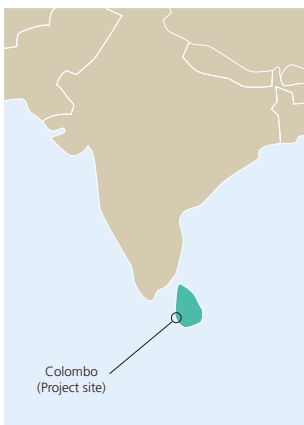


Overall Rating **A Foundation for Sustained Growth**  
**C**



## 25 Sri Lanka Kelanitissa Combined Cycle Power Plant Project

Helping to increase and stabilize the power supply to the Colombo area

**Loan Amount/Disbursed Amount** 13.481 billion yen/13.460 billion yen  
**Loan Agreement** October 1996  
**Terms & Conditions** Interest rate 2.3%, Repayment period 30 year (grace period 10 years), General untied  
**Final Disbursement Date** June 2003  
**Executing Agency** Ceylon Electricity Board (<http://www.ceb.lk>)



### Project Objectives

The Kelanitissa district in the north of Colombo City is an area that contains heavy oil and gas turbine thermal power plants. By constructing a 150MW class combined cycle power plant in that district, this project aims to increase the base load power sources and stabilize the power supply, thereby contributing to economic growth in Sri Lanka as a whole.

### Effectiveness & Impact

Rating **a**

By constructing a combined cycle power plant through this project, a maximum power output of 169MW (initial target was 150MW), power output of 1,107GWh (the initial target was 985.5GWh), and a plant load factor of 76.7% (the initial target was 75%) were achieved in 2004 which largely exceeded initial targets. Moreover, Sri Lanka's greatest power demand in 2004 came to 1,563MW, whereas capacity was 2,329MW. This means that a surplus of 766MW was secured. The power provided through this project amounts to 13.8% of total power generated in Sri Lanka, and can thus be judged to have helped increase the nation's power supply. Moreover, in a survey of consumers in the Greater Colombo Area, most (including 82% of large businesses) said that power supply conditions had improved after the completion of the project in 2003. Therefore, this project has largely achieved its objectives, and effectiveness is satisfactory.

### Relevance

Rating **a**

This project has been highly relevant with Sri Lanka's national policies both at the time of the appraisal and at the time of the ex-post evaluation. Through both the appraisal and the ex-post evaluation, increase and stabilization of power supply, as well as an outgrowing of the "hydro first, thermal second" structure, were major policy objectives. Further, at the time of the ex-post evaluation, a

Trends in net electric energy production in Sri Lanka

	1992	1993	1994	2000	2001	2002	2003	2004
Hydropower	81.9%	95.4%	93.2%	47.8%	47.7%	39.5%	43.5%	36.8%
Thermal power	18.1%	4.6%	6.3%	52.1%	52.2%	60.4%	56.5%	63.2%
Wind power and others	0%	0%	0.5%	0.1%	0.1%	0.1%	0%	0%

Compared to levels at the time of the appraisal (1994), at the time of project completion (2003) the proportion of thermal-generated power production had increased. Against this backdrop: 1) since 1997, thermal power plants managed by independent power producers were introduced, and 2) with the execution of this project the transition from a "hydro first, thermal second" structure was undertaken.

bill of the electricity sector reform was introduced by the nation's parliament, so execution of the project was consistent with this bill.

### Efficiency

Rating **c**

Both project costs and period exceeded planned targets by 110% and 186% respectively, therefore the evaluation for efficiency is low. Project delays were due to the fact that design changes led to a delayed bidding period, and deteriorating public order led to delays in material and machinery transportation.

### Sustainability

Rating **b**

Since no major problems have been observed, sustainability of this project is moderate. However, as for financial affairs, despite the fact that electricity fees were greatly increased, the financial status of the executing agency has worsened. At the time of the ex-post evaluation, based on a power sector reform, debt restructuring negotiations were under way. While there are hopes that the financial situation will improve, monitoring needs to be continued.

### Conclusion, Lessons Learned, Recommendation

In light of the above, this project's overall evaluation was moderate. Issues that remain include the need to improve the financial condition of the executing agency and the need to grasp the effect of this project on the surrounding environment by implementing an environmental monitoring system at the plant. Moreover, the highly deteriorated training center needs to be refurbished so as to improve the technical capacity of the executing agency.

### Third-Party Opinion

This project was evaluated as a highly efficient and relatively low-cost power plant project. While execution of an ex-post evaluation is considered premature, monitoring in the future will be needed regarding the lowered operation rate ever since the startup of operation.

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