Solar Energy in Auroville

Auroville, a small community in Pondicherry is involved in a microcosm of sustainable practices through focus on solar energy

uroville is an intentional. international community in Pondicherry where people have gathered to follow the spiritual teachings in an attempt to realise human unity. These teachings have led Aurovillians to place a high value on the harmonious interaction with the natural ecology. This is put into action through the adoption of a myriad sustainable practices, the most prominent being the widespread use of solar energy. From meals at the solar kitchen to solar bicycles to social projects aimed at spreading the use of solar power, this place works with the sun.

Auroville was one of the first communities in India where the use of solar power became widespread. Not too long ago, the photovoltaic power generation in Auroville accounted for 15% of India's total solar output. The 37 kW solar plant powers the Matrimandir, Auroville's temple located at the centre of Auroville and was the largest standalone photovoltaic power plant in India when it was built in 1997. In addition to the Matrimandir plant, there are now more than 150 solar water pumps, 150 houses entirely powered by solar, and 50 houses powered partly by solar and partly by the grid.

Many Aurovillians eat lunches prepared at the solar kitchen. This collective kitchen uses a reflective bowl 15 metres in diameter to harness the sun's energy for cooking. The kitchen has the capacity to attain a temperature of 150



degree Celsius to generate enough steam used to cook about 1,000 meals per day. The solar system entails partial heating from a diesel boiler that is turned off at 11am on sunny days. Each day about 700 meals are cooked, which are then delivered in tiffin boxes to schools and work places. This saves around 12 litres of diesel per hour resulting in the saving of several hundred rupees daily.

Auroville is home to several organisations that promote the use of solar through their operations. The largest is the Centre for Science and Research, a volunteer-based organisation working

for a sustainable future through the promotion of renewable energies. CSR has been involved in many types of solar initiatives in its 24-year long history. These vary from installing several hundred solar water pumps across India to implementing social entrepreneurial programmes such as the one in which people invested in (and profited from) small loans for Chennai's street hawkers to switch from kerosene lamps to solar Auroville Energy Products Inc is another organisation interested in spreading the use of solar power. The company focuses on developing solar





products, such as solar lamps, solar charge controllers, and solar inverters. They have also developed a solar charged bike system that takes advantage of the solar water pumps across Auroville. The bikes have a 10 km radius and can be rented by Aurovillians and the guests.

Village action groups are also active in sharing the benefits of solar energy. One such programme involves teaching interested local villagers to use solar cookers. Four thousand women from six villages have attended the monthly solar cooking demonstrations conducted by Nitu Deshmok from Sri Aurobindo Ashram. She goes beyond teaching technical skills and informs people of the changes they need to make to their schedules and recipes to integrate solar cooking into their daily lives. This programme has been designed in response to historical failures of the government and various NGOs' taking solar cooking initiatives that usually involved one or two demonstrations, followed by distributing solar cookers to village women. They hope that with a more holistic approach towards making solar cooking more convenient and with demonstrations over a long period of time, this solar cooking program can succeed and become a replicable model for spreading the use of solar cookers. •



