



Nirvana Country is located in Sector 50-51 of Gurgaon with 1200 villas (950 occupied) in an area of 300 acres. Sustainability initiatives are part of the community's goal of going green and giving back to the society.



## Solar Energy Integration

Residents of Nirvana Country are installing rooftop solar photovoltaic to become producers and users of "Green Power" and to reduce grid dependence.

Phased approach — Solar rooftop to be installed in common areas followed by individual villas.



1.42 lakh litres water saved every month through a well-maintained rainwater harvesting system comprising mini water pits in each household to collect all wastewater except black water. Collected wastewater is sent to 14 major Rainwater Harvesting pits. Wastewater is filtered before injection into groundwater. Rise in groundwater table from 200 ft. to 65 ft.



**3-4 lakh litres** of wastewater predicted to be treated by a sewage treatment plant. Treated water to be used for horticultural purposes.



Household waste segregated into- wet compostable waste, dry recyclable waste and dry non-recyclable waste.

Wet/kitchen waste and garden waste is diverted to zero-energy composter.

**900 kg** compost is generated each day after a 14-day cycle.

E-waste segregation and collection once a month.

To know more about the initiative, write to sanukapila@gmail.com









# **Climate** Resilience **Interventions in** Gurgaon

This document depicts a preliminary assessment of possibilities of climate resilience across various building types.

## **Building Type**

High potential, only financing challenge

High potential but low demand or financing plus infrastructure challenge

Low potential and / or difficult challenges

Solar Rooftop PV for Power Generation

> Solar Water Heating



Commercial



#### Renewable Energy Integration

Rooftop availability high

Rooftop better used for PV due to lack of year-round hot water demand

Rooftop availability High initial cost

Low potential due to low hot water demand

Rooftop limited, but savings higher due to commercial tariff

> Feasible if hot water demand is high

Rooftop limited, but savings higher due to commercial tariff

Feasible if hot water demand is high

### Water Management



Wastewater Recycling

High water saving potential

Land availability may be a challenge; Pipelines for water reuse challenge

High water saving potential

Land availability may be a challenge; High potential, reuse in garden

Limited potential; Space constraint

High potential for reuse in HVAC cooling

Limited potential, but water use may be high

High potential for reuse in HVAC cooling

#### Waste Management



High potential for composting; Biogas possible if there is a community kitchen

Recycling of various solid wastes but challenge of segregation and collection

High potential for composting or for electricity for common areas

Recycling potential high for paper and e-waste

High potential only if there is a canteen

Recycling potential for packaging waste

High potential for biogas for kitchens serving food courts and restaurants



Wet Waste

Composting/Biogas



