



## CDM PROJECT CO-BENEFITS IN ANDHRA PRADESH, INDIA

### Energy efficient lighting for low-income households

#### Project description

The Visakhapatnam OSRAM CFL project involves the distribution of approximately 700,000 long-life compact fluorescent lamps (CFL) to households in the district of Visakhapatnam, Andhra Pradesh, India.

In the district of Visakhapatnam CFLs are being distributed at low or no cost to grid-connected customers of the Eastern Power Distribution Company of Andhra Pradesh Ltd. Approximately 670,000 households in the area are now benefitting from this project. Each customer may exchange one incandescent bulb (either 60 W or 100 W) for one CFL (15 W or 20 W respectively) placing it where it will be most used in their household, potentially reducing electricity demand for lighting by up to 80 %.

#### Co-benefits

This project illustrates how the CDM can provide energy efficiency lighting for low-income households and deliver benefits to the community by:

- Delivering cheaper to run domestic lighting for low-income households, allowing residents to light up their homes for longer
- Involving the community in the implementation of the project, in particular the empowerment of women self-help groups
- Increasing energy services in a country which faces considerable power outages
- Providing for employment in the local factory manufacturing the CFLs and a variety of other jobs associated with project implementation

#### KEY PROJECT BENEFIT

#### Reduction of poverty, access to energy efficient lighting and empowerment of the community

Over 3,000 women have been engaged through self-help groups to provide energy efficient lighting to low-income households

Women self help groups replacing GLS (incandescent) bulbs  
(Courtesy of Boris Bronger, OSRAM)






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### CO-BENEFITS IN DETAIL

<b>Economic</b>	<ul style="list-style-type: none"> <li>Contributing to poverty alleviation by reducing household expenditure on electricity bills (200 rupees per year saving for the average low income household)</li> <li>Promoting local employment opportunities at the local OSRAM factory and related service providers, such as lamp recycling, data entry, monitoring and meter installation. A total of 10 full-time and 50 part-time jobs were created with durations from 4 to 12 months</li> <li>Improving energy services by reducing peak demand for electricity, improving grid reliability and reducing the risk of black-outs and rolling brown-outs that persist in this area</li> <li>Increasing access to affordable and longer lasting household lighting appliances</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>Enabling longer evening hours in households allowing for increased social, domestic and educational activities</li> <li>Improving the living environment of all, especially of women and children</li> </ul>
<b>Empowerment</b>	<ul style="list-style-type: none"> <li>Engaging women self-help groups to support project implementation, with over 3,000 women engaged through self-help groups to distribute CFLs and collect old bulbs</li> <li>Utilization of full community-based participatory approaches</li> <li>Providing the opportunity to learn about climate change and to contribute to decisions made at the community level</li> </ul>

### PROJECT FACTS

<b>Project title &amp; number</b>	Visakhapatnam OSRAM CFL Distribution Project – 1754	
<b>Project type &amp; methodology</b>	Energy efficiency in households – Lighting AMS-II.C – Demand side energy-efficient equipment/appliance at households/community level	 
<b>Location</b>	Visakhapatnam, Andhra Pradesh, India Lat: 17° 40' 31" N Long: 83° 13' 57" E	 <p>(Courtesy of Boris Bronger, OSRAM)</p>
<b>History &amp; CERs</b>	Registered: 12 February 2009 Project operational life: 10 years Expected CERs: 27,427 (tCO <sub>2</sub> eq/year) Expected total CERs: 274,270 (tCO <sub>2</sub> eq) CERs issued to date: Request yet to be submitted	
<b>Project link</b>	<a href="http://cdm.unfccc.int/Projects/DB/TUEV-SUED1206629154.85/view">http://cdm.unfccc.int/Projects/DB/TUEV-SUED1206629154.85/view</a>	
<b>Facts as at</b>	November 2010	

This factsheet has been compiled from information provided by project participants of the CDM project, either through the project design document, monitoring reports or subsequent correspondence with project participants. The information is not verified as part of the CDM registration or issuance processes. This factsheet is one of a series produced by the UNFCCC secretariat to highlight the types of co-benefits generated by the CDM.