

# Barriers to Energy Efficiency

**In spite of many efforts and benefits of energy efficiency, the various barriers such as technical, financial, market and policy have constrained the implementation of energy efficiency projects in India. Some of these barriers are discussed here. - Editor**

Considerable untapped potential exists for curbing wasteful use of energy estimated to be of the order nearly 30% of the total consumption of commercial energy. The size of energy efficiency markets growing at 10% annually in India, is estimated to be in the range of Rs. 200 to Rs. 300 billion.

In spite of many efforts and benefits of energy efficiency, several technical, financial market and policy barriers have constrained the implementation of energy efficiency projects. The major barriers are:

## ◆ Lack of awareness:

The main barrier to energy conservation is the lack of awareness among the industry managers of the potential gains from improved efficiency. Industries as well as government are yet to take into consideration factors such as tax credits, depreciation benefits, electricity price escalation, life cycle savings of the investment and the timely release of money.

## ◆ Shortage of widespread education and training:

The widespread educational opportunities in energy management and conservation are not available. In addition, the appropriate training facilities, trainers and auditors are lacking.

## ◆ Economic and market distortions:

The response to conservation measures is irrational because of inappropriate pricing, other market distortions and socio-economic factors.

## ◆ Lack of standardization of equipments:

The slow rate of progress in achieving higher standards of energy consumption in equipments and appliances is also adversely affecting the adoption of energy saving measures.

## ◆ Lack of financing:

The non availability of sufficient credit facilities and the difficulties in obtaining required finances for energy saving projects are strong deterrents to investments in energy efficiency in India.

## ◆ Lack of effective co-ordination:

In India, the lack of effective national-level coordinat and promotion of energy conservation activities have bee major constraint to achieving energy efficiency.

## Policy framework:

With the background of high energy saving potential and its benefits, the Government of India has enacted Energy Conservation Act- 2001 to bridge the gap between demand and supply, reduce environmental emissions through energy saving, and to effectively overcome the barriers.<sup>1</sup> Act provides, for the first time, the much-needed legal framework and institutional arrangement for embarking on energy efficiency drive.