

**Project 1993: Siam Quality Starch Wastewater Treatment and Energy Generation Project  
in Chaiphum, Thailand  
Project Participant's Response to Request for Review**

**Issue No. 1**

The DOE is requested to clarify how they have validated that the project is not a common practice.

**PP Response**

The common practice analysis in the PDD identified comparable projects based on them being SQS's closest competitors. The three other factories identified in the PDD were National Starch, Sangan Wongse Industries, and General Starch.

However, as no publicly available/official documentation could be found to substantiate this<sup>1</sup>, we have carried out a new common practice analysis as part of our response to the request for review, in which comparable projects were identified based on the following characteristics:

1. Appropriate industry.

There are two types of starch, Native and Modified, but only Native starch has wastewater characteristics that will allow biogas recovery from wastewater. Hence, the selection of factories for the common practice analysis excludes Modified starch-only factories.

2. Relevant size.

Starch factories vary significantly in size, and the project circumstances cannot be readily compared between these sizes. What is particularly relevant to additionality assessment is the fact that projects of a large size tend to be more viable than smaller ones due to economy of scale. For this reason, a comparison between the large SQS Project and a wide spectrum of projects could distort the result of common practice analysis to be less conservative than it should be. The selection for the common practice therefore identified plants of a similar scale to SQS.

Two sets of data were used in narrowing down the factories. These are:

- a. A list obtained from the Thai Tapioca Starch Association, which lists the starch plants and technologies employed for wastewater treatment. This list was compiled in April 2007 based on a survey TTSA sent out to the factories. As stated in 1 above, Modified starch-only factories were excluded.
- b. A list obtained from the Department of Industrial Works which lists, among others, the size of the factory in terms of horsepower which will be a reasonable indicator of starch production capacity. The DIW list gives the SQS factory's horsepower as 14,773. For the purpose of narrowing down the comparable projects based on criteria 2 stated above, the list was narrowed down to factories that were of similar size as SQS or larger.

[Originals of both lists have been submitted to the DOE.](#)

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<sup>1</sup> A Ministry of Energy article showing production capacity of starch plants in "Region 5" could be found but none were found for the entire country, which is considered the appropriate boundary for the common practice analysis.

To summarize the result of the common practice assessment, it was found that there were four factories that should be compared against the Project, as listed below. Three of the four factories used comparable technologies to the Project, while another did not have a biogas recovery technology. Consistent with the “Tool for the demonstration and assessment of additionality”, none of the three factories were considered similar as all were/are carried out with the assistance of carbon credits, one as a registered CDM project, and others at various stages of the CDM process. It was thus concluded that the Project is not a common practice.

Table 1: List of comparable factories in order of decreasing size (horsepower)

<b>Company</b>	<b>Size (horsepower)</b>	<b>Biogas system</b>	<b>Notes</b>
Sanguan Wongse Industry Co., Ltd.	30,505	Yes	Registered CDM project (Project 1040)
Eiamheng Tapioca Flour Industry Co., Ltd.	21,130	Yes	Applying for CDM <sup>2</sup>
Eiamburapa Co., Ltd.	15,821	Yes	Applying for CDM <sup>3</sup>
Siam Quality Starch Co., Ltd.	14,773	Yes	The project activity
Sangpetch Tapioca Flour Co., Ltd.	13,084	No	N/A

We believe that the common practice analysis provided above, including the process of identification of “similar” projects, is appropriate.

<sup>2</sup>[http://www.tgo.or.th/index.php?option=com\\_content&task=view&id=37&itemid=29&task=view&id=37&itemid=29](http://www.tgo.or.th/index.php?option=com_content&task=view&id=37&itemid=29&task=view&id=37&itemid=29)

<sup>3</sup><http://cdm.unfccc.int/Projects/Validation/DB/A8JT0K03JKGLSDSV1O1Y0JISTYYNHN/view.html>

## Issue No. 2

The DOE is requested to provide reliable evidence to demonstrate that continuing and real actions were taken to secure CDM status for the project activity in parallel with its implementation following the guidelines from paragraph 5, Annex 46, EB 41.

### PP Response

The Project Participant wishes to clarify that reliable evidence has been submitted during the course of Validation to demonstrate continuing and real actions were taken to secure CDM status for the project activity, which is in full compliance with paragraph 5, Annex 46, EB41.

Table 2 summarizes the documentation that have been already provided and submitted to the DOE during Validation with all but one of these – evidence for item 2.c. – also being submitted to the UNFCCC upon request for Registration. All originals were sighted by the DOE during the course of Validation. Table 3 illustrates the time line for further clarity, and also incorporates further dates that were not a part of the original submission. Additional evidence have been provided to the DOE in connection with Table 3.

Table 2: Evidence already submitted

1. In response to EB41 Annex 46 paragraph 5 (a) *“The project participant must indicate awareness of the CDM prior to the project activity start date, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project. Evidence to support this would include, inter alia, minutes and/or notes related to the consideration of the decision by the Board of Directors, or equivalent, of the project participant, to undertake the project as a CDM project activity.”*:
  - a. 14/11/2003. Avebe<sup>4</sup> report submitted to SQS for regular site visit conducted on October 7, 2003. In it, it shows that SQS agreed to conduct a pilot scale biogas system to ascertain its feasibility. Excerpt of the meeting report was submitted as Appendix 6.
  - b. 19/09/2004. SQS Internal email report to the Managing Director reporting the results of the pilot scale biogas system which concludes that the risks in view of the investment cost and biogas instability are unacceptable without extra revenue from the sale of carbon credits. Both the original email in Thai and the English translation were submitted as Appendix 4.
  - c. 29/10/2004. Waste Solutions<sup>5</sup> proposal for engineering services which specifically incorporates the CDM revenue. Excerpt of the proposal submitted as Appendix 7.
  - d. 20/01/2005. Contract between SQS and Waste Solutions for engineering services. Excerpt of contract submitted as Appendix 5.

The sequence of events and submitted documents clearly indicate both *“awareness of the CDM prior to the project activity start date”* and that *“the benefits of the CDM were a decisive factor*

<sup>4</sup> As stated in PDD p17, Avebe BA of the Netherlands was SQS’ joint partner at the time.

<sup>5</sup> As stated in PDD p16, Waste Solutions was the same engineering consultant as the first starch wastewater project in Thailand (project 1040).

*in the decision to proceed with the project”.*

2. In response to EB41 Annex 46 paragraph 5 (b) *“The project participant must indicate, by means of reliable evidence, that continuing and real actions were taken to secure CDM status for the project in parallel with its implementation. Evidence to support this should include, inter alia, contracts with consultants for CDM/PDD/methodology services, Emission Reduction Purchase Agreements or other documentation related to the sale of the potential CERs (including correspondence with multilateral financial institutions or carbon funds), evidence of agreements or negotiations with a DOE for validation services, submission of a new methodology to the CDM Executive Board, publication in newspaper, interviews with DNA, earlier correspondence on the project with the DNA or the UNFCCC secretariat.”:*

- a. 20/12/2005. Email from SQS expressing interest in MUS (CDM consultancy) services in anticipation of commercial operation due to start in 2006. Submitted as Appendix 1.
- b. 13/10/2006. Email sent by MUS to UNFCCC on behalf of early start Thai projects for the extension of deadline for retroactive projects due to slow progress with Thai DNA approval coupled with political instability (the 2006 military coup d’etat) which threw the entire host country approval process into disarray. Submitted as Appendix 2.

It is noted that the list does not include SQS and included only six projects which had by then been lobbying the Thai government for up to four years, but serves to justify the wait-and-see approach adopted by the majority of Thai project owners who were wary of taking the double risk of going ahead with the project and spending a significant amount of money on CDM transaction costs by entering into a contract with CDM consultants and DOEs in advance. Indeed, a further eight projects which had also been lobbying the government but for a shorter period were not approved in time for the retroactive credit deadline, and were only approved in late August 2007.

- c. 22/11/2006. CDM consultancy agreement between SQS and MUS executed after 8 months’ negotiations through lawyers on both sides. SQS hired an external lawyer at considerable expense to negotiate the agreement. A number of email communications during this time were forwarded to the DOE at the time of Validation.

The documents in Table 2, together with the ongoing public actions to achieve CDM status, clearly demonstrate that *“continuing and real actions were taken to secure CDM status for the project in parallel with its implementation.”*

To provide further clarity, Table 3 summarizes the timeline, including both the submitted evidence and ongoing actions. Additional evidence has been submitted to the DOE as necessary, which are shown in blue writing. We suggest to incorporate the below table as a correction to the PDD.

Table 3: Complete timeline

<b>Date</b>	<b>Action</b>	<b>Relevance to paragraph 5</b>	<b>Note</b>
07/10/2003	SQS agrees with joint venture partner to conduct pilot study for biogas system.	<i>Awareness of the CDM prior to the project activity start date</i>	Excerpt of Avebe visit report submitted as Appendix 6 as part of request for Registration.
19/09/2004	SQS concludes after pilot study that the biogas system is not viable without carbon credits.		SQS internal email to senior management, submitted as Appendix 4 as part of request for Registration.
14/05/2004	SQS visits Sanguan Wongse factory (host factory of Korat Waste to Energy Project, project 1040)		
29/10/2004	SQS receives proposal for engineering services from Waste Solutions, which explicitly includes CDM revenue.	<i>Awareness of the CDM prior to the project activity start date; The benefits of the CDM were a decisive factor in the decision to proceed with the project</i>	Excerpt of the proposal submitted as Appendix 7 as part of request for Registration.
20/01/2005	SQS executes contract with Waste Solutions for engineering services.	<i>The benefits of the CDM were a decisive factor in the decision to proceed with the project</i>	Excerpt of contract submitted as Appendix 5 as part of request for Registration.
31/03/2005	Project start date as per Section C.1.1. (ordered linings for the CIGAR system)		As confirmed in Validation Report p37.
20/12/2005	SQS initiates discussion with MUS (CDM consultant to the Project).	<i>Continuing and real actions were taken to secure CDM status for the project in parallel with its implementation</i>	Email from SQS submitted as Appendix 1 as part of request for Registration.
24/03/2006	SQS receives formal CDM consultancy proposal from MUS after extensive discussions.		Excerpt of proposal submitted.
31/03/2006	SQS accepts MUS proposal		Email between SQS and MUS submitted.
18/04/2006	Negotiations with MUS begin in earnest		Emails between SQS and MUS, dated April 2, April 3, April 18, May 4, May 19, and June 23 submitted.
13/10/2006	Email sent by MUS to UNFCCC on behalf of early start Thai projects for the extension of deadline for retroactive projects.	N/A – shows delay in Thai project approval process	Submitted as Appendix 2 as part of request for Registration.

22/11/2006 (principal agreement) and 29/12/2006 (minor correction)	CDM consultancy agreement between SQS and MUS executed after 8 months' negotiations through lawyers on both sides.	<i>Continuing and real actions were taken to secure CDM status for the project in parallel with its implementation</i>	<p>Emails between SQS and MUS, dated November 3<sup>6</sup>, 15, 22, 30, December 18, 19, 21 and 29 submitted.</p> <p>It is noted that SQS hired an external lawyer at considerable expense to negotiate the agreement, which is a CDM transaction cost.</p>
30/01/2007	Thai cabinet approves first batch of projects after years of lobbying by a handful of pioneering project developers	N/A – shows delay in Thai project approval process	Public knowledge. <a href="#">Point Carbon article submitted.</a>
08/03/2007 – 08/06/2008	MUS enquires with ONEP regarding the new approval process	<i>Continuing and real actions were taken to secure CDM status for the project in parallel with its implementation</i>	<p>Email submitted during Validation.</p> <p>It is noted that around this time, ONEP introduced a new requirement for an Initial Environmental Evaluation to be carried out for the sake of host country approval, even if it were not required by any other regulation. The eventual confirmation came on June 08, 2007.</p> <p>SQS was subsequently notified of this new requirement.</p>
06/07/2007	Thailand Greenhouse Gas Management Organization (TGO) established with a view to taking over approval process from cabinet	N/A – shows delay in Thai project approval process	Public knowledge.
11/07/2007 & 01/08 /2007	SQS receives quotes for IEE in response to new rules	<i>Continuing and real actions were taken to secure CDM status for the project in parallel with its implementation</i>	<p><a href="#">Formal proposal dated August 1 submitted.</a></p> <p>It is noted it took several months to obtain the quote as there was confusion as to</p>

<sup>6</sup> It is noted that there were extensive communications between SQS and MUS between June 23 and November 3, however these were not submitted to the DOE as they contain commercially sensitive information relating to the contract negotiations carried out by lawyers on both sides.

			whether an ONEP-registered IEE consultant was required <sup>7</sup> .
28/08/2007	Thai cabinet approves second batch of projects which missed out in the first round	N/A – shows delay in Thai project approval process	Public knowledge. <a href="#">Point Carbon article submitted.</a>
14/09/2007	SQS contracts IEE consultant	<i>Continuing and real actions were taken to secure CDM status for the project in parallel with its implementation</i>	<a href="#">Contract submitted.</a>
26/07/2007	MUS requests SGS proposal for Validation		In DOE archive.
26/09/2007	PDD uploaded to UNFCCC website		Public knowledge.
28/09/2007	Validation site visit by DOE		As per Validation Report.
06/03/2008	IEE completed		
07/03/2008	Request for Thai DNA approval		PDD submitted together with completed IEE.
24/03/2008	Request for Japanese DNA approval		
10/06/2008	Japanese DNA approval		Refer to LoA.
14/07/2008	Thai DNA approval		Refer to LoA.  It is noted that this approval was obtained at record speed at the time, as a result of intense lobbying with the TGO, who was sympathetic to SQS' plight. Had the approval not been achieved in time, the grace period on the methodology would have lapsed, further delaying CDM progress.
04/08/2008	Final Validation Report issued by DOE		
05/08/2008	Request for Registration		In DOE archive.

In summary, there can be no doubt that the SQS Project meets the requirements of paragraph 5, Annex 46, EB41.

Contact person for review on behalf of project participants:

Kyoko Tochikawa

[ktochikawa@cefconsulting.com](mailto:ktochikawa@cefconsulting.com)

Tel: +852-3583-1045

<sup>7</sup> It was eventually clarified with TGO that a registered consultant was not required, however this was after SQS retained a registered consultant.