



## HPCL Administrative Building and Integrated Pipeline & Terminal Control Building, RKPL project, Kanpur, Uttar Pradesh

<b>Location</b>	: Kanpur, Uttar Pradesh
<b>Site Area</b>	: 10169 sq.m.
<b>Built up area</b>	: 1875 sq.m.
<b>Typology</b>	: Commercial/Office
<b>SVA GRIHA rating</b>	: 4 star

The following strategies were adopted to reduce the building impact on the natural environment:

- 🌿 **Landscape**
  - 100% of existing mature trees have been preserved on site.
  - 151 new trees have been planted on site.
- 🌿 **Energy**
  - 83% of total living area falls under daylight zone.
  - The LPD of the project is 6.68 W/sqm which is lower than the ECBC specified LPD limit of 10.80 W/sqm for offices.
  - The thermal efficiency of the building envelope is 304.87 sq.ft./TR
  - All air-conditioners installed in the building are BEE 5 star rated. In addition, VRV system has been installed in the control room building whose energy efficiency ratio is more than that of a 5 star BEE rated air-conditioner.
  - 7 kWp solar photovoltaic panels have been installed on the roof of the building.
- 🌿 **Water and waste**
  - The project has reduced building water demand by 47.41% below the SVAGRIHA base case through the use of low-flow fixtures.
  - The project has reduced landscape water demand by more than 25% below the SVAGRIHA base case.
  - Rainwater storage tank of 15000 litre capacity and recharge pit is constructed on site to capture and utilize rainwater. Excess rainwater is recharged in ground water aquifer after passing it through a filtration system.
- 🌿 **Materials**
  - PPC has been used for 100% structural, masonry and plaster works.
  - Low-VOC and lead free paints have been used to maintain good indoor air quality.
  - More than 70% of the panelling, false ceiling and in-built furniture installed in the building are low energy.
  - The project has demonstrated a reduction in embodied energy by 56% by using AAC Blocks for external walling application.
- 🌿 **Lifestyle**
  - There is a provision of dedicated rest room and toilet for the service staff within the site.
  - The project has taken environmental awareness initiative by sticking pamphlets at various places mentioning green building features of the project.
  - Ramps have been provided at the entrance of the building for providing accessibility to differently abled persons.
  - The project has provided a septic tank within the site boundary.

### Integrated Team

<b>Client</b>	: Hindustan Petroleum Corporation Limited
<b>Developer</b>	: Hindustan Petroleum Corporation Limited