

## Clique Solar's ARUN® at ITC Maurya, New Delhi

World's first large solar concentrator system that caters to the hospitality industry for satisfying their thermal energy needs



### Summary of the case

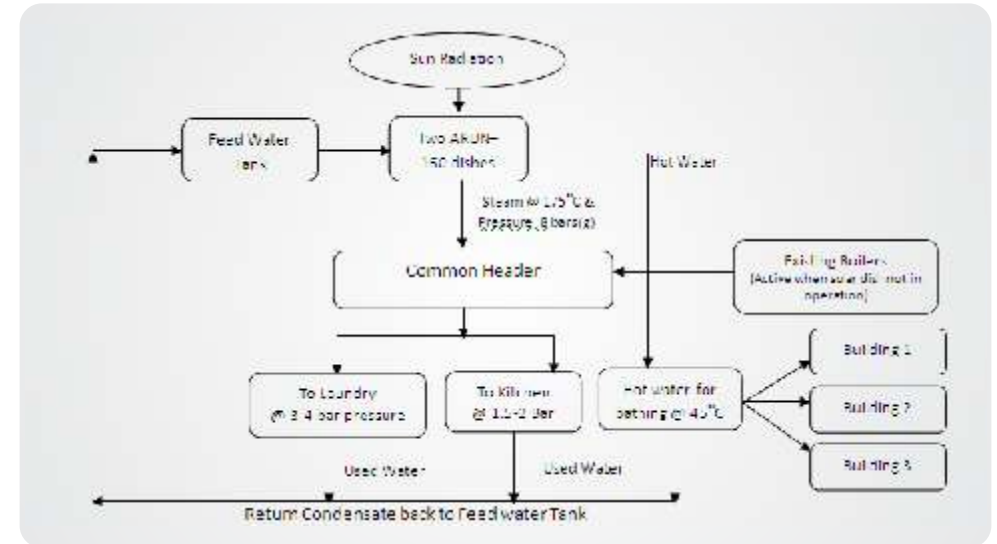
ITC-The Maurya has set an example by pioneering the successful use of solar technology for satisfying its thermal energy needs in laundry, cooking, bathing and other applications. The ARUN® system was installed and commissioned in 2009.

### Highlights

- The system consists of 2 ARUN® 160 solar concentrator dishes
- It saves ITC an equivalent of almost 40,000 to 42,000 litres of fossil fuel (furnace oil) per annum
- Reduction in CO2 emissions by almost 110 to 130 tons per annum
- The dish was installed on a single pillar, overcoming the challenge of land constraint.

### The process

- Step 1: At the start of the day, the Dish extracts water from the feed water tank to generate steam at 175° C and pressure of 5 to 8 bars
- Step 2: Steam delivery from dishes to various applications starts as soon as the required steam delivery pressure is achieved
- Step 3: The steam is fed to the Common Header. It gets distributed to various applications from this common header



### Conclusion

Not only has the system been operating successfully for more than 2 years now, but the economics of the investment also make a strong case for all hotels to install such systems. Contrary to being an eye-sore, the ARUN dish installation has been an attraction for all its guests.

"ITC is trying to reduce its carbon footprint through various measures that it has taken across the company. One of the steps it has taken in ITC Maurya is to install the ARUN® solar concentrator which generates 8 bar of steam and helps us to save 13 liters of diesel per hour." - Mr. Niranjan Khatri, General Manager - ITC Welcomgroup.