

Over the longer term, Canadian water infrastructure technology and service companies may wish to explore joint venture partnerships with other foreign partners in the construction, project management and financial service industries to market comprehensive turnkey solutions to the Indian market.

## 5.4 Clean Energy

Environmental preservation is inter-linked with the provision of more sustainable sources of power. It will be increasingly difficult for India to address its air pollution and hazardous waste problems without a transition to more efficient forms of energy. Energy efficiency and the introduction of Renewable Energy Technologies (RETs) are, therefore, environmental market opportunities with great potential. Clean energy is a front-of-pipe solution to many environmental problems such as climate change.

### 5.4.1 Energy Efficiency

#### *Market Overview and Current Activity*

India has an existing energy shortfall and massive energy requirements over the next several decades. The country has plans to add 5,000-6,000 Megawatts (MW) of power generation capacity annually in the next decade. Even with this growth, the nation will still face energy shortages of about nine percent, and peak power shortages of 20 percent. There are business opportunities to bridge this power gap (totaling 30,000 MW) through participation from the private sector and foreign investment in energy efficiency. These opportunities are becoming more attractive as energy prices rise through the liberalization process.

#### *Technology Opportunities*

India requires energy efficiency technologies in the following areas:

- Heavy and small-scale manufacturing;
- Buildings and building systems;
- Transportation;
- Energy generation and distribution.