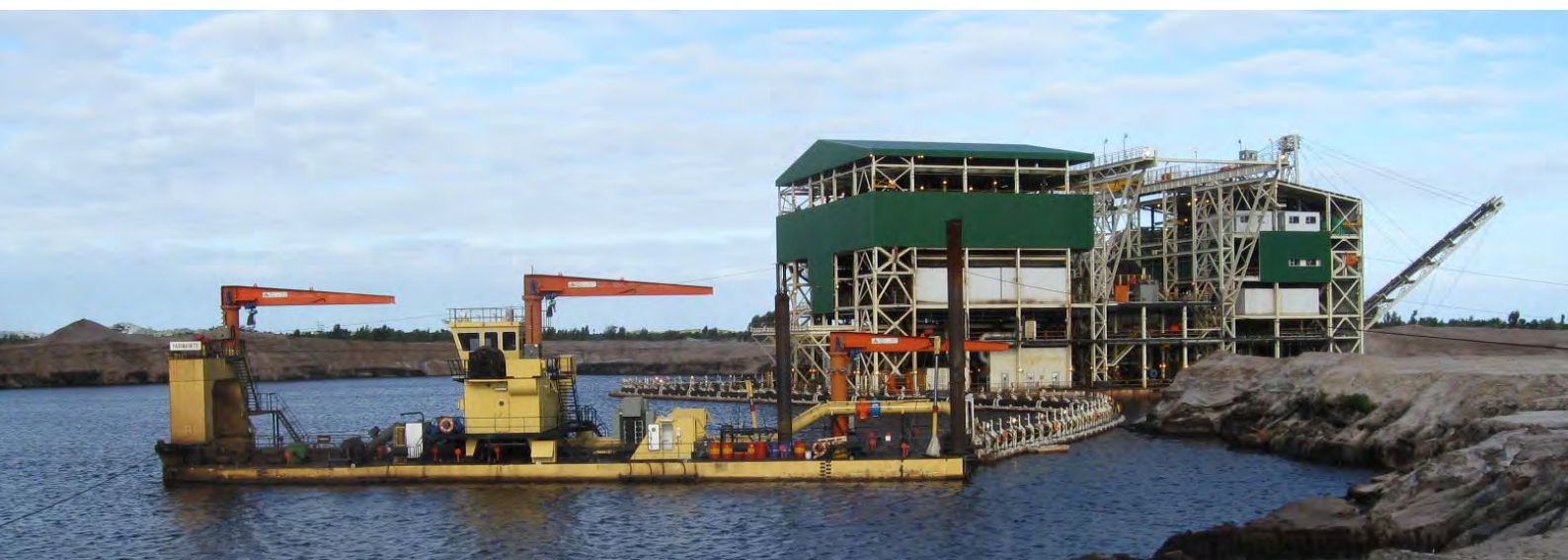


## QIT Madagascar Minerals SA (QMM)



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*The dredge and the wet plant on the Mandena deposit. In order to separate ilmenite and zircon from other minerals contained in the sand, QMM uses spirals as well as electrostatic and magnetic separators, a process that requires no chemical treatment of minerals.*

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### History of the project

We started geological research in the Fort Dauphin region in 1986 and we initiated preliminary social and environmental studies in the late 1980s. After many years of negotiations, we concluded a Convention of Establishment with the government in 1998 defining the main rights and obligations of both parties for the duration of the project.

In 1998, we undertook an evaluation of the social and environmental impacts with a report submitted to the Government. Following extensive reviews by the National Office of the Environment (ONE) of Madagascar, we were granted an environmental permit in November 2001. This permit includes a series of social and environmental obligations to which we must comply with at every stage of the project.

From 2002 to 2005, we conducted a final evaluation of the feasibility of the project, which allowed the taking of a positive investment decision on August 3, 2005.

Mining operations began in December 2008 and the first cargo of ilmenite left the Port d'Ehoala in May 2009.



*The weir prevents the occasional upwelling of salt water in the Ambavarano Lake. The structure lets fishermen boats as well as fish through.*



### Main economic impacts

There are 75 million tonnes of ilmenite in the Fort Dauphin deposit, sufficient for more than 40 years of production. Our main economic impacts include, among others:

- job creation. We have created over 4,000 jobs during the years of construction, more than 600 direct jobs and some 2,000 indirect permanent jobs during the production phase.
- taxes, mining taxes and royalties. We will pay, for example more than US \$ 15 million of tax to the government once the Company will operate at full capacity.
- economic development programmes that strengthen the capacity of local suppliers and contribute to developing a favorable investment climate.
- environmental programmes whose purpose is a net positive impact on biodiversity.
- social programmes aimed at improving households well-being and quality of life.
- the Port d' Ehoala contributing to opening up the Anosy Region and allows the movement of goods at a competitive cost.

We seek to Public/private partnerships in our social, economic and environmental initiatives. Our objectives are to minimize the negative impacts of our activities and to maximize the benefits for sustainable development.

**Rio Tinto is a leading international mining industry. QMM is a member of the Rio Tinto Group. The Malagasy Government, represented by the Office of National Mines and Strategic Industries (OMNIS) owns 20% of shares.**

### The major components

The mining and port facilities, for which an investment of 940 million USD was necessary, started in 2006 for a period of more than 3 years. The construction work undertaken primarily concern:

- The construction of a public utility deep-water port at Ehoala peninsula, including a breakwater, docks, buildings and other facilities to operate the Port and bottom dragging to facilitate the access of large vessels to the docks;
- The establishment of mining facilities in Mandena sector including, among others:
  - a dredge and a wet plant for the extraction of minerals sands
  - a mineral separation plant,
  - the buildings and other facilities for the exploitation of the deposit and administration of the company
- The construction of a new road between the mining facilities and the Port d' Ehoala;
- The installation of a power plant capacity and fuel depots for the needs of mining and operation of the port;
- The construction of a weir, structure to ensure the fresh water supplies required to operate and support rehabilitation;
- The construction of staff accommodation.

### Complementarity of QMM to Rio Tinto Iron and Titanium Canada

The Ilmenite from Madagascar is shipped to the QIT Reduction plant in Sorel, Canada, to be transformed into a slag with more than 90% of TiO<sub>2</sub>. The reception and the treatment of ilmenite from Madagascar required the setting up of new equipment for a total additional investment of US \$ 195 million.

The treatment of the Madagascar ilmenite in Sorel will allow QIT to strengthen its competitive position in the titanium dioxide market by producing a new product (slag with more than 90% of TiO<sub>2</sub>) in the chloride sector market. Moreover, this additional volume of ilmenite will allow operation at full capacity of Sorel QIT facility and an increase of efficiency.