

Point 1:

The PDD does not provide strong evidences that the CDM was considered from project inception; although it states that “there is also sufficient evidence available in form of documentation clearly showing that the project promoter was well aware of carbon credits, and CDM incentive played a role in the decision taken by TGSML’s management in implementing the cogeneration plant. The documents have been produced to the validator on request”. However, these evidences are not attached, and the only evidence mentioned by the Validation Report is a “Board resolution dated 17/02/2000 referring to Mr. Samir Somaiya attending Seattle Conference of World Trade Organization (WTO) in November – December 1999 and resolution stating ‘benefits though CDM to be considered’ in implementation of bagasse based cogeneration power plant.”, which are also not attached. Since the project activity is requesting retroactive credits, strong evidences that CDM was considered from the beginning should be provided.

Response 1:

The following documents are enclosed towards demonstrating CDM evidence:

Content	Document enclosed
Evidence that Mr. Samir Somaiya, Executive Director of the Company attended the Seattle Conference of the WTO in 1999	TEXWATCH. Paragraph 4 - Copyright 2000, Time Inc, Fortune January 10, 2000 [Ref: Annex-1]
The Kyoto Protocol and CDM discussions in WTO	Seminar Note by Aaron Cosbey, Trade and Sustainable Development, International Institute of Sustainable Development [Ref: Annex-2]
Evidence that TGSML was aware of the carbon benefits from their GHG prevention project and the extracts of the meeting thereof	The Extract of the Minutes of the Meeting of the Board of Directors of The Godavari Sugar Mills Limited – meeting held on 17/02/2000 [Ref: Annex-3]

Tool for the demonstration and assessment of additionality; Step 0: para (b) Provide evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity. This evidence shall be based on (preferably official, legal and/or other corporate) documentation that was available at, or prior to, the start of the project activity. In our view, this second line clearly expects that the documentary evidences are with respect to the “start date’ of the project activity.

Point 2:

Also, while the PDD defines a project starting date of May 2000, the validation report refers to a stakeholder consultation held in January 1999. Similarly, the EIA dates from 1998 and the loan sanction by IDBI from October 1999. Thus the project may not fulfill the CDM requirements of starting after January 2000.

Response 2: Clarification on project starting date

The project starting date i.e. May 2000 refers to the 'approval of plant layout drawings' [Ref: Annex-4], subsequent to which the civil works began. As per the CDM Glossary of Terms, 'Starting date' indicates date at which implementation or construction or real action of a project activity begins. As the approval of civil works itself happened in May 2000, the project started construction after this date and therefore it can be inferred that the project starting date is post Jan 1 2000.

As per national environmental legislations in India, for the 24 MW cogeneration project of TGSML, environmental clearance was required to be obtained from the Ministry of Environment & Forests (MoEF), Government of India (GoI), this one of the very first approval required in order to proceed with the project:

Typically, steps involved in obtaining environmental clearance from MoEF, GoI includes:

- (a) Preparation of an Environmental Impact Assessment (EIA) report and submission to MoEF
- (b) Conducting 'Public hearing' (stakeholder consultation), which is mandatory for obtaining environmental clearance for the project activity under consideration
- (c) Appearing for MoEF meeting and clarifying the queries raised by the Expert committee

Stakeholder consultation basically termed as 'public hearing' is a part of the environmental clearance procedure. The environmental clearance is a long drawn process and it is not necessary that a project would be cleared at the end of it.

Therefore it can be inferred that the undertaking of EIA in 1998 and subsequently the stakeholder consultation in 1999 (or 'Public Hearing' as it is called) were pre-requisites to the project activity without which the real action/ construction could not begin. The EIA and public hearing therefore

were more of a compulsory/ mandatory environmental feasibility assessment of the project to decide on whether the project activity can be undertaken or not.

The IDBI loan sanction letter dated 26 Oct 1999 refers to 'in principle' acceptance to grant TGSML a Rupee Term Loan (RTL) not exceeding INR 4000 lakh (or INR 400 Million) however this is just a Letter of Intent (LOI) [Ref: Annex-5]. This LOI clearly indicates that TGSML needed to go through the 'Terms and Conditions' of the RTL document and inform IDBI on the acceptability of such terms and conditions. Further enclosed is one more document dated 23 November 2000 which clearly mentions that TGSML after going through IDBI's terms and conditions requested change in the 'Security Clause' of the RTL document which was agreed to by IDBI in this letter dated 23 Nov 2000 [Ref: Annex-6].

The actual date of opening account with IDBI for funds was 20 March 2001. The actual disbursement of loan from IDBI took place only in March 31st 2001 [Ref: Annex-7].

The IDBI loan agreement of INR 400 Million is only a part of the project cost and therefore TGSML's financial closure was not yet completed. The sanction of credit facilities from Andhra Bank for INR 190 million was dated 24-05-2000 [Ref: Annex-8] and the LOI for part finance of INR 150 million from State Bank of India (SBI) was dated April 9, 2001 [Ref: Annex-9].

As apparent from the above, the project feasibility assessments, to assess financial and project viability, were essential before any real action on the project could have been undertaken.

The assessment of financial viability (availability of funds) started in 1999 when IDBI was approached for loan and the process went on till 2001 (as evident from above referred documents) when SBI and Andhra Bank were approached.

As already mentioned in the additionally section of the PDD, there was conflict between lenders of the sugar mill project and lenders of the cogeneration project (they being different) on first charge on fixed assets at the time of loan sanctioning from IDBI...this right was with sugar lenders...As cogeneration lenders also wanted the first charge on fixed asset, the final settlement involving combined (both sugar and cogeneration lenders') first charge on total fixed asset took significant time...Due to the above reasons, despite the fact that a request for loan sanction of 74 crores was made to IDBI, only 40 crores were sanctioned.

In addition to the above, an assessment of project viability (including a study of project logistical requirements) was also required.

Based on the above two studies, the project zero date was planned to be 26 January 2000 (as evidenced in the equipment supply contract dated 5 Feb 2001) [Ref: Annex 10] that followed with 'bhoomi puja' (sacred ceremony of land) on 23rd March, 2000 [[Ref:Annex-11]] and approval from BSES on plant layout drawings to start civil works (real action) was obtained on 29th May, 2000.

For the project activity, the following is the chronology of events:

Date	Activity
26 January 2000	Planned 'Zero date' of project as referred to in the equipment supply contract document dated 5 Feb 2001
23 March 2000	Bhoomi Puja (a sacred/religious ceremony as is prevalent in India before any land can be subject to use) happened on March 23 2000 and no construction activity in India would ever start before this date
29 May 2000	Approval / comments on plant layout drawings
5 February 2001	The equipment supply contract, between TGSML and BSES Limited, was signed

Point 3:

In addition, the additionality argument is weak: by December, 2004 bagasse cogeneration capacity in India had reached 432.5 MW from 56 projects, most of which have not applied for CDM, showing that they are an economically attractive alternative and do not face prohibitive barriers. The project developers themselves state that they were the fourth bagasse cogeneration project in the state of Karnataka which supports this argument. In this context, the technological barrier is not credible. Similarly, the fact that consultancy contracts had to be awarded to set up the plant is common practice and cannot be seen as prohibitive barrier. The barrier with respect to the lacking financial health of the state electricity companies affects all electricity generators alike and cannot be seen as barrier specific to bagasse cogeneration.

Response 3:

(a) CDM Projects from India those are in the pipeline:

As per 'National CDM Authority Approved Projects' (document prepared by Government of India- Annex-12) as of May 2005, the number of bagasse based cogen projects approved by them in India was about ten (10). TGSML

received HCA on 2 June 2006 and therefore not in the above list. CDM projects not listed in the above 10 DNA approved projects, but already registered at the UNFCCC (<http://cdm.unfccc.int/Projects/registered.html>) include cogeneration projects of Jamkhandi Sugars (12.3MW), Rana Sugars (12MW), Pandurang SSK (9MW), LHSF (12MW) and Ganpati Sugar Industries (15MW).

Referring to 'Analysis of bagasse based cogeneration Projects in India' (Annex-13) enclosed, in the bagasse based cogeneration project category:

1. The CDM registered projects from India quantifies to **137.1 MW**
2. DNA approved (by May 2005) and not yet registered (including TGSML's project) quantifies to **182.3 MW**
3. Total CDM application (1)+(2) already quantifies to **319.4 MW**.

In addition to the above, there are probably more projects which may have got approved by DNA in last 18 months (from June 2005 to November 2006). The above pipeline of projects waiting to get registered at the UNFCCC as CDM projects, clearly indicates that bagasse based cogeneration is probably not an attractive course of action in India and project developers feel the need to substantiate their hurdles/ challenges through CDM funds.

(b) Technological barrier: As already mentioned in the additionally section of the PDD, TGSML's cogen plant was unique because of the following reasons (Annex 16):

1. The highest capacity bagasse-fired boiler in India until 2005 (130 tons per hour (TPH) boiler): TGSML faced a lot of difficulties in getting a supplier for the above mentioned high capacity boiler. At that point in time, there was no Indian supplier to provide such a high capacity boiler and TGSML had to procure the same from a supplier. Therefore there were inherent risks associated with the implementation of the first of its kind boiler, which was unique.
2. Vacuum conveying type ash handling system with dust conditioner is installed to avoid dust nuisance which is the **first of its kind in the State**
3. TGSML's cogen turbine is an double extraction condensing type with 9 Kg/cm² uncontrolled extraction and 3 Kg/cm² controlled extraction which facilitates the drawing of process steam from turbine to sugar plant without compromising full load of 24MW on the turbine. Hence the cogen plant higher cycle efficiency and performance can be achieved. So during season and off-season the cogen plant generation

- is same i.e. 24 MW. In other cogeneration plants, the seasonal capacity will be less when compared to offseason. **TGSML is the first to implement a cogen plant with this concept in the state**
4. TGSML has installed 170TPH Capacity comprehensive bagasse handling system with a flexibility to operate with four different paths to facilitate trouble free operation during season and off-season. The specially designed stack conveyor is installed along with mobile tripper wing conveyor with telescopic chutes for stacking of excess bagasse all along the length of 288.5 meters on either side of the stacking conveyor, hence bagasse can be stacked to a height of 10 meters. **TGSML is the first cogen plant to implement this in the state and the country**
 5. TGSML has provided dust extraction system at transfer points in bagasse handling system to avoid fugitive emissions **and are the first cogen to implement this in the state**
 6. TGSML has installed **PLC operated** 2x20 M³/hour capacity DM plant to maintain recommended quality of make up water to the boiler and are the **first cogen to implement this in the state.**
 7. It is a **fully automatic plant** with logic redundancy for all critical controls with **mechanized bagasse stacking and modern fire-fighting system**
 8. The 70M³/hour capacity **condensate polishing unit** installed to treat the return condensate from sugar plant which may otherwise lead to contamination of boiler water was only implemented in one other cogen plant in the state
 9. TGSML has installed triple **modular redundant governor for effective control of turbine and export of power to the grid** and are the first cogen to implement this in the state. Other cogen plants went in for single modular.
 10. TGSML has **installed switchyard having two bays with bus coupler facility and power is exported at 110 KV**, which is a new system for the sugar unit which needs good technical personnel to operate the plant. TGSML is the first in the state to implement this type of concept.
 11. TGSML has installed **Distributed Control System (DCS)** for better control and efficiency of plant and are only second cogen plant in the state to implement this

Considering the advanced and relatively new technology for the cogen plant which was unique at the time when the project was implemented, TGSML provided the turnkey EPC cum O&M contract (for 5 years) to Desein Pvt Ltd. Placing EPC contract with consultants is no doubt a well known concept but not the O&M contract too.

Though for Desein Pvt Ltd also this was the first time the O&M contract was being handled, TGSML took the risk of taking up the project as they were not having sufficient proficiency in handling the cogen plant. TGSMSL placed the contract on Desein as IDBI insisted that such a modern cogen plant needs to be operated and maintained by someone with enough technical know-how. This was considering the significant training of personnel would be required to handle the advanced technology plant. Even procuring/ hiring experience personnel who would be proficient to handle the cogen plant was ruled out as no one in the region had the experience of the same (other 3 cogen plants were just commissioned).

Therefore the placement of EPC cum O&M contract on Desein Pvt Ltd was a decision taken by TGSML which demonstrates presence of technological barriers to the project proponent. The placing of O&M contract to Desein had a financial implication of INR 13 Million (2002-03), INR 14.1 Million (2003-04), 18.1 Million (2004-05), 19.6 Million (2005-06), INR 11.2 Million (upto Sep 06) which is likely to be about INR 22.5 Million for 2006-07. The O&M contract for about INR 87.3 Million over a period of 5 years has been spent by the TGSML for the project activity only towards paying Desein for the O&M purpose. This is likely to continue for the next few years too till the end of the project.

(c) Barriers due to pending payments from HESCOM

Enclosed is a document of the South Indian Sugar Mills Association (SISMA) Karnataka on 'Most immediate issue requiring consideration'. This document clearly indicates that TGSML is the 2nd highest in the list of pending payments to be made by the state electricity boards (SEB) as per their notification/ letter dated 22 March 2006 [Ref: Annex-14 & 15]. The 'lacking financial health of the state electricity companies' do not affect all electricity generators alike but as apparent TGSML needs to receive INR 18.34 Crores (INR 183.4 Million) as per the tariff base rate of INR 2.8/ kWh. Considering that Hubli Electricity Supply Company (HESCOM) is only paying TGSML as per base rate and actually with escalation of 5% p.a., the current tariff should be Rs 4.02/ kWh (This matter of increase in tariff as per escalation of 5% p.a. is being contested in the Indian court of law). The payment pending is actually INR 183.4 Million + 197.8 Million = INR 381.2 million.

As evident, the pending payment from the electricity board does not affect all the companies in the same way.

Point 4:

The OM values for 2000-1 and 2002-3 are severely overestimated. The data published by CEA show an OM of 1010 and 990 g CO₂/kWh, respectively, so almost 20% less than the PDD. Moreover, the PDD does not explain why it uses 2000-1 instead of 2001-2 for the third year of the OM calculation.

Response 4:

The latest data available at the time of preparation of PDD was used. The CEA data was not available at that time and is in the draft stage as on date.

We have observed that difference in the values between the data used by us and published by CEA are mostly on the account to few parameters such as calorific value of the fuel used and efficiency of the power plant. Also CEA data is plant wise, where as earlier data provided in the PDD uses average value for the region. However, CEA estimates being more detailed and conservative have been adopted now. The EF and corresponding values in the calculation and PDD have been changed.

Point 5:

There is an error that requires attention in the calculation of project emissions. In section E.1 emissions from transportation activities are stated to be 8,310 tons annually. In section E.3 this figure is used for transportation emissions for the entire crediting period. If in fact the figure given is annual, then the total emission reduction for the crediting period should be corrected from 448,587 tons to 398,547 tons. For the sake of transparency, the details of the calculation of annual emissions from transportation should be added to Annex 3.

Response 5:

The error is typographical in section E.1. As per the calculation sheet, the transportation related emissions total to 8,130 tons for the entire crediting period of 7 years and not 'annually' as referred to in section E.1. The transport related emissions are also enclosed in Enclosure 3 of the PDD for the reference of the UNFCCC.

List of References: Attached with this reply as Annexs

Annex-1: TEXWATCH. Paragraph 4 - Copyright 2000, Time Inc, Fortune January 10, 2000

Annex-2: IISD & Royal Institute of International Affairs; Seminar Note, Trade and Sustainable Development, International Institute of Sustainable Development, paper by Aaron Cosbey, 1999.

Annex-3: Extract from minutes of the meeting of the Board of Directors held on 17 February 2000.

Annex-4: Letter from Desein Private Limited for approval of design dated 29 May 2000.

Annex-5: Letter of Intent from IDBI dated 26 October 1999 (along with terms imposed by IDBI for TGSML to accept before executing the loan agreement).

Annex-6: IDBI letter on 'Modification of security clause' dated 23 November 2000.

Annex-7: Bank Statement of "Union Bank of India" account of TGSML to which IDBI made the first disbursement on 31 March 2001.

Annex-8: Letter from Andhra Bank on Sanction of credit facilities dated 25 May 2000.

Annex-9: Letter of Intent from State Bank of India dated 9 April 2001.

Annex-10: Two relevant pages of Contract of Services between BSES and TGSML.

Annex-11: Invitation from BSES to attend *Boomi Puja* (sacred ceremony of land conducted before start of excavation).

Annex-12: Report of National CDM Authority India: Approved projects as of May 2005

Annex-13: Analysis of bagasse based cogeneration projects in India

Annex-14 & 15: Letter from SISMA on delayed payment by KPTCL.

Annex-16: Letter from Technology Supplier