

Kinoya Sewerage Treatment Plant GHG Emission Reduction Project, Fiji



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KSTP CDM PROJECT

What is happening?

Answer-

- A METHANE GAS CAPTURE AND FLARING PROJECT TO REDUCE GHG .

Benefits

- Monetary Benefits for selling Carbon Credits.
 - Clean technology

What are the advantages and disadvantages of this project?

- **Advantages**

- . Revenue Generation

- . GHD reduction

- . Pilot Project for future

- . Can get more sponsor

- **Disadvantages**

- . Penalty when we breach conditions in CERPA

- . Poor operation and maintenance of the project will lead to failures

Who are Involved ?

- **WSD/WAF** - as the operator or project entity
- **WSD Tech Team** - as advisors and monitors
- **ADB** - as the consultant for WSD/WAF in design of the PDD
 - contact to the CDM executive board in UNFCCC
 - our loan provider and the purchaser of CER credits
- **Beca Erasito** - Design of the flare and Augmentation iv Project in Kinoya STP
- **TechnoFab** - As the contractor to Beca Erasito for completing Augmentation iv and Installation of the Enclosed flare system for CDM and commissioning.

CDM Assessment

- **CDM sectoral scope**
- Waste handling and disposal - 13
- **Scale of project**
- Small Scale
- **Source of emission reductions**
- Methane recovery and flaring from anaerobic digestion of wastewater sludge
- **Baseline scenario**
- venting the methane in wastewater & sludge into atmosphere.
- **Approved baseline methodology**
- Type III.H - Methane recovery in waste water treatment (III.H./Version 16) and
- **Estimated annual emission reductions**
- 22469 tCO₂e (Average)

What is the status of the project so far the chronology of events?

- 1) ADB and WSD identified Open Flare for GHG reduction as CDM project
- 2) ADB started negotiations to carry out feasibility study but, this was shelved due to political upheavals
- 3) 2008 Environment unit within WSD was formed
- 4) Negotiations started 2008 and HOA was signed.
- 5) First team consultancy for CDM done Nov 2008
- 6) Work order signed before May 1st
- 7) CERPA signed in Dec 4 2009 for CER 2010-2012
- 8) Validation undertaken on March 2010
- 9) Installation and commissioning to be done in August 2011
- 10) expect carbon credits generation after August 2011
- 11) Future Carbon Fund HOA signed on Oct 2010 for 2013 to 2020
- 12) CERPA documents for FCF will be signed after cabinet approval
- 13) **The project has passed through “Completeness Check” & “Information & Reporting Check” and is up for “Registration” on UNFCCC website.**

When are we seeing the Funds and how much ?

For the 2010 to 2012 CER s we will see it when registration is completed and monitoring carried out for Issuance.

We expect approx Fj \$ 906113.45 as gross income .

The Capital and Operations Cost is Fj \$635007.47

The benefits after costs is **Fj\$ 271105.98**

The Project Identification Number for Kinoya at the UNFCCC site is 4552.

The enclosed flare will be commissioned in

August 2011 and we will receive the PIA.

What happens for 2013 to 2020

CERs ?

- The WSD/WAF has opted for **future carbon fund** and ADB will be purchasing our CERs.
- The ADB will buy the CERs from 2013 to 2020 and the HOA was signed in OCT 2010. We are expecting the CERPA to be signed by July 2011.
- The Funds expected for the next 8 years would be Fj\$2774742.72 gross and the general cost will be FJ\$334763.54 .
- The benefit or net will be **FJ\$2439979.18**

Where else can similar Projects apply ?

- In other treatment plants which can produce methane.
- According to a UNFCCC source records in their office show that one projects has been registered by Fiji and Hydro projects in Vaturu and Wainakasou.
- Renewable energy projects
- Energy efficiency projects
- Agriculture and fossil fuel switching

Total Benefits

- APCF : FJ\$271105.98
- FCF : FJ\$2,439979.18

- APCF + FCF = FJ\$ 2,711085.16

Validation



Deliberations



The Project site and the methane capture dome in the background



Kinoya STP



SBR PLANT front view



Validation cont'd



DOE WITH VALIDATION TEAM



STAKEHOLDERS VIEWS



Cot'd



Questions to WSD Technical Staff



The Project site



Together we shall save the world
!!!!!!



Thank you for
your
contribution!!!