

Case 7: Czatkowice Limestone Mine

Mining activity in complicated environmental and spatial conditions



This good practice case responds mainly to Social Licence to Operate (SLO) and Permitting.

Minland Good Practice Stream Topics:

G) Assessment of integration of social aspects and civil society involvement

Permitting

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Part 1: Case Overview

1.1 Executive summary

The Polish case study (“Czatkowice” Limestone Mine) addresses a good practice of smoothly and effective decision-making process in the field of obtaining a new mining licence and integration of social aspects and civil society involvement (SLO). In recent years works associated with the preparation of the area for mining (technical works related to forest clearing and removal of overburden) from a new deposit have been launched. The investment located across the area of approximately 50 hectares guarantees a possibility of extraction in the mine until 2060. Limestone products produced by Czatkowice Limestone Mine are mainly used by power plants and combined heat and power plants in modern flue gas purification technologies. The expansion of exploitation was related to the complicated environment and spatial conditions. Obtaining a new mining license required, among others: abolition of extraction ban in landscape park (the new part of deposit is located in park boundary), the changes of land use directions in local planning documents, conducting an environmental impact assessment and obtaining of decision on environmental conditions for conducting activities (environmental decision) and wide social consultations (SLO). **The results from the case study suggest that with proper internal and external conditions, it is possible to conduct mining activities in very complicated environmental and spatial conditions and that local authorities and the local community played an important role in this process.**

1.2 Overview of Key Good Practice Aspects and suggestions

Good Practice Aspect 1: Efficient and short permitting & licensing process in relation to obtaining new mining license

- **Element 1:** Conducting several proceedings in parallel in various institutions and complete and accurate elaboration of documents necessary for issuing decisions / permits.

Good Practice Aspect 2: Integration of social aspects and civil society involvement (SLO) - positive Company image and related social acceptance

- **Element 1:** CSR policy of Company (continuous support for employees, local organizations and local authority).
- **Element 2:** Good communication approach to stakeholders.
- **Element 3:** Successive reclamation of post-mining areas and minimization of the mining activities impact on the environment.

1.3 Mineral resource groups



Industrial minerals

Part 2: Case description

2.1 Case description

The Czatkowice deposit (Małoposka Voivodeship, southern Poland) was first extracted by the Germans in 1943. The extraction was resumed after the Second World War. In 1996, the Minister of Environmental Protection, Natural Resources and Forestry granted a mining licence for the extraction of carboniferous limestone from “Czatkowice” deposit (valid for 30 years). In 2002 Company launched actions (exploration works) aimed at expanding the limestone resources. The newly documented part of carboniferous limestone deposit extends to the north of the existing deposit and has area of 48 ha. In the Czatkowice Limestone Mine (now owned by the TAURON Group), works associated with the opening of new deposit took place in May 2015 . The investment located across the area of 48 hectares guarantees a possibility of extraction until 2060. The limestone products (sorbents) produced by the mine are mainly used by power plants and combined heat and power plants in

modern flue gas purification technologies. Currently, the Czatkowice Limestone Mine produces approximately 40% (available on the domestic market) of sorbents used for flue gas desulfurization. Extending the exploitation required solving many local environmental and spatial problems. They concerned the presence in the mine's surroundings: landscape park (the new part of the deposit is located at the park's boundary), natural reserve, Natura 2000 area, Monastery Complex and drinking water intakes. Landscape parks (together with national parks, nature reserves and Natura 2000 areas) are the most important surface forms of nature protection in Poland. The list of prohibitions, that can be established within each of them, is included in the Nature Conservation Act. However, detailed guidelines in this regard are determined by the regional assembly of province, in whose boundaries the given landscape park is located. Starting the mining activity by Czatkowice mine, required many activities related to: the abolition of extraction ban in the landscape park, obtaining an environmental decision (together with Environmental Impact Assessment) and changes of local spatial planning documents. The area of new documented deposit is 48 ha including: national forests (with a protective function)- 29 ha, private areas (agriculture)- 19 ha. Before obtaining the mining license the direction of land use should have been changed, which required a change of local land use documents (Study of Conditions and Directions of Spatial Development of the Town and Commune of Krzeszowice and Local Spatial Development Plan for the planned mining area). At present, the priority direction of land use is industrial activity and planned industrial activity related to extractive of Czatkowice deposit. Nevertheless, in boundary of mining area of the Czatkowice mine, there are areas with other use directions (sports and tourism areas, forest areas and areas intended for afforestation, agricultural areas, and areas of single-family housing). Obtaining a new mining license lasted only 4 years. Considering the complex environmental and spatial conditions of the mine and the Polish legal regulations, this is a record short time.

While implementing the investment, the company simultaneously mitigates the environmental impact. These activities included, among others, the creation of approximately 33 hectares of a protective belt in the form of plantings, around the north-eastern border of the deposit extension, and establishing migration corridors for bats. Following the completion of the investment in 2060, the whole area of the excavation (both the current exploited area and a new one), i.e. approximately 120 hectares, will be reclaimed (forest direction).

2.2 Responsible institutions

- **Regional/provincial government** - Marshal of Małopolskie Voivodeship – issuing an exploration licence for a new part of deposit, issuing of mining license for new part of deposit, rescinding the ban of extraction of raw materials in this landscape park (amendment to Regulation of Kraków Valleys Landscape Park).

- **Regional government** - Regional Director of Environmental Protection in Kraków – opinion of Environmental Impact Report (one of elements of environmental impact assessment and obligatory element in obtaining a decision of environmental conditions for mining activity).
- **Local/community government** - City Council of Municipality Krzeszowice- amendment of local spatial planning documents: Study of Conditions and Directions of Spatial Development of City and Municipality of Krzeszowice and Local Development Plan (assignment of new direction of land use – mining).
- **Local/community government** - Mayor of Municipality (Krzeszowice)– issuing a decision on environmental conditions for new part of exploited deposit (obligatory element in obtaining a mining licence).
- **Regional government** - Regional Directorate of the State Forests - consent to lease of forest areas.

2.3 Case stakeholders

- **Local authority:** Changes of local planning documents- according to Polish law, local authorities are responsible for procedures to changing planning documents for commune).
- **Regional (province) authority:** Amendment to Regulation of Kraków Valleys Landscape Park- Marshal of Małopolskie Voivodeship rescinded the ban of extraction of raw materials in Kraków Valleys Landscape Park.
- **Local community:** According to Polish law, public participation is part of the planning procedure (everyone have opportunity to express the opinion of project of local planning documents) and obtaining an environmental decision).
- **General public:** Before the planned change of land use directions, the Company's authorities held a conversation with the local community (during village meeting) presenting investment plans.
- **Land owners:** As part of the project, the Company had to acquire title to land having a total area of approx. 81 ha.

2.4 Context

- The lack of a new mining license means the end of the mine's operations in 2022;
- Due to the fact that the exploitation of Czatkowice deposit has been going on for several decades, the local community (together with local authority) sees positive aspects related to mining activities in its commune; the mining activity allowed to obtain financial benefits, among others: from the sale of plots, taxes, fees for extracted minerals, as well as maintaining employment at the current level- employees are close neighbours (local benefits);
- Use direction of raw materials: "Czatkowice" limestone quarry provides, among others, limestone products (sorbents) to several largest power plants in the south-western part of Poland; sorbents produced by mine are mainly used by power plants and combined heat and power plants in modern flue gas purification technologies. The benefits of using these sorbents have a national importance- , owing to the mine products, it is possible, inter alia, to eliminate approximately 140 million of cubic metres of sulphuric acids. In this case the extraction of raw materials bring economic and environmental benefits for the country. In this case, the economic and environmental benefits of the country. And their value is greater than the directions of land use within the boundaries of the deposit (designated in the past in local planning documents).



Part 3: Case Evaluation

3.1 Impact achieved

- Actualization of local spatial planning documents (providing access to the deposit - protecting mineral resources) and abolition of the extraction ban in landscape park.
- Obtaining social acceptance for further mining activities (Social License to Operate – SLO).
- Extension of the mining license for the next 60 years.
- Maintaining current employment.
- Maintaining at the current level of production the most important product of the company (and important in the country level) - on an annual basis, owing to the mine products, it is possible, inter alia, to eliminate approximately 140 million of cubic metres of sulphuric acids.

3.2 Good Practice Aspects: Elements and their transferability

GOOD PRACTICE ASPECT 1:	
Efficient and short permitting & licensing process in relation to obtaining new mining license	
Key elements (of Good Practice Aspects)	Suggestions for Transferability (of Key Elements)
<p>1. The company's ability to process several cases in parallel and complete and accurate preparation of documents necessary for issuing decisions / permits.</p> <p>Obtaining a new license required the preparation of several documents and carrying out procedures in several different institutions (e.g. State Forests, regional authorities, local authorities, Regional Director of Environmental Protection). Good organization of work inside the Company allowed for several procedures to be carried out in parallel. A special team for the new concession was created in the company and various people were responsible for the special aspect of obtaining a new mining license. One sub-team was responsible for environment aspects - decision on the environmental conditions of mining operation (together with Environmental Impact Assessment), second sub-team was responsible for spatial aspects - purchase of land, changes in land use directions, changes in planning documents.</p> <p>Their task was to coordinate work and prepare appropriate documentation and contact the relevant institutions related to the case.</p> <p>This shortened the time of obtaining a license more than 12 months.</p> <p style="text-align: center;"></p> <p style="text-align: center;">INTERNAL SUCCESS FACTOR</p>	<p>Obtaining a new mining concession is a long-term and multithreaded process (especially if the mining operation will be carried out within the boundaries /in the neighbourhood of valuable natural areas). Each mining company should plan work organization (related to obtain a license) appropriately and set a time frame (taking into account especially the legal conditions of country and/or region). All activities in this area should start early enough (especially when the date of expiry of the old license is approaching) and should be preceded by a plan of preparation of all documents (plan well the sequence of formal and administrative activities (including the development of relevant documents)).</p> <p>Persons responsible for the task (or appoint an appropriate team together with team leader) should be designated - they will coordinate the work and be responsible for its results.</p>

GOOD PRACTICE ASPECT 2:

**Integration of social aspects and civil society involvement (SLO) -
positive Company image and related social acceptance**

Key elements (of Good Practice Aspects)	Suggestions for Transferability (of Key Elements)
<p>1. CSR policy of Company: the Company successfully combines business activities with all activities for the benefits of the local society. The company actively and responsibly participates in the local community life by engagement in solving the local problems and supporting many local initiatives (e.g. permanent support for orphanages, nursing homes and foundations for disabled people, organization (every year) of Children’s Day and World Earth Day in Krzeszowice, occasional family picnics, repairs of local roads and numerous churches in the commune, organization of the “Good Neighbour” competition with financial prizes). Many years of experience and a number of initiatives have led the Company to be one of the most important entities acting for the benefit of the local community.</p> <p style="text-align: center;"></p> <p style="text-align: center;">INTERNAL SUCCESS FACTOR / STRATEGIC CHOICE</p>	<p>The guarantee of success for mining activities (in area with complicated environmental and spatial conditions) is constant support for local organizations, authorities and local community. It is also important to create good working conditions and professional development. This is especially important if the company’s employees come from the local community (this is the case here). It is important that the pro-social activities of the Company are voluntary and carried out on their own initiative. They must be addressed to a wide group of recipients (e.g. women / men, adults / children, authority/community etc.)</p>
<p>2. Good communication approach to stakeholders (communication from early stages with different groups of stakeholders). Before the planned change of land use directions, the Company’s authorities held a conversation with the local community (during village meeting) presenting investment plans. In the next steps, an external company (after obtaining corporate consent) held talks with proper owners of plots located in the boundaries of extended deposit. They were presented with financial proposals related to the purchase of plots. The negotiation process was successful - all owners agreed to the purchase of land by the Company. Talks and negotiations with local and regional institutions were conducted always with the participation of the Chairman of the Board (the highest representation).</p> <p style="text-align: center;"></p> <p style="text-align: center;">INTERNAL SUCCESS FACTOR</p>	<p>Following this case, suggestions to obtain similar elements in other contexts should involve: properly and early on recognize the needs of the widest possible groups of stakeholders who may be involved in the case (local authorities, local community, prospective mine neighbours, landowners, etc.). Stakeholders should be made aware of and know in advance the benefits and costs related to starting mining/processing operations. Be open to discussions and proposals from individuals as well as groups / organizations / communities); meet representatives of all groups and do not avoid confrontation.</p>

GOOD PRACTICE ASPECT 2:

Integration of social aspects and civil society involvement (SLO) -
positive Company image and related social acceptance

Key elements (of Good Practice Aspects)

3. Reclamation of post-mining areas and minimization of the mining activities impact on the environment.

Various direction of land use in boundaries of mining area of Czatkowice Mine (and in his surroundings) (sports and tourism areas, forest areas and areas intended for afforestation, agricultural areas, and areas of single-family housing) require effective and integrated activities in the area of mining land reclamation and minimization of environmental impact. Reclamation of extraction areas is successive and accordance with the accepted direction of the reclamation.

The Company, in connection with mining and processing activities, **takes actions to improve the quality of the environment in the mine boundaries and its surroundings**, among others:

1. Limitation of dust emission as a result of high-efficiency dust extraction installations
2. Building of sound absorbing panels along railway tracks and equipment of initial processing of raw materials
3. Sustainable water and wastewater management
4. Planting trees and shrubs acting as sound absorbing panels
5. The implementation of pro-ecological investments in accordance with the programs established for the Małopolska Voivodeship, mainly related to air protection.

These activities are not obligatory (they are not covered by the decision on environmental conditions of mining operation), their initiator is a Company. Activities are financed from own funds of the mine.



INTERNAL SUCCESS FACTOR / STRATEGIC CHOICE

Suggestions for Transferability (of Key Elements)

Gradually carry out reclamation processes, especially if your activities cover vast area in the vicinity of areas with high potential and natural significance. Gradually minimize the negative effects of your activity (mining or/and processing). This will avoid additional costs and will have a good impact on the company's image. The company will be better perceived by both the local community and local authorities as well as institutions responsible for environmental issues in the region (and at the same time taking part in the process of mining license obtaining)

These activities should be voluntary, not obligatory.

