IFM Integrated Clean Energy Project – Main stakeholder Consultation

The Gold Standard Main Stakeholder Consultation is based on a set of additional criteria in addition to UNFCCC requirements. Full documentation of the project activity is publicly available for two months prior to conclusion of validation at https://www.southpolecarbon.com/dev-gold.htm, including:

- *The original and complete PDD*
- *A non-technical summary of the project design document (in appropriate local language)*
- *Relevant supporting information*

During the consultation period, stakeholders are invited to submit their comments and questions related to the project activity. For this purpose an online comment form is available at https://gs1.apx.com/myModule/rpt/myrpt.asp

- ***A non-technical summary of the project design document***

International Ferro Metals is an integrated ferrochrome producer listed on the London Stock Exchange. The company operates a state-of-the art integrated chromite mine and processing facility to produce ferrochrome (FeCr) at the Buffelsfontein site located approximately 10km east from Mooinooi close to the N4 highway linking Brits and Rustenburg in the North-West Province of South Africa.

The facility incorporates two closed electric furnaces, which are capable of producing approximately 260,000 tonnes of FeCr a year. Inherent in the FeCr process is the generation of significant quantities of furnace off-gases, including a substantial percentage of carbon monoxide (72% CO). In the current plant design these gases are flared and emitted to atmosphere as carbon dioxide (CO2).

The purpose of the proposed project activity of AAP Carbon is to utilise waste furnace off-gas as a source of energy to generate clean electricity and contribute to lower greenhouse gas emissions by replacing fossil fuel-based electricity from the South African national grid.

The gas will be fed from the gas conditioning system to a bank of ten internal combustion engines each capable of generating up to 2MWh of electrical power, depending on the relative levels of CO and H_2 present in the gas. The installed capacity of the combustion engines is therefore 20MW with an operational capacity of up to 19.06MWh, where approximately 0.94MWh is consumed by parasitic load of the project activity during stable operation.

All electricity generated will be supplied to the IFM plant, thereby providing a green energy alternative to the predominantly coal-fired electricity currently being supplied through the South African national grid.

Sustainable Development:

In the view of the project participants the proposed project activity assists South Africa in achieving its sustainable development criteria by:

• Creating significant local employment opportunities, particularly during the construction phase, but also during the ten year operating period;

• Generating waste gas based electricity and consequently having a positive impact on the use of nonrenewable resources by replacing fossil fuel based generation capacity;

• Lowering national green house gas emissions by displacing fossil-fuel based electricity generation from the national grid.

• Creating an Independent Power Producer and therefore providing diversity in the electricity supply in accordance with the White Paper on the Energy Policy of South Africa (1998)1; and

• Transferring cutting edge modern technology to South Africa.

Environmental Impacts:

The IFM Integrated Clean Energy Project conforms to the National Environmental Management Act of 1998 (Act 107 of 1998) (NEMA) principles of sustainable development. The project activity will take place on the existing IFM-SA Buffelsfontein industrial site, on unused open land. This project is therefore incorporated under the original Environmental Impact Assessment and Management Plan (EIA) for the site.

Much careful thought and planning has been committed to ensure that the project will have minimal negative environmental impacts:

• There will be no disturbance of any ecosystem or loss of biodiversity through the project activity. The selected site is on the existing industrial property between existing operational units with no active ecosystem or biodiversity constraints.

• There will be no pollution or degradation of the environment through the project activity.

• There will be no disturbance of landscapes and sites that constitute the nation's cultural heritage through the project activity as the selected site is within the boundary of the existing IFM industrial complex.

• The project activity will not generate any operating waste. A small quantity of inert building rubble will be generated during construction, which is normal for this type of project. The building rubble will be removed and used as filling materials in a nearby old opencast on the IFM property (this has been included in the EIA and approved by the DME) or disposed in an approved landfill.

• The project activity will be integrated with the existing sewage pipelines, storm-water management system as well as the existing solid waste management system of IFM-SA.

• A risk averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions. This will be ensured through scrutiny and monitoring by EIA consultants used by IFM for the overall plant development. Furthermore, a monitoring methodology forming part of the UNFCCC criteria for CDM registration will be implemented and adhered to during operation.

• There will be no negative impacts on the environment and on people's environmental rights through the project activity.

Overall, the project is expected to lead to an improved environmental situation of the region. Decreasing carbon emissions will also assist in the global effort to combat climate change and its severe expected environmental, social and economic repercussions in South Africa, and in many other countries throughout the world.