

Mine Infrastructure Development in Developing Countries

Globally, corporate social responsibility is on the rise. Governments are strengthening regulations, and financial institutions are adopting procedures and enacting policies to ensure that companies they finance are working to reduce and manage the environmental and social impact of their operations on the communities in which they operate.

Many financial institutions are signatory to The Equator Principles which serve as benchmarks to manage social and environmental issues in project financing all over the world. As participation increases, so too does pressure on borrowers, such as mining companies, to demonstrate how their operations and practices have a net positive impact on society and the environment.

These issues can be seen to delay development and add to the costs of the mine. In developing countries, infrastructure is one of the largest cost items - power, water, and transportation (roads, rail, ports). Mines are typically located in remote regions that lack the infrastructure, which can be costly to install, operate, and maintain. Poor infrastructure can deter investors and render projects unfeasible.

Wardrop is pioneering a creative approach that can lower the capital, operating, and maintenance costs of mine infrastructure, while meeting the corporate social responsibility objectives. For instance, establishing local utilities that supply communities with excess power and water from the mines corresponds with the mandate of important development stakeholders such as the World Bank Group, and other bilateral aid and development finance agencies. Partnering with such institutions by including a social component into mine infrastructure design can provide an important cost savings through co-financing.

Our experience spans some 40 years, and includes the development of water boards to manage water systems that we designed and commissioned in small towns in rural Africa. As well, in partnership with a Canadian power utility, Wardrop has managed power distribution in several large African cities. We recently designed and constructed a transmission line in the Yukon Territory in northern Canada. It delivered cheaper hydropower to a mine site and a local community and offset the cost and potential greenhouse gas emissions of expensive diesel generation.

Our expertise helps our clients achieve net positive social and environmental impacts and financial savings without sacrificing operational requirements.

