

AUROVILLE

AN INCUBATION CENTRE FOR SMART CITY DEVELOPMENT

“At present mankind is undergoing an evolutionary crisis in which is concealed a choice of its destiny; for a stage has been reached in which the human mind has achieved in certain directions an enormous development while in others it stands arrested and bewildered and can no longer find its way.

Sri Aurobindo



28th feb 1968 inauguration



yesterday



today



plan



ENERGY MANAGEMENT

SOLAR PV

- Pioneered Grid-Connected Solar PV in Tamil Nadu and Puducherry
- Long experience with stand-alone solar PV systems
- Hybrid solutions (solar, wind etc.)
- Collaborated with Regulators and Distribution Licensees in shaping policies and guidelines
- Developed in-house PV monitoring system (Wattmon)

ENERGY MANAGEMENT

SOLAR PV



ENERGY MANAGEMENT

SOLAR THERMAL



ENERGY MANAGEMENT

Wind



ENERGY MANAGEMENT

Small Windturbines



WASTE WATER MANAGEMENT



WASTE MANAGEMENT



ELECTRIC VEHICLES



REGENERATION

ECO SYSTEM SERVICES



REGENERATION

Implementation in Chennai

before



after



URBAN FARMING



INFORMATION SYSTEMS

- ICITI (Integrated Communication and Information Technology Infrastructure)
- ASYNCTO (Auroville Synchronization Tool)
- AUROSTAT (Auroville Statistics Office)
- Progress Monitoring Systems (including “real progress”)

TRAINING



HOLISTIC EDUCATION

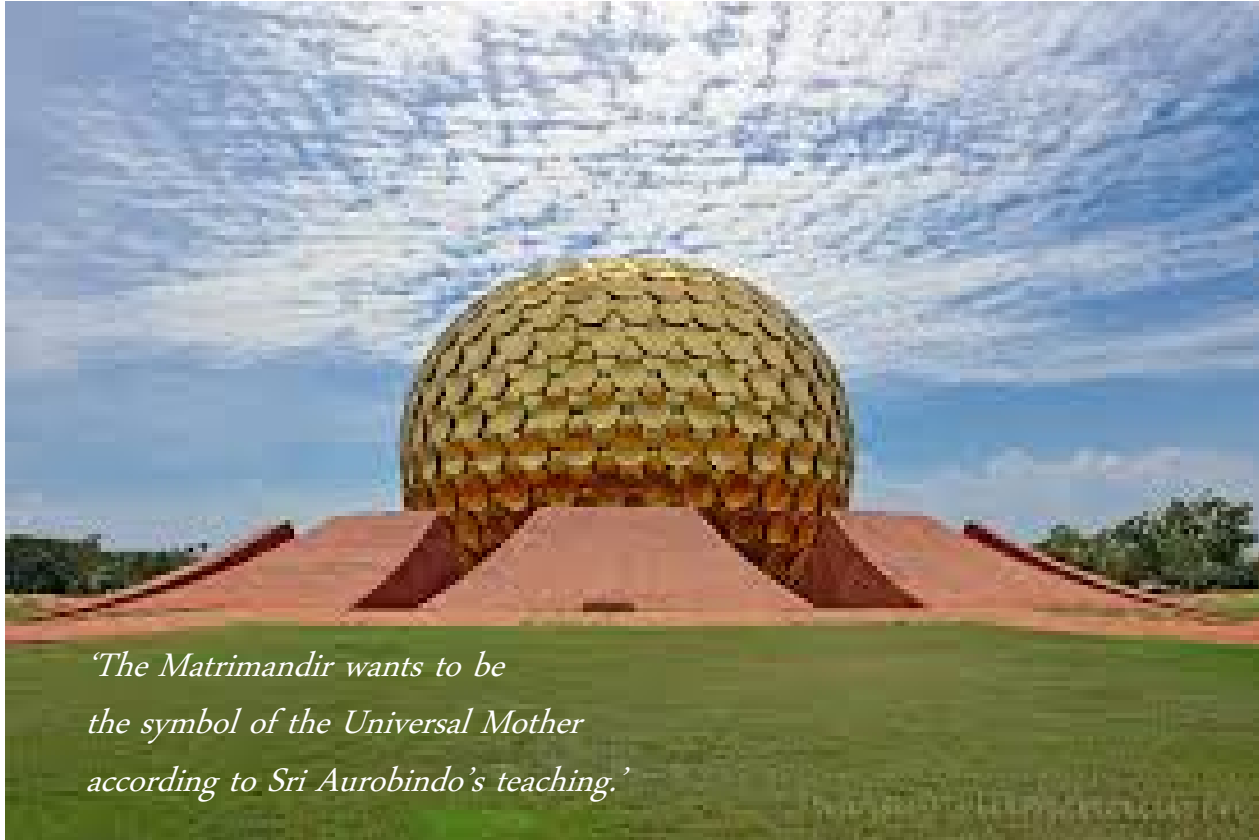
- Inspired by the Integral Yoga of Sri Aurobindo
- Curriculum aligned to needs of students
- Smart education prepares students for a sustainable life
- Education *in the city*, not in a far away campus
- Life-long learning



BEAUTY & PLACE-MAKING



CITY WITH A SOUL



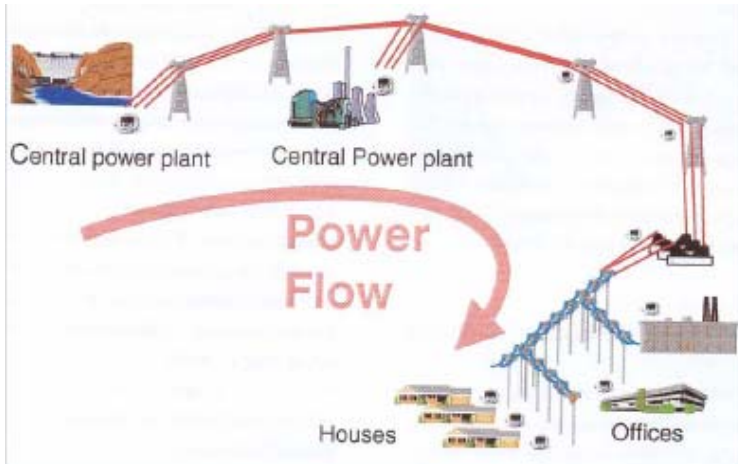
*'The Matrimandir wants to be
the symbol of the Universal Mother
according to Sri Aurobindo's teaching.'*

POLICY & GUIDELINES

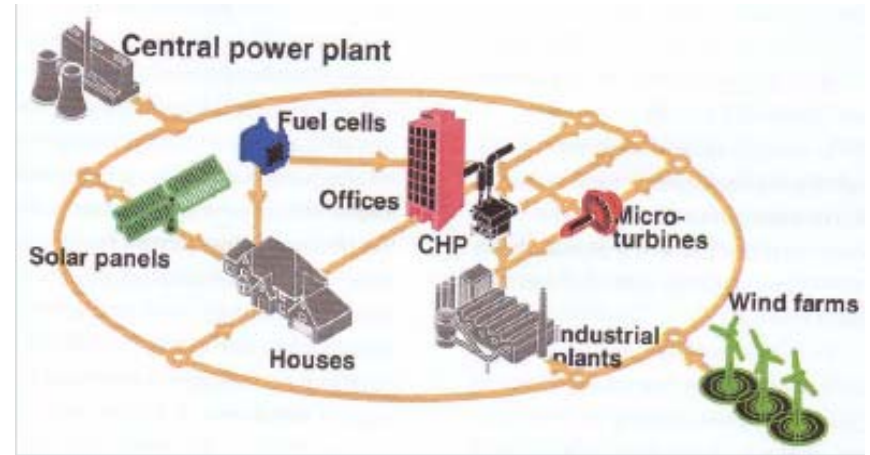
- Support to policy makers and regulators (e.g. solar net metering)
- Planning and design Guidelines for Green Industrial Parks
- Developing of voluntary Guidelines for Green Buildings

The Smart Grid

Present



Future



Auroville has installed its first micro-grid with (virtual net-metering) in 2015.

Distributed renewable energy



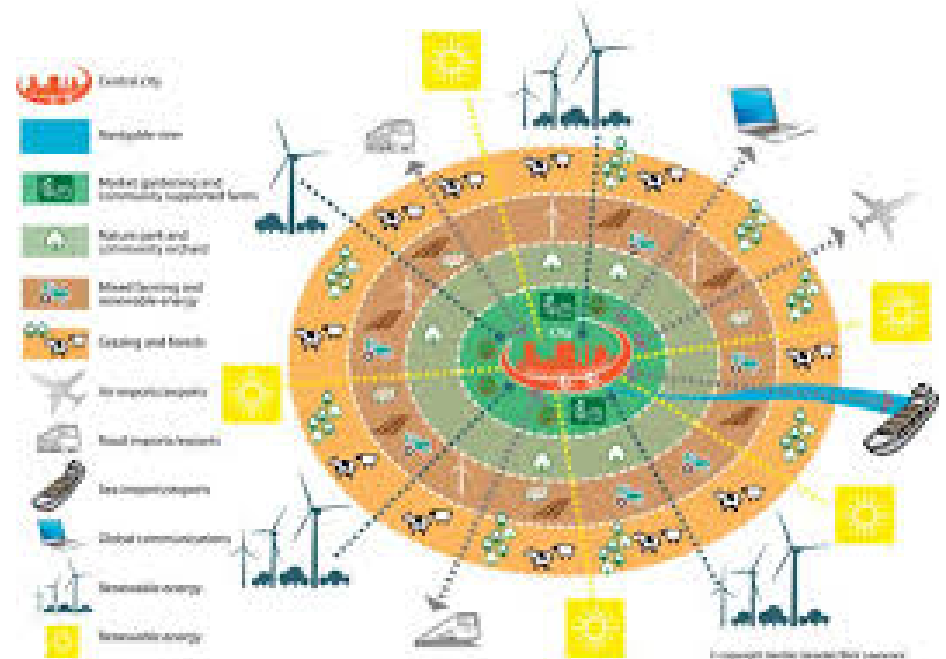
Distributed renewable energy



A SMART CITY also has. . . .

- 24 by 7 water, pressurized (no more individual sumps, booster pumps and overhead tanks)
- All electrical service connections with bi-directional energy meters (“solar ready”)
- From Consumers to Prosumers
- Walk-able cities
- Point-to-point public transport (*include the last mile*)
- Virtual vehicle ownership
- No queues (for ration cards, licenses, bill payments. . . .)
- Recreational facilities (parks, yoga plazas)
- Vibrant city that retains cultural heritage
- Cities with a soul/focus point/identity
- Roof Space Index (RSI) is as important as FSI (Floor Space Index)

A Smart City is *Regenerative*



Credit: Herbert Girardet, the World Future Council

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Thank You

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