

Environmental and other effects of mining and transport - CCC/281 ^[1]




Abstract

Historically coal mining is associated with damage to natural landscapes and the rise and fall of the mining communities which grow up around mine sites. But the sector has grown and most mining companies now act with forward planning and responsibility to minimize potential negative effects on mining land and, in some cases, to leave behind a positive legacy. This study addresses the environmental effects of coal mining and related transport, reviewing the potential environmental impacts arising at all stages of the coal chain. The report summarises the relevant issues in the major coal-producing nations. Whilst for some regions the main concern is environmental, social and political issues dominate in others. Potential environmental impacts from emissions of dust, water, and local land use are reviewed, highlighting emerging techniques to limit and reduce negative effects. Automation and remote control of larger, more dangerous equipment

reduce the risk for mine workers. Many of the major coal mining companies use corporate and social responsibility not only to improve the working conditions of miners on site but also to reach out into the local population to improve the lives of all those involved in the wider communities which grow and establish around mine sites. Examples of best practice for mine operation, transport logistics, and dust control are included to demonstrate the potential for improved performance and environmental sustainability in mining practices. Socio-economic impacts, as well as regional employment and community engagement, are also covered. Permit bonding is required in most regions to ensure that the cost of reclamation is included in the mine plans. However, problems remain at abandoned mine sites in some less developed regions, and funding may be required to complete the reclamation process. By nature, coal mining involves significant, but temporary, intrusion into the land above and around the coal seams, and along the delivery chain. However, with appropriate environmental impact assessment and responsible working practices, this intrusion is minimized and ameliorated.

Attachment

Size

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