

Simplified Ex-Post Evaluation for Technical Cooperation Project

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Project Name	Project on Energy Management Promotion in the Islamic Republic of Iran	February 2010 – December 2010

I Project Outline

Country Name	Islamic Republic of Iran			
Project Period	March 2003-March 2007			
Executing Agency	Energy Efficiency Office (EEO)/Ministry of Energy, Azerbaijan Higher Education and Research Complex (AHERC), National Training Center for Energy Management (NTCEM), Iran Energy Efficiency Agency (SABA)			
Cooperation Agency in Japan	Energy Conservation Center, Japan			
Total Cost	684 million yen			
Related Projects (if any)	Institutional Capacity Building on Energy Management in Building Sector and its Regulations (2010-2011), Project on Energy Management Promotion in the Islamic Republic of Iran F/U (Provision of Equipment) (2008-2010)			
Overall Goal	Enhancement of energy management in the industrial sector is achieved through the promotion of rational use of energy.			
Project Objective(s)	The National Training Center for Energy Management (NTCEM) contributes to the energy management of the industrial sector.			
Output[s]	<ol style="list-style-type: none"> 1. Policies and the related administration structures are coordinated so that the contribution of the project becomes effective. 2. The project counterparts—namely the instructors at the training center—are able to operate and maintain the training facilities and equipment. 3. Both theoretical and practical training for energy related engineers are carried out in a continuous manner. 			
	Inputs (Japanese Side)		Inputs (Iran Side)	
Experts	4 for Long term, 19 for Short term		Staff allocated	11
Equipments	144 million yen		Equipments	-
Local Cost	25 million yen		Local Cost	9.9 billion rials
Trainees Received	11		Land etc provided	Training buildings, offices for experts
Others	-		Others	-

II Result of the Evaluation

Summary of the evaluation
<p>This project is consistent with the Socio-Economic and Cultural Development Plan of the Islamic Republic of Iran, the country's development needs, and Japan's ODA policy; therefore, the relevance of the project is high. As for the project's inputs, since defects occurred in the mini-plant that was supplied, this had influenced the progress in the first half of the project. In addition, the number of counterpart personnel assigned on the Iranian side was slightly lower than planned, and was not sufficient for the sake of carrying out concentrated and continuous training courses. For this reason, the efficiency of the project is deemed fair. The project outputs were largely achieved. But for the one portion of the outputs of conducting training for energy related engineers, the number of times the training course was held fell short of the goal, and the goal was not reached for the number of graduates either. The target for the number of trainees from factories, which was a project objective, was largely achieved. But the number of proposals for energy efficiency measures by ex-trainees accepted at factories and the number of factories passing the financing screenings of financial institutions for energy efficiency activities were beneath the mark at the time the project completion; therefore, the effectiveness of the project is fair. Currently an adequate number of instructors have been assigned to NTCEM, and a collaborative structure has been maintained with the related organizations of EEO and SABA. However, due to institutional changes in 2009, there have come to be calls for the sustainable continuation of training activities at some of the training agencies. As a result, compensation for budget shortfalls from the government have gradually been reduced and the cost of attending the training has been raised in order to continue running the training activities. After the project completion, since the number of trainees has been steadily increasing, no immediate impact is observed. However, there can be further institutional changes. For this reason the sustainability of the project is considered to be fair.</p> <p>In light of the above, this project is evaluated to be fairly satisfactory.</p>

1 Relevance
<p>(1) Relevance with the Development Plan of Iran Over the project period, the Five-Year National Socio-Economic and Cultural Development Plan of the Islamic Republic of Iran (Third: 2000-2004, Fourth: 2005-2009) set forth policies for energy efficiency and for environmental conservation such as the standardization and labeling of devices, equalization of peak energy use hours, promoting the shift to non-peak energy use months for factories, saving energy at buildings, etc.</p> <p>(2) Relevance with the Development Needs of Iran In recent years domestic energy consumption within Iran has shot up rapidly, and has reached 44% of total energy productions. In Iran, where 36% of the population is under 15 years old, the amount of oil consumed will be on an upward trend for the future. If it holds steady around the current energy consumption growth rate of 6% then preliminary calculations indicated that Iran will shift to being an energy importing country by 2018. Conversely, Iran is dependant on exports of oil products for roughly 80% of its foreign currency income. Therefore, if exports of oil cannot be guaranteed then there are fears that this will have a major impact on the domestic economy. For this reason the promotion of the efficient use of energy in the industrial sector is crucial for Iran for the sake of its ongoing economic development; therefore, this project is relevant with Iran's development needs.</p> <p>(3) Relevance with Japan's ODA Policy The goal of this project is to achieve ongoing development in Iran by promoting energy efficiency. It is prioritized in Japan's policies of the economic cooperation policy consultation with Iran; therefore, the project is highly relevant with Japan's ODA policy.</p> <p>This project has been highly relevant with the Iran's development plan, development needs, as well as Japan's ODA policy; therefore its relevance is high.</p>
2 Effectiveness / Impact
<p>(1) Achievement of Project Outputs and Project Objective(s) In terms of the outputs indicator on implementing training for energy related engineers, the number of times the training course was implemented fell short of the objective value and the target was not reached for the number of graduates either. However, the other outputs indicators were achieved. As for the project objective of the number of trainees from the factories, which was taken as an indicator, the actual number of about 700 people largely achieved the target of 800 people. But compared to the target of 400 for the number of ex-trainees' proposals accepted by factories, the actual number was about 100. While for the number of factories with ex-trainees which succeeded to obtain loans for the energy efficiency activities, there were three in actuality compared to the target of 50. Both of these targets remained unachieved as of the time of project completion. Yet training has been conducted at the center even after the completion of the project, and initiatives for energy efficiency continue to be carried out at factories with training participants. One factor for why the project targets were not achieved is the fact that progress in the first half of the project was delayed because defects occurred in the mini-plant that was provided as part of the project's inputs. Another is that the number of counterpart personnel assigned was slightly lower than planned, and was not sufficient for carrying out concentrated and continuous training courses.</p> <p>(2) Achievement of Overall Goal, Intended and Unintended Impacts For the "10% decrease in the targeted Specific Energy Consumption (SEC) of industrial sectors", which was the overall goal of the project, differences were observed in the average reduction rate for each industrial sector. Yet from the perspective of the targeted industrial sectors as a whole, it is believed that this was achieved in nearly 80% of the industrial sectors. But it could not be said that the contributing factors for the decrease in SEC was necessarily due to the effects from this project. It is also conceivable that the enactment of laws pertaining to SEC reduction and activities by related agencies aside from SABA also contributed to reduction.</p> <p>This project has somewhat achieved its objectives; therefore its effectiveness is fair.</p>
3 Efficiency
<p>(1) Outputs As was indicated in (1) in "Effectiveness / Impact," out of the input elements the defects in some of the supplied equipment and the fact that the required number of counterpart personnel were not assigned had an impact; therefore, the outputs produced by this project is fair.</p> <p>(2) Project Period of Cooperation The actual project period came to 49 months and it is the same as the 49 months; so, the project went as planned (100% of the plan).</p> <p>(3) Project Cost of Cooperation The actual project cost came to 684 million yen, while the 930 million yen was the planned cost. It was lower than planned (74% of the plan).</p> <p>Some of the elements of inputs are inappropriate for producing outputs and achieving the project objective; therefore the efficiency of the project is fair.</p>
4 Sustainability
<p>(1) Related Policy towards the Project Policies related to energy efficiency continue to be specified in the Five-Year National Socio-Economic and Cultural Development Plan of the Islamic Republic of Iran (Fourth: 2005-2009), and its priority in a policy remains high.</p> <p>(2) Institutional and Operational Aspects of the Executive Agency According to the response from the executive agency, at present NTCEM has secured an adequate number of instructors for implementing general course, electricity course, and heat course. Moreover, EEO, the project's executive agency, and SABA, which is the agency in charge of recruiting trainees and the external evaluation, maintain a collaborative structure. The executive agency has maintained a sustainable management structure for the training system.</p> <p>(3) Technical Aspects of the Executive Agency According to the response from the executive agency, the NTCEM instructors continuously implement training courses 26 times a</p>

year, and make use of the technology for managing the courses. Moreover, changing the training contents to accommodate the progress made in energy efficiency technology has been held up as a challenge at NTCM. Looking at the content of the request for the follow-up experts scheduled to be dispatched within FY2010 reveals that they have a clear recognition of the technology they should learn about from Japan and the technology they can learn about on their own. It is believed that they are acquiring the ability to change technology on their own somewhat. What is more, according to the response from the executive agency the NTCM instructors have sufficient knowledge and technology when it comes to operating the mini-plant, but the claim could not be made that their technical level is adequate for its operation and maintenance. The desire is that the maintenance technology will be improved for the sake of improving the sustainability of the counterpart's technology.

(4) Financial Aspects of the Executive Agency

As for the budget required to manage the courses, until 2009 the Ministry of Energy allocated a budget sufficient for this. But there were institutional changes and calls for AHREC to carry out independent course management, and so currently government compensation such as in the form of subsidies is gradually being reduced. Because of this, according to the responses to the questionnaire the portion by which the government compensation has been reduced is being borne by the trainees. NTCM is not exceptional. Therefore, even if there are no problems with the sustainability of AHREC's financial affairs, in the future the further understanding of the factories, which are also beneficiaries, will be necessary in order to increase the number of trainees as has been done so far.

In addition, in cooperation with the Ministry of Petroleum the Ministry of Energy has started training via the budget of the Ministry of Petroleum aimed at organizations affiliated with the Ministry of Petroleum. The operation of this training is continuing through this sort of cooperation between government ministries and agencies.

(5) Continuity of Effectiveness and Impact

After the completion of the project, 346 trainees were trained through the 24 training sessions that were held from April 2007 to March 2008, 738 trainees were trained through the 27 training sessions that were held from April 2008 to March 2009, and 554 trainees were trained through the 27 training sessions that were held from April 2009 to March 2010, respectively. As such, it was confirmed that the project outputs are steadily expanding even after the completion of the project. As this shows, even after the completion of the project, the "number of trainees from the factories" is on the rise, and the project effects related to implementing training are on course to continue. But that is not to say that there are no concerns over the aforementioned problem with the counterpart's technical status and the future trends in the number of trainees. Furthermore, the target values at the time of project completion were not necessarily reached for indicators measuring effects other than the increase in the number of trainees as of the ex-post evaluation. Taking this into account, it is not being claimed that there are no problems with the sustainability of the future effects.

In light of the above, some minor problems have been observed in the technical and financial aspects of the counterpart; therefore, the sustainability of the project effects is fair.

【Comments from Ministry of Energy】

1. As for 3. *Efficiency*, the scientific board consists of fewer members compared to the agreed number. However, in the past 6 years the instructors managed to train more participants than expected even though there were laboratory problems and the anticipation of dispatch of expert of Japan to fix the problems.
2. As for 4. *Sustainability (4) Financial Aspects of the Executive Agency*, participation of the trainees in paying expenses related to the training courses contributed to higher motivations and the center's self-sufficiency. Despite the 25% payment of the training courses expenditure covered by the participants, the number of applications for the course increased, which indicates the personnel's high interest in participating in the courses. The Ministry of Energy's support and the improvement of the center's performance before and after the project termination indicate the stability of the training courses in the future.
3. As for 4. *Sustainability (5) Continuity of Effectiveness and Impact*, according to the agreement between Ministry of Energy and JICA regarding the exploitation of the NTCM, it was decided to instruct 1600 managers before 20th of March 2009 but 1760 Industry energy managers were trained and 2675 of energy managers and Energy Services Companies agents were trained until 5th of December, 2010. It proves the success of the center in providing a time table and conducting specialized and non-specialized training courses.