



# The eThekweni Western Aqueduct Hydro Electricity Generation CDM Project, Durban, South Africa



## CDM Project Summary - June 2010

The Project entails the installation of hydro electric power generation turbines at two separate points on the new 73km Western Aqueduct Bulk Water Supply Pipeline that is being constructed within the eThekweni Municipality of KwaZulu-Natal, South Africa .

**Project Location** : eThekweni Municipality, KwaZulu-Natal, South Africa

### Project Objectives

- Contribute towards offsetting of the **carbon footprint** for hosting the **2010 FIFA World Cup** in Durban
- "Carbon" Capacity Building
- **Financial return** through the sale of Carbon Credits and electricity generated
- Provision of **renewable energy**
- **Job Creation** and **sustainable development**
- Combating of global **climate change**
- **Technology Transfer**

### Project Role-players

- Project Developer:
- **eThekweni Environmental Planning and Climate Protection Department**
- Project Partner:
- **The eThekweni Municipality eThekweni Water and Sanitation (EWS) Unit**

**Average # of CERs per Year : 34 407**

**Total # of CER's (14 Years) : 481 699**

**Average kWh Electricity Output Per Year : 15 937 000**

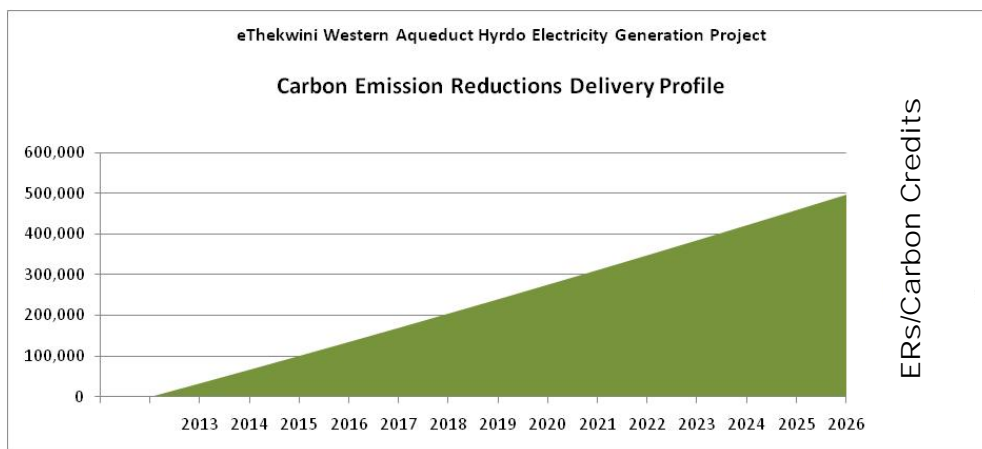
**Total kWh Electricity Output (14 Years): 223 118 000**

### Job Creation

#### Hydro Electric Power facilities (No.):

Engineering Technician x 1  
Plant Operators x 2  
General Workers x 2

Additional jobs will also be created for the ongoing environmental monitoring of the project, CDM processes for ongoing registration of the CER's, carbon transaction administrator and project manager / champion



### Project Technologies

The proposed hydro electric power installation at each site will comprise the turbine penstocks and turbines (possibly vertical shaft Pelton wheel type) directly coupled to the generator).

*\*please note that all timeframes / calculations are based on the assumption that plant commissioning will take place in the third quarter of 2012. This date is dependant on a range of factors including capacity within the municipal departments responsible, environmental authorisations, CDM registration and the signing of PPA and ERPA.*