European Commission, June 2001 - that assessing alternatives should mean opting for the alternative which is environmentally least cumbersome ("taking into account the environmental effects") but which is apt to produce desired outcome of the project in question (in this case the production of electricity).

To enable that, the EIS should not only assess the different technologies for one type of facility (in this case for coal-fired TPP), but rather assess different types of facilities (e.g. fueled by gas, biomass, oil...) apt for the achievement of the same purpose (in this case electricity production).

This legal disjunction was drafted in the following way:

A) Is investor free to choose the type of facility to his own liking? In this case the competent authority would just have the mandate to say whether the facility/technology chosen is environmentally acceptable or not,

OR

B) Is investor obliged to request impact assessment for the type of facility/technology which best meets environmental demands and is apt for achieving the purpose of the investment (electricity production)? In this case the competent authority would need to assess whether the project at question is the one best meeting the "cocktail of demands" such as health impacts, environmental impacts, the availability of the technology, the price, *et cetera*;

4. The question of facts:

- inappropriate assessment of potential health impacts,
- inappropriate assessment of potential environmental impacts,
- inappropriate assessment of cumulative effects in relation to existing pollutants in the area;

5. Procedural mistakes

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