



renewable  
energy  
& energy  
efficiency  
partnership



## Half-day Interactive Workshop on Renewable Energy Technologies in Food Processing Industry

Tuesday, September 16, 2008 from 2.00 p.m. to 5.00 p.m.  
at Shekhar Natu Training Hall, 5<sup>th</sup> Floor, MCCIA Trade Tower,  
ICC Complex, S.B. Road, Pune 16.

Jointly organized by  
**Mahratta Chamber of Commerce, Industries & Agriculture (MCCIA)**  
&  
**The Energy and Resources Institute (TERI), Navi Mumbai**

### Introduction

Maharashtra has a great potential to develop into a major Food Processing Hub. Although, different food products and production processes vary, there are certain common operations, such as concentrating, drying, evaporating, fermentation, heating/cooling (heat exchange), and mixing. These operations are highly energy intensive processes.

The irregular supply of power has adversely impacted the food processing industry. One solution could be the proper selection and integration of renewable energy solutions into the processing systems. TERI has developed a range of technologies for conservation of energy specifically for food processing units.

MCCIA & TERI jointly organize an Interactive Workshop on '**Renewable Energy Technologies for Food Processing Industry**' to help them in providing alternative energy solutions. TERI will make presentations on various technologies which have potential for immediate implementation, such as:

**A) Solar Energy Technologies** : A range of solar thermal technologies are available which can replace the fossil fuels used for variety of applications such as water heating in canteens, kitchens, process heating, drying etc.

**B) Biomethanation** : For treating biodegradable waste generated in the process or canteen to produce energy and manure. TERI has developed a safe, cost effective and eco-friendly technology called 'TEAM' which converts the food into biogas and organic manure. The biogas could be utilized to partially replace the fuel in the processing unit or in canteen and the organic manure could be either sold out or used in the premises for gardening. The plants based on this technology are operational at the township of NTPC, Faridabad, plant canteen of Sona Koyo Steering Systems Ltd., and TERI training complex at Gurgaon.

**C) Gasifier - for generation of heat or electricity using the dry biomass**: TERI has developed biomass gasifier technology which converts solid fuel into a gaseous fuel through a thermo-chemical process and the resultant gas is used for heat and power generation applications. The overall combustion efficiency of this process is more than

80%. TERI's designed biomass gasifier systems are in use for a variety of small and rural enterprises like sericulture, textile processing, drying of agriculture produces, rubber drying and large scale cooking etc. Fuel savings of the order of 50-60%, along with significant increase in overall productivity at the enterprise level have been achieved with these systems. Biomass gasifier based technology packages for 10, 20, 50, 100 and 150 KW capacities are available.

MCCIA and TERI would like to appeal you to participate in the Interactive workshop. The details are as follows :

**Day & Date** : **Tuesday, September 16, 2008**  
**Time** : **2.00 p.m. to 5.00 p.m.**  
**Venue** : **Shekhar Natu Training Hall, 5<sup>th</sup> Floor, A Wing  
MCCIA Trade Tower, ICC Complex, S.B. Road, Pune 411016.**  
**Fees (concessional)** : **Rs. 250/- per participant**  
**Faculties** : **Experts from TERI, Navi Mumbai & New Delhi**

*This is an Interactive Workshop organized in the Pubic Interest.*

#### PROGRAMME

2.15 - 2.25 p.m.	Welcome Address	Shri Anant Sardeshmukh Addl. Director General, MCCIA
2.25 - 2.45 p.m.	Introductory Remarks	Shri Amit Kumar <a href="#">Director, EETD</a> , TERI
2.45 - 3.00 p.m.	Technical Session I <b>Solar Energy Technologies</b>	Shri Shirish Garud <a href="#">Fellow, TERI &amp; Co-coordinator, REEEP-SA Secretariat</a>
3.00 - 3.15	Presentation of REEEP's role in the Food Sector	Ms. Sonya Fernandes Regional Coordinator, REEEP South Asia.
3.15 - 4.00 p.m.	Technical Session II <b>Biomethanation Technology</b>	Ms. Rajeshwari <a href="#">Fellow, TERI</a>
4.00 - 4.40 p.m.	Technical Session III <b>Gasifier Technology</b>	Shri Sunil Dhingra, <a href="#">Fellow</a> , TERI
4.40 - 5.15 p.m.	Vote of Thanks	Dr. Anjali Parasnis <a href="#">Fellow, TERI- Mumbai</a>
5.15 p.m.	Refreshment / High Tea	