

ASSESSMENT OF CLIMATE IMPACTS IN THE EIA PROCESS AND THE ROLE AND PRACTICE OF THE SCREENING STAGE IN MINING ACTIVITIES – COMPARISON OF CZECHIA, SLOVAKIA AND POLAND

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1. Introduction

The European Union has been gradually integrating climate considerations into various areas of EU law (climate mainstreaming), including development and land-use planning. The environmental impact assessment (hereinafter “EIA”) plays a crucial role in environmental protection within this sector. Therefore, the incorporation of climate change-related criteria into the assessment by Directive 2014/52/EU (amending Directive 2011/92/EU, hereinafter the “EIA Directive”) was a natural development in light of the EU’s political and legislative direction in 2014. Member States should have transposed the new directive into their national legislation by May 2017 and, since then, all projects subject to the EIA process should have been evaluated from the climate change perspective as well.

As mining activity has a long history in European countries, the significance of its environmental and climate impact is undeniable. Such activity can last for decades, and its impacts, whether negative or positive, may be long-lasting. Conversely, the consequences of climate change may also significantly affect mining activities. Hence, mining projects generally fall within the scope of the EIA process, and climate change implications should form part of their assessment. However, are climate considerations being thoroughly implemented in practice? And does practice differ among particular Member States within the mining sector?

2. Methodology and scope

To examine and compare actual practice within the EIA process, three Member States subject to the EIA Directive were selected. Czechia was chosen naturally because of the author’s background, and it was sensible to choose Member States in close geographical and legal proximity so that the basic conditions would be broadly comparable. Accordingly, Czechia, Slovakia and Poland were selected for the qualitative analysis and the subsequent comparison presented in this article.

The analysis of the selected Member States’ approach to the assessment of climate considerations within the screening stage of EIA is based on mining projects assessed in the period from 1 September 2023 to 1 September 2025: 25 projects in Czechia, 23 projects in Slovakia and 10 (out of 28) projects in Poland. All of these projects are categorised as mining operations, or are designated by specific mining activities according to the relevant legal definitions.

Further, all of these projects fall within the category of projects listed in Annex II to the EIA Directive, on the basis of which Member States may determine whether such projects should be made subject to a full EIA assessment. The screening stage is an essential phase of the EIA process, because it ensures that a full EIA is carried out only for projects with potentially significant impacts on the environment. At the same time, this stage performs a gatekeeping role. Where examination at this stage is inadequate, projects with potential impacts on the environment and climate may proceed without any measures addressing or mitigating those implications. For these reasons, only projects whose assessment was concluded at the screening stage were selected for analysis.

It is worth noting that the Czech and Slovak EIA/SEA databases are well structured, transparent and user-friendly. The same cannot be said of the Polish database, which is not accessible outside Poland and, even when accessed from Poland, does not contain all of the relevant project documents. The list of Polish projects assessed during the relevant period was obtained from the official database with the invaluable assistance of Dr Filip Nawrot (Uniwersytet Śląski w Katowicach). Nonetheless, that database does not provide the related documents. Documentation for 10 Polish projects therefore had to be found through other publicly available sources, while documents for the remaining 18 projects were not accessible at all. Accordingly, the examination of Polish projects covers only about half of the projects from the relevant period, which may affect the overall evaluation. At the same time, this lack of transparency indicates significant shortcomings in Polish practice from another perspective.

3. Legislative framework

The EIA Directive lays down the conditions and objectives for conducting EIAs of public and private projects defined by type and divided into two categories (Annex I and Annex II to the EIA Directive). As it is a directive, Member States retain a degree of discretion when transposing it into national legislation, especially, for the purposes of the present analysis, in determining how and on what grounds an Annex II project may be made subject to EIA. They may make such determination through a case-by-case examination, by thresholds or criteria set at national level, or through a combination of both methods. Individual national EIA acts may therefore differ slightly. Even so, some elements of the directive remain fixed, namely the requirement to assess a project's impact on climate (mitigation) and the project's vulnerability to climate change (adaptation).

3.1 Czechia

Under Czech national legislation, Act No. 100/2001 Coll., on environmental impact assessment and on amendments to certain related acts (hereinafter the

“Czech EIA Act”), essentially mirrors the EIA Directive. Climate considerations, both mitigation and adaptation, form a mandatory part of project documentation (notifications) and the assessments carried out by state authorities. The screening stage is governed by several criteria and sub-criteria, including project characteristics (among them the risks of accidents and disasters caused by climate change), project location, and the characteristics of the presumed impacts of a project on the population and the environment. Types of project are listed in Annex 1 to the Czech EIA Act and divided into two categories (subject to a full EIA or to screening) according to specified thresholds. Finally, there is a Czech methodological guideline specifically addressing climate considerations in EIA.

Mining operations correspond to activities listed under numbers 77–82. Activities under numbers 77–79 are assessed in the EIA process according to a specific minimum threshold. If that threshold is met or exceeded, the activity is subject either to screening or to a full EIA assessment, depending on the category in which the threshold is placed. Activities that do not meet the thresholds are not necessarily subject to EIA, subject to certain exceptions, but the competent state authorities may still require screening of the project’s impacts. Finally, activities under numbers 80–82 have no threshold and are always subject either to screening or to a full EIA assessment according to the symbol (“x”) placed in the relevant category.

3.2 Slovakia

Act No. 24/2006 Coll. on environmental impact assessment and on amendments and additions to certain related acts (hereinafter the “Slovak EIA Act”) transposes the EIA Directive in a manner very similar to its Czech counterpart. Mitigation and adaptation aspects form part of project documentation as well as the subsequent assessment of projects. According to Annex 10 to the Slovak EIA Act, the criteria for the screening stage are built on similar foundations: the nature and scope of a project, including the risks of accidents and disasters caused by climate change, the project location, and the significance and characteristics of the presumed impacts. Types of project are again divided into two categories (subject to a full EIA or to screening) depending on the thresholds laid down in Annex 8 to the Slovak EIA Act. Lastly, there is no specific methodological guidance on climate considerations in EIA, although the general methodological guidance for state authorities conducting assessments within the EIA process does contain some references to climate considerations.

Mining operations are defined in the third section of Annex 8 as nine specific activities which are subject to EIA where the relevant threshold is met or exceeded, similarly to the Czech EIA Act. In five cases, no thresholds are set and such activities must always be assessed either at the screening stage or in the full EIA process according to the relevant category. As regards mining activities that do not

meet the thresholds, the state authorities decide whether such activities are subject to EIA in proceedings initiated either *ex officio* or on the basis of a reasoned written motion submitted by an individual.

3.3 Poland

In Poland, the Act on access to information on the environment and its protection, public participation in environmental protection and environmental impact assessments (hereinafter the “Polish EIA Act”) broadly mirrors the EIA Directive, much like the Czech and Slovak EIA acts, and mitigation and adaptation aspects form part of both project documentation and project assessments. There are no specific statutory criteria for the screening stage; nevertheless, the Regulation of the Council of Ministers of 10 September 2019 on types of projects that may have a significant impact on the environment lists project types together with the corresponding thresholds. Finally, there is no official methodological guidance on climate considerations in EIA, although a methodological guide on this issue has been prepared by Instytut Ochrony Środowiska – Państwowy Instytut Badawczy.

The Polish EIA Act does not contain a definition of mining operations. However, the Regulation of the Council of Ministers of 10 September 2019 on types of projects that may have a significant impact on the environment divides individual mining activities into two categories: projects that may have a potentially significant impact on the environment (and are therefore subject to screening, numbers 40–42) and projects that may always have a significant impact on the environment (and are therefore subject to a full EIA assessment, numbers 24–28). These mining activities are complemented by thresholds, specific areas or special conditions that must be met for the activity to be subject to EIA. In cases of cumulative impacts or particular changes to existing projects, projects that would not individually meet the thresholds may also be made subject to screening.

4. Comparison of Czechia, Slovakia and Poland

The analysis focuses primarily on the assessments carried out by state authorities at the screening stage of the EIA process, although the project documentation (notifications) is also taken into account. Three main questions are examined:

What are the reasons for concluding the assessments (within the EIA process) in the screening stage?

What role do the climate impacts play in the assessments?

Are there any differences among the Member States? If so, what differed one state from another?

As regards question 1), all assessments of the analysed projects were concluded at the screening stage and, unsurprisingly, the main reasons for that conclusion

recurred in all Member States: the projects' impacts were deemed environmentally acceptable and, where negative impacts were identified, preventive measures were imposed. None of the assessments, however, explained where the threshold between environmentally acceptable and environmentally unacceptable impacts lies. In Slovakia, a number of assessments mentioned the absence of essential comments from the public as one of the reasons for concluding the EIA process, and in both Slovakia and Poland the assessments referred to the opinions of consulted authorities raising no essential objections.

As regards question 2), climate impacts played only a marginal role in the assessments. In most Czech and Slovak cases, the authorities merely reproduced the project notifications in relation to climate considerations. The assessments focused instead on microclimate and air-quality impacts, and only about half of them considered greenhouse gas emissions. Six Czech and five Slovak assessments contained no climate-related paragraph at all. Interestingly, four Polish assessments emphasised the project's positive impacts on the environment and climate change, whereas no Czech assessment and only one Slovak assessment did so.

Finally, as regards question 3), there were no major differences among the analysed Member States. Czech and Slovak assessments shared more similarities, particularly the near absence of any adaptation assessment, whereas the Polish assessments focused more on adaptation aspects, although one case completely omitted the mitigation dimension. In addition, one Czech assessment suggested no preventive measures even though climate impacts were identified, and one Slovak assessment highlighted positive impacts of the project on the environment. By contrast, four out of ten Polish assessments highlighted such positive impacts.

	REASONS FOR CONCLUDING THE ASSESSMENT IN THE SCREENING STAGE	ROLE OF CLIMATE IMPACTS IN THE ASSESSMENT	MAIN DIFFERENCES
CZECH REPUBLIC (25 PROJECTS)¹	Environmentally acceptable (regarding the individual natural components), imposition of measures preventing projects from causing further environmental damage	In most cases, the assessments copied notifications of the projects, however, only few projects were evaluated from the perspective of climate impacts ² (bigger focus on air, only few mentioned the GHG emissions ³), 6 assessments did not contain any climate considerations ⁴	Even if climate impacts were detected, no preventative measures were suggested ⁵ , no adaptation assessment in 19 cases ⁶

	REASONS FOR CONCLUDING THE ASSESSMENT IN THE SCREENING STAGE	ROLE OF CLIMATE IMPACTS IN THE ASSESSMENT	MAIN DIFFERENCES
SLOVAKIA (23 PROJECTS) ⁷	Authorities' opinions, environmentally acceptable, no essential remarks from the public, imposition of measures preventing projects from causing further environmental damage	Assessments mostly copied the notifications of projects, 5 assessments completely lacked any climate related paragraph, ⁸ bigger focus on microclimate and air impacts ⁹	Rare assessments of adaptation aspects (2 out of 23 projects) ¹⁰ , 1 assessment highlighted positive impacts of the project on the environment ¹¹
POLAND (10 PROJECTS) ¹²	Authorities' opinions, environmentally acceptable, imposition of measures preventing projects from causing further environmental damage	Bigger focus on emissions and the air impacts, ¹³ 4 assessments highlighted positive impacts of projects on the environment ¹⁴	Assessments (as well as the notifications of projects) dealt with the effects of negative impacts of climate change on projects ¹⁵

¹ JHM1861, ZLK1019, HKK1177, STC2774, STC2781, HKK1166, ULK1299, KVK605, PAK1011, ULK1292, STC2721, JHM1805, ULK1278, OLK985, JHM1800, OLK979, MSK2364, PAK993, ULK1256, ZLK1001, STC2611, KVK584, JHC1095, JHC1087, JHC1088 – https://portal.cenia.cz/eia-sea/view/eia100_cr.

² Examples of good practice can be found in STC2774, ULK1299, ULK1292, JHC1095.

³ For example, STC2781, PAK1011 or JHC1088.

⁴ HKK1166, KVK605, JHM1805, JHM1800, KVK584, JHC1087.

⁵ See ULK1256.

⁶ Only 6 cases touched upon the adaptation aspect – STC2774, ULK1278, ZLK1001, JHC1095, ULK1292, ULK1299.

⁷ Ložisko Veľká Čierna – Baranová (Žilina), Lietavská Lúčka (Žilina), Zberné naftové stredisko Brodské (Trnava), ZNS Gajary (Bratislava), Jelšava (Banská Bystrica), Kúty 50 a Kúty 51 – (Bratislava), Jelšava 2 (big bagy; Banská Bystrica), GTC 2 (Košice), Jablonica (Senica), Žarnov (Košice), Mierová (Bratislava), KSR Kameňolomy SR, s.r.o. – adaptácia ťažby (Rimavská Sobota), Pečovská Nová Ves (Prešov), KSR Kameňolomy SR, s.r.o. – kontinuálne pokračovanie ťažby (Rimavská Sobota, Husiná), GTK-1 Kalinčiakovo (Levice), Bratislava – Vračuňa (Bratislava), Čierne Kľačany (Čierne Kľačany), Horná Mičíná (Banská Bystrica), Zemplínska Široká a Sliepkovce 4 (Zemplínska Široká), Tunežice (Trenčín, Ladce), Láb v Plaveckom Štvrtku (Zmena č. 10; Malacky), Malženice (Trakovice), Kúty 48 (Kúty, Senica) – <https://www.enviroportal.sk/eia-sea/informacny-system>.

⁸ Lietavská Lúčka (Žilina), ZNS Gajary (Bratislava), Jablonica (Senica), Pečovská Nová Ves (Prešov), Zemplínska Široká a Sliepkovce 4 (Zemplínska Široká).

⁹ For example, Ložisko Veľká Čierna – Baranová (Žilina), KSR Kameňolomy SR, s.r.o. – adaptácia ťažby (Rimavská Sobota), KSR Kameňolomy SR, s.r.o. – kontinuálne pokračovanie ťažby (Rimavská Sobota, Husiná) or GTK-1 Kalinčiakovo (Levice).

¹⁰ Although briefly, these assessments deal with the adaptation aspects – Kúty 50 a Kúty 51 – (Bratislava) and Zberné naftové stredisko Brodské (Trnava).

¹¹ Jelšava (Banská Bystrica).

5. Conclusion

Climate mainstreaming is an important and necessary process for protecting the environment and the climate through EU law. Nevertheless, the qualitative analysis conducted in this article suggests that the practical implementation of climate considerations in EIA remains flawed. The majority of the selected mining projects were not thoroughly assessed from either a mitigation or an adaptation perspective. More “traditional” environmental factors received greater attention, while most assessments simply copied the project notifications concerning climate impacts and found those impacts environmentally acceptable. Similar patterns were identified in Czechia, Slovakia and Poland, albeit with mild differences. Overall, climate impacts received very little attention compared with other impacts and, where they were considered, negative impacts were mostly dismissed briefly without any need being identified to impose preventive measures. The analysis therefore shows that the practical implementation of climate considerations in EIA in Czechia, Slovakia and Poland still lacks substance and that a more thorough and detailed approach is needed.

About the author

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Abstract

This article examines the inclusion and assessment of climate considerations in environmental impact assessments of mining projects in Czechia, Slovakia and Poland. Directive 2014/52/EU required Member States to integrate both mitigation and adaptation aspects into EIA. The qualitative analysis presented here indicates that most of the selected mining projects were not thoroughly assessed from either perspective. Similar patterns were identified in Czechia, Slovakia and Poland, albeit with mild differences. The article therefore concludes that the practical

¹² Chorzewice Zawale I (Zakliczyn; Małopolskie), Kłodawa 13 (Bukowa/Brzostek; Podkarpackie), Bogdaj-Uciechów (Dolnośląskie/Wielkopolskie), Jaśniny Północ (Małopolskie), Ślubów (Dolnośląskie), Anna (Śląskie), Bystrowice (Podkarpackie), Niwiska Krasocińskie I (Świętokrzyskie), Wola Żyrakowska – Szacik (Podkarpackie), Żarków – Tarnówek (Dolnośląskie), Winiary I – Winiary IV (Małopolskie) – <https://www.gov.pl/web/bip> or <https://bazaos.gdos.gov.pl/web/guest/home>.

¹³ Chorzewice Zawale I (Zakliczyn; Małopolskie), Kłodawa 13 (Bukowa/Brzostek; Podkarpackie), Ślubów (Dolnośląskie), Anna (Śląskie).

¹⁴ Winiary I – Winiary IV (Małopolskie), Bystrowice (Podkarpackie), Kłodawa 13 (Bukowa/Brzostek; Podkarpackie), Wola Żyrakowska – Szacik (Podkarpackie).

¹⁵ Apart from Winiary I – Winiary IV (Małopolskie).

implementation of climate considerations in EIA still lacks substance and requires further improvement.

Key words

Environmental Impact Assessment; EIA screening; climate change; adaptation and mitigation; mining activities; Czechia; Slovakia; Poland.

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