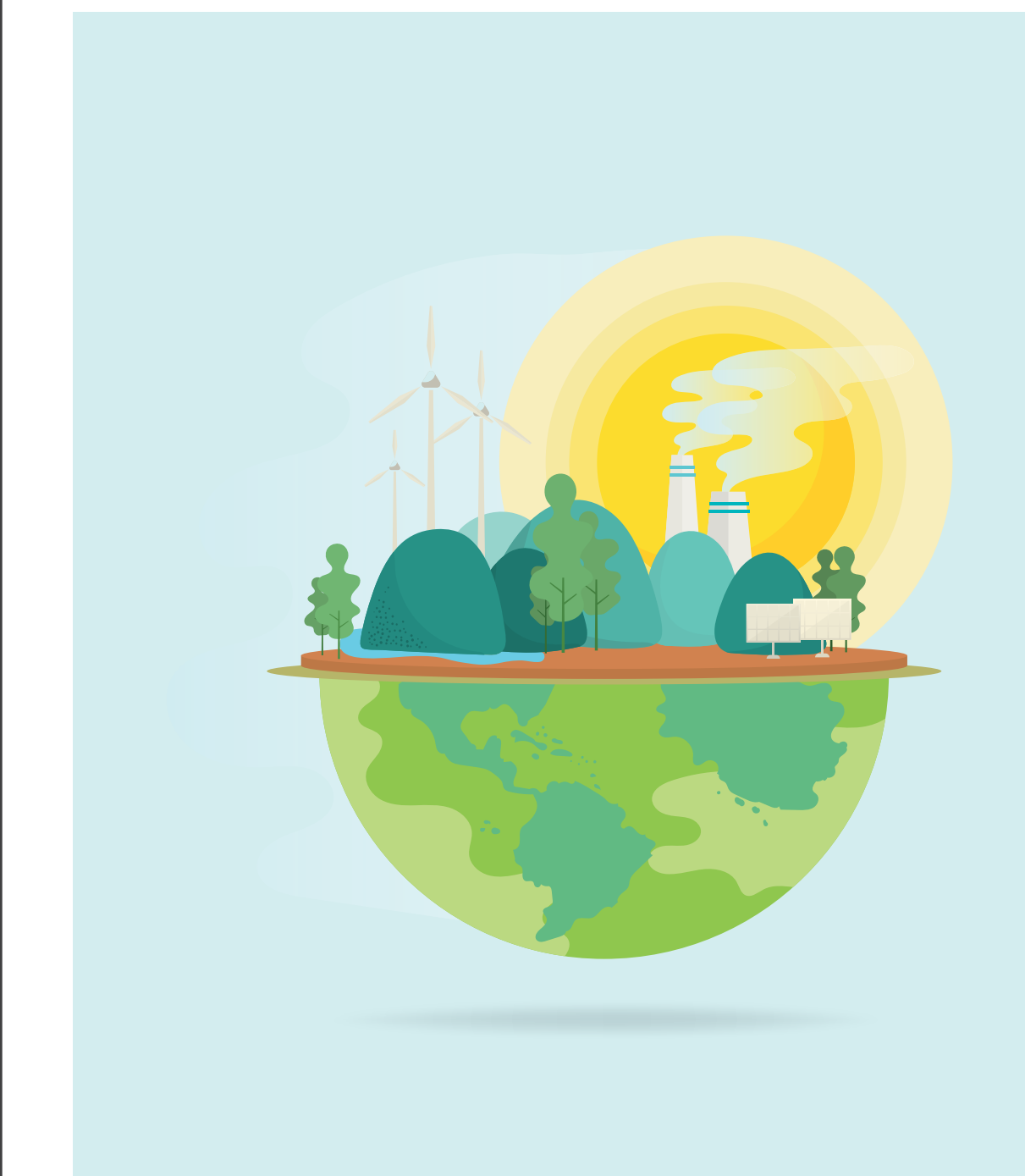


<p><b>Area</b> 257.04 sq.km.</p>	<p><b>Population</b> 1.89 Million</p>	<p><b>Population Density (2021)</b> 7,339 persons/ sq.km</p>	<p><b>Household Size (2021)</b> 4.37</p>	<p><b>Zones</b> 5 (South, North, East, Central, West)</p>
<p><b>Total Household</b> 4,31,547</p>	<p><b>Climatic Condition</b> Hot &amp; Dry</p>	<p><b>Wards</b> 100 (20 Wards in each zone)</p>	<p><b>Major Economic Activity</b> Trade, Medical, IT, Commerce and Industries (foundry, metal-based, and machine tools)</p>	

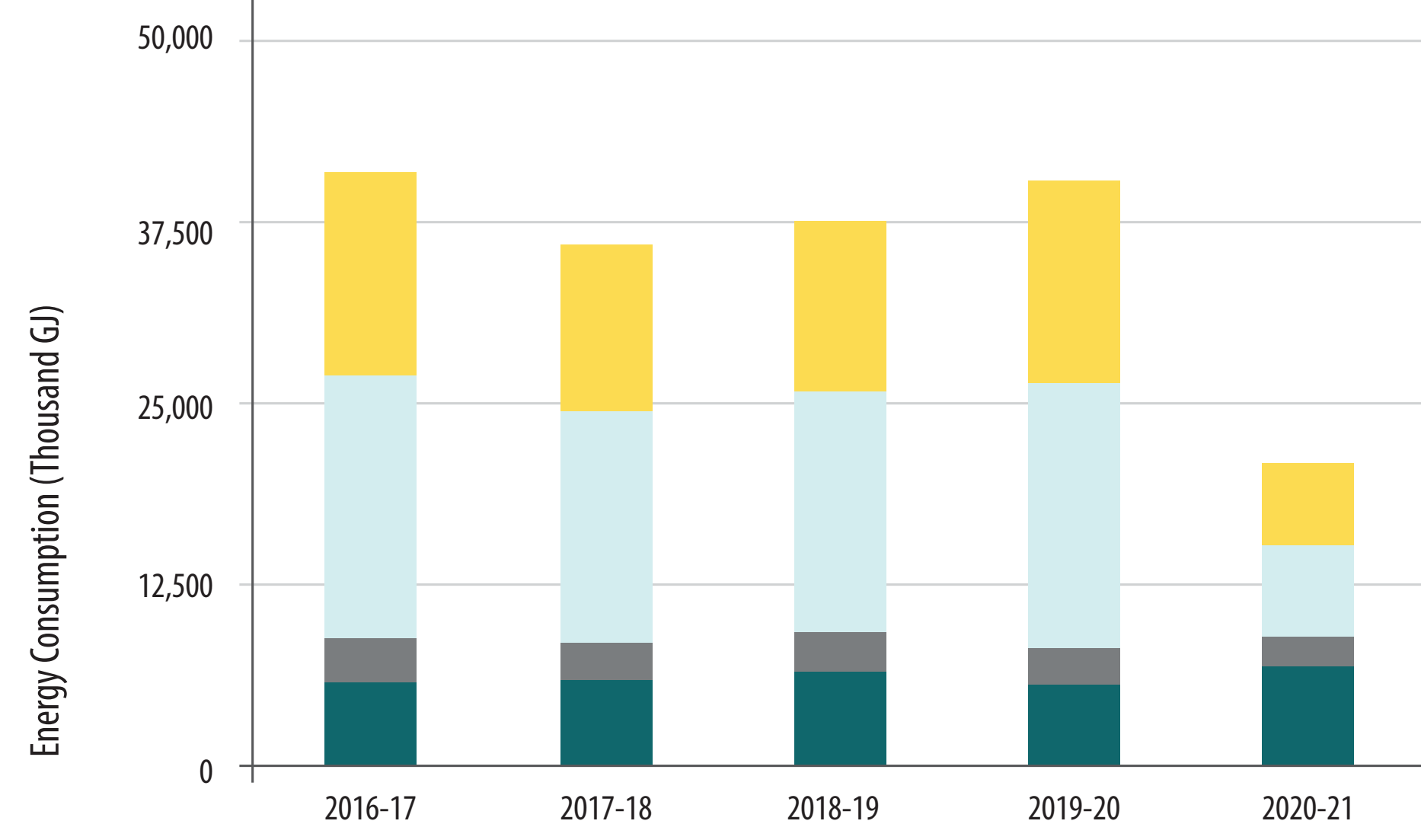


**Climate Projections**  
Coimbatore will see an increase in average maximum temperature by 3.3°C; increase in average minimum temperature by 3.4°C by the end of the century and increase in rainfall upto 0.5% by 2050, with increasing frequency of short duration high intensity rainfall.

## Energy Consumption & GHG Emissions

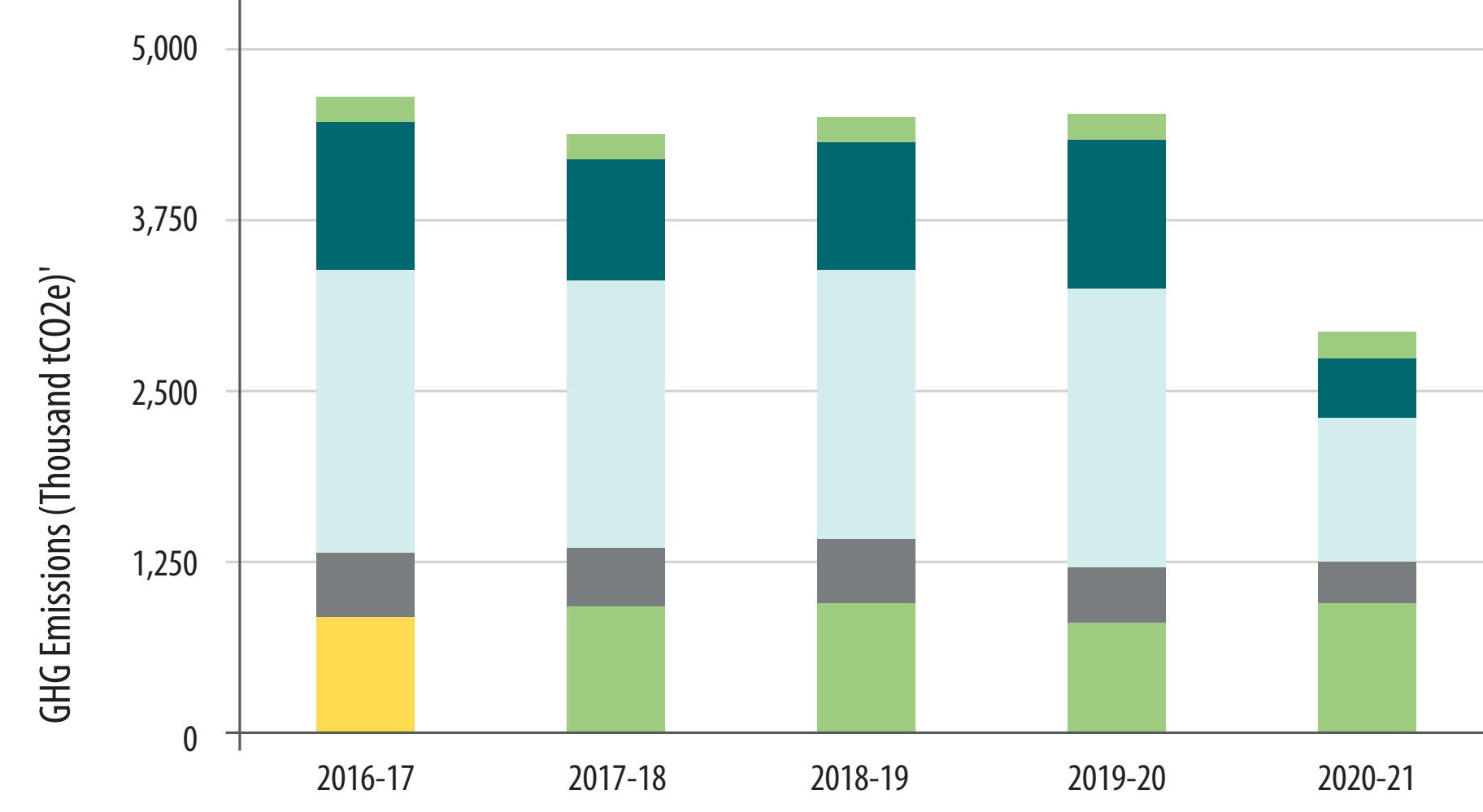
## Vulnerability & Risk Assessment

Energy Consumption



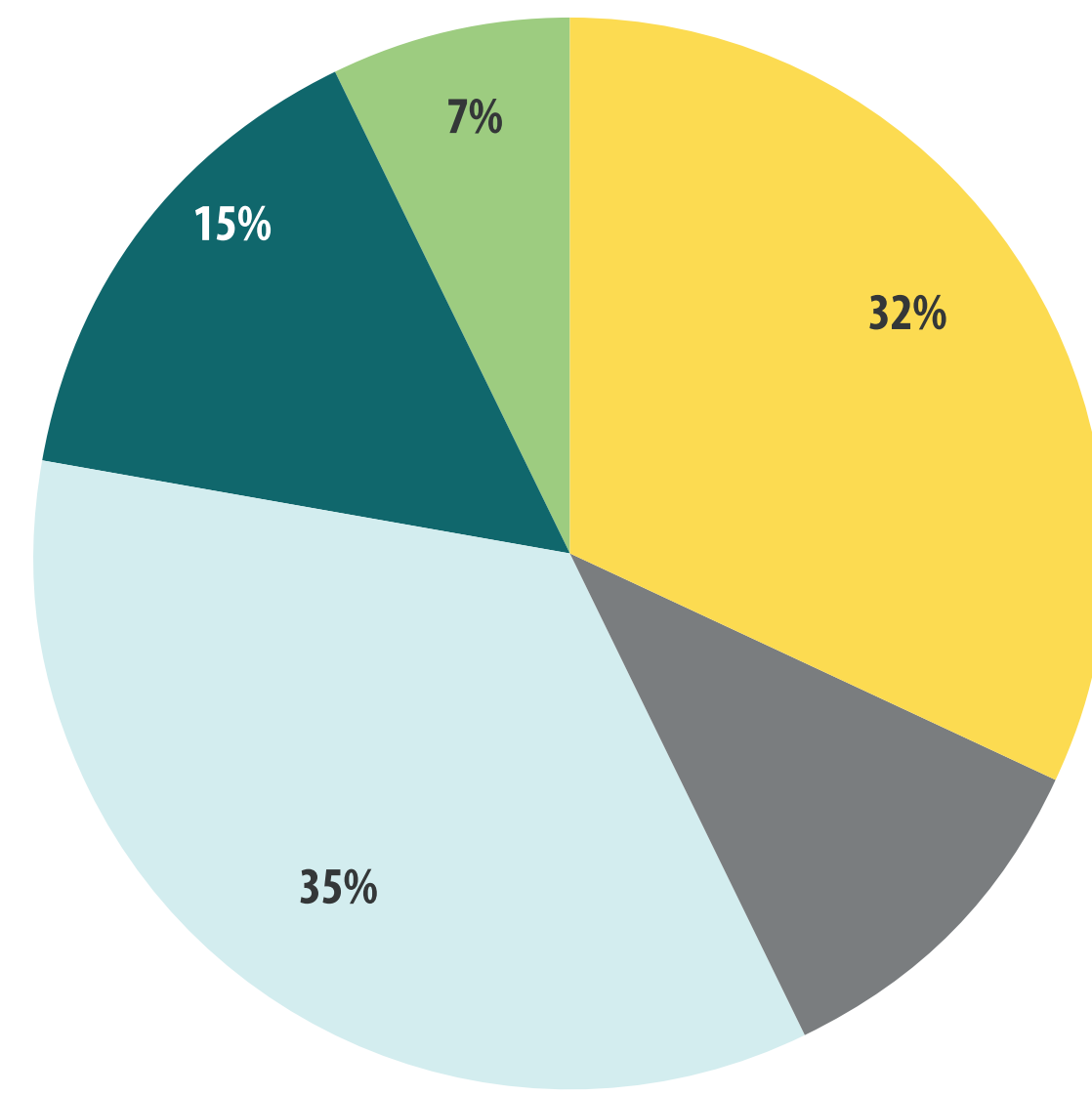
Residential Buildings  
Commercial and Institutional Buildings / Facilities

GHG emissions



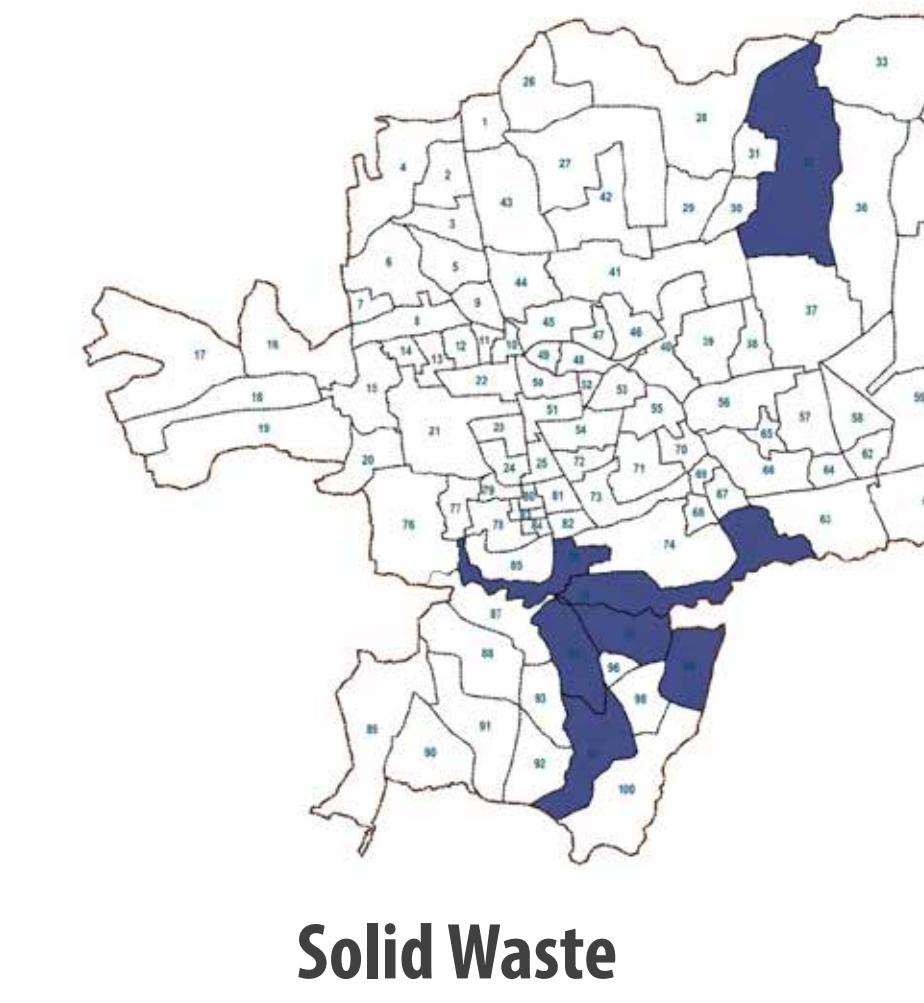
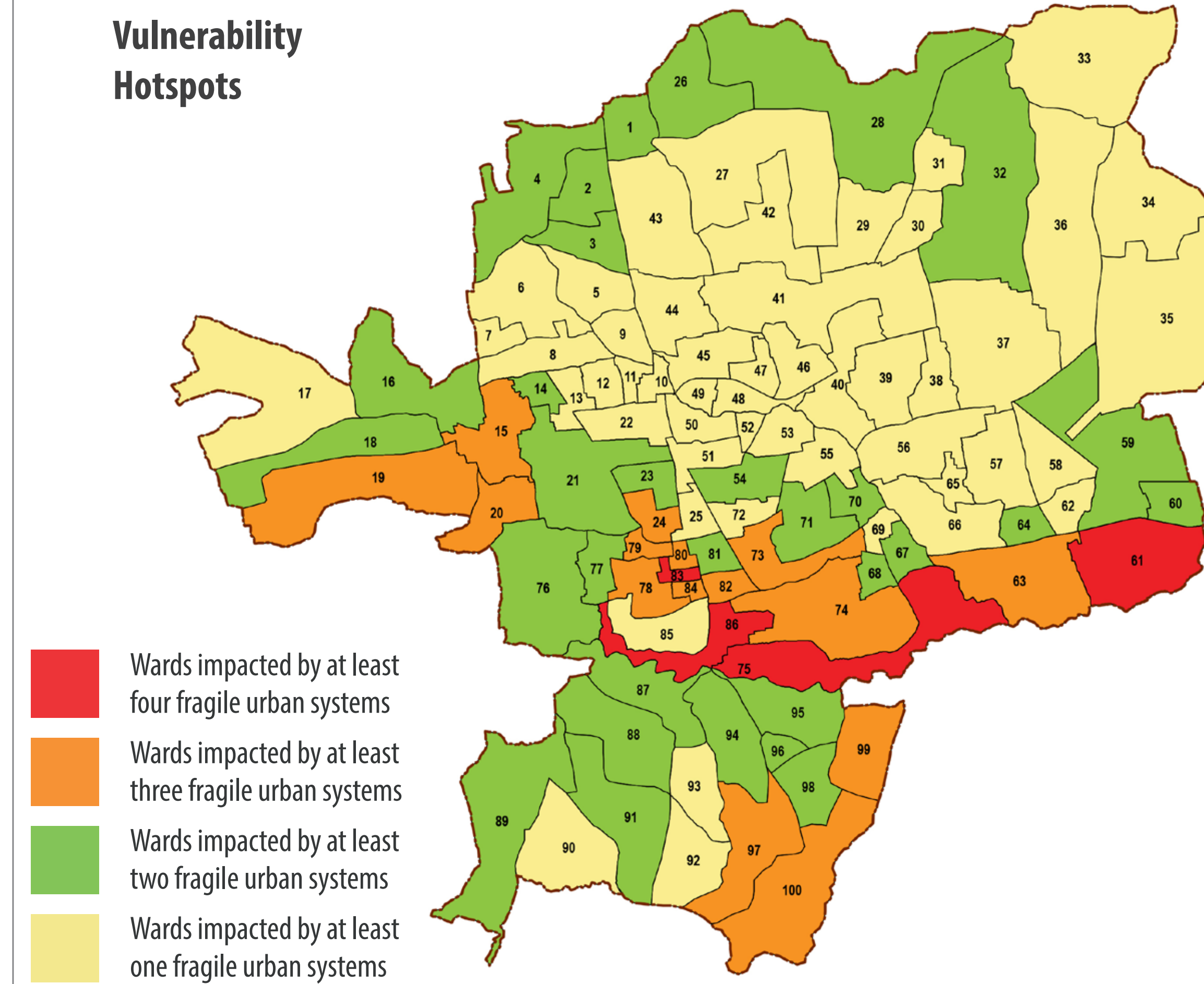
Agriculture, forestry and fishing activities (ie. mainly agriculture)  
Transport

Sector-wise share of GHG emissions, 2020-21

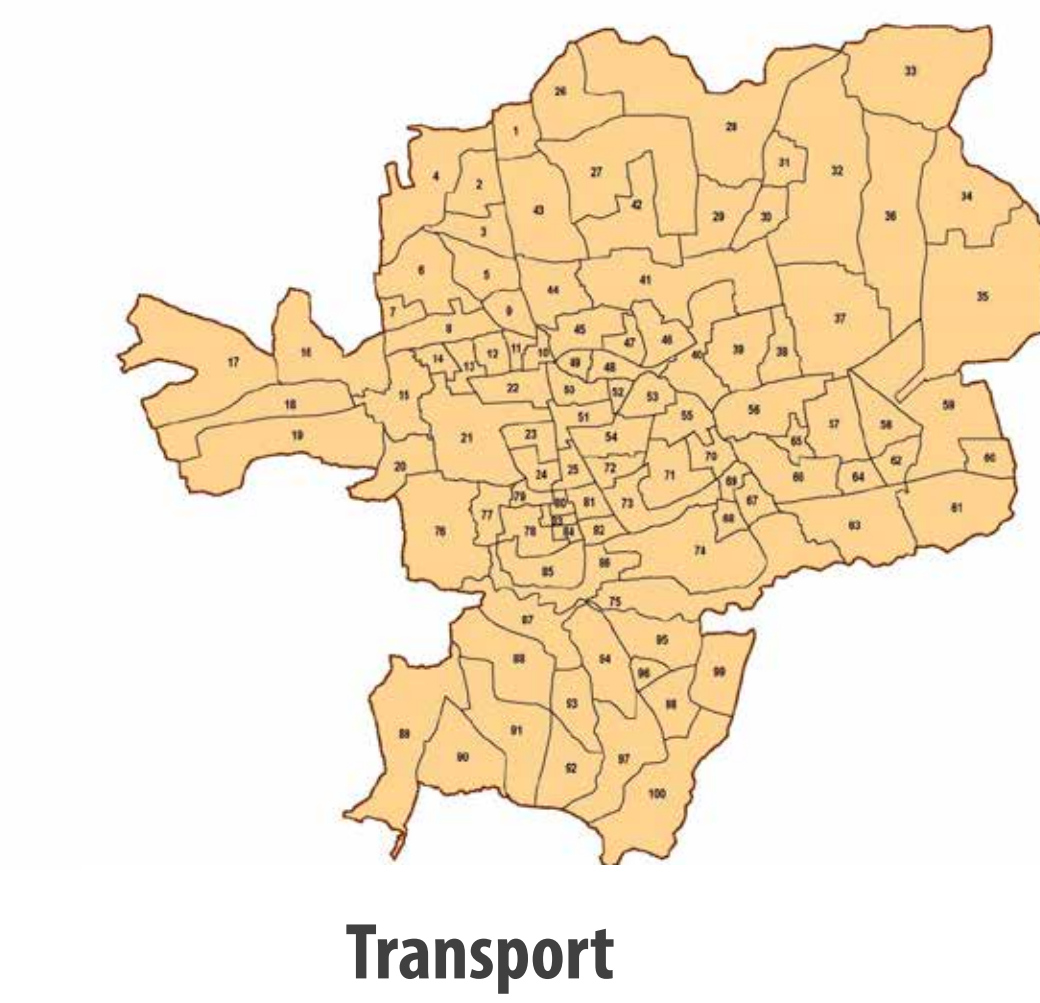


Manufacturing Industry and Construction (ie. industrial sector)  
Waste

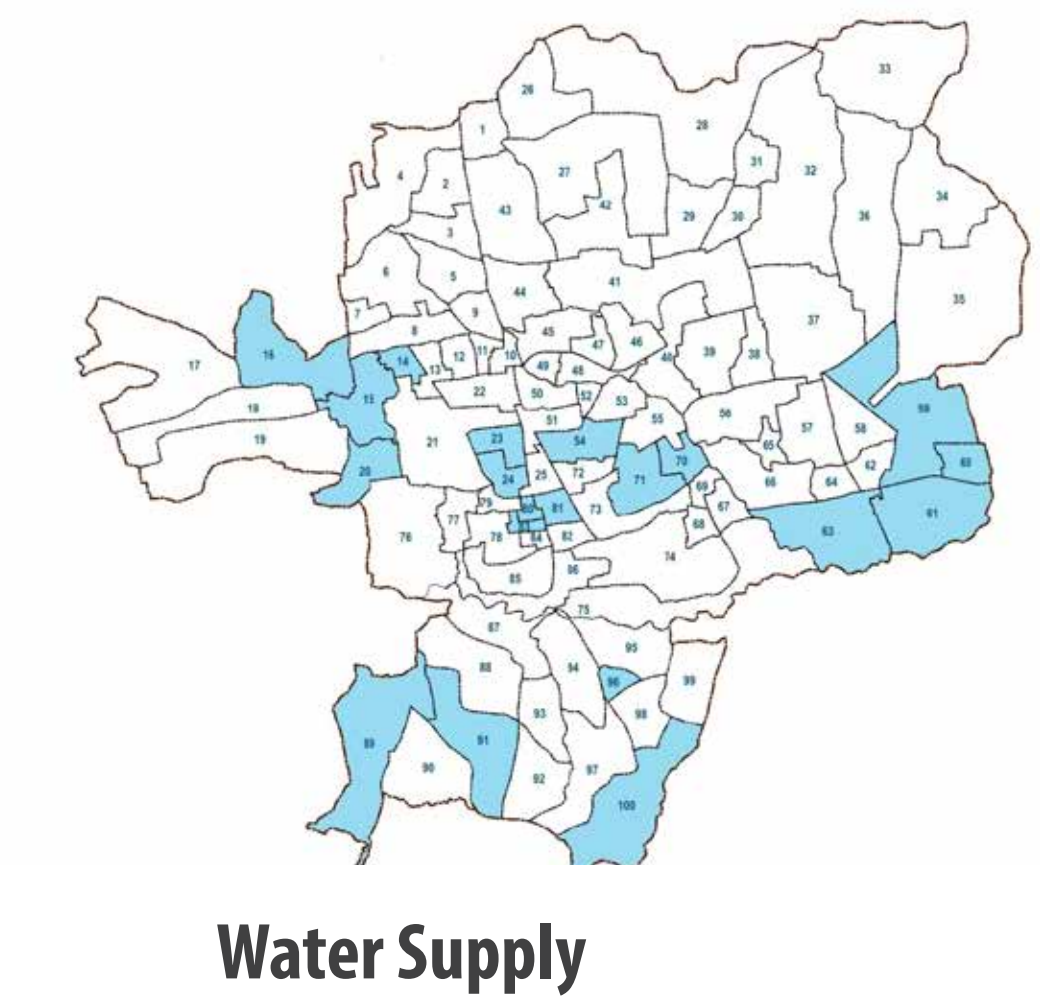
Vulnerability Hotspots



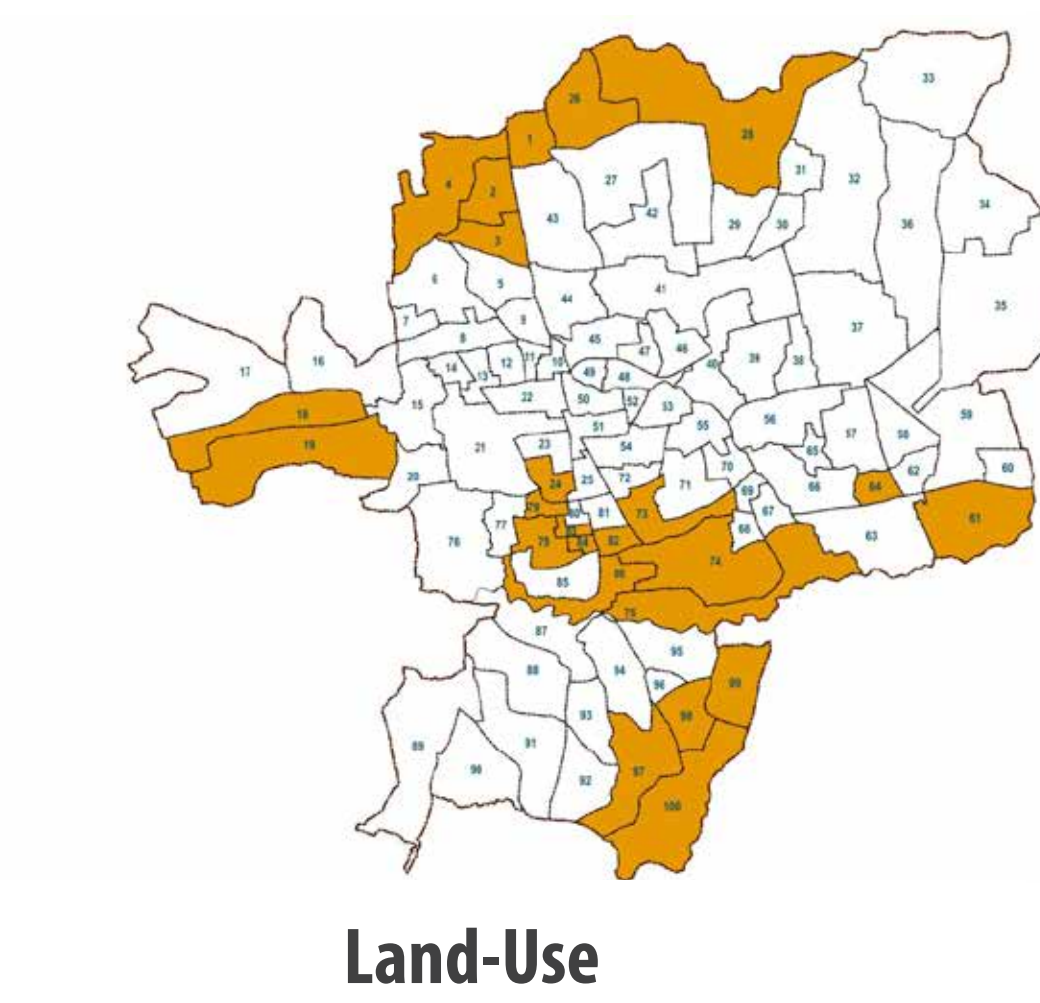
Solid Waste



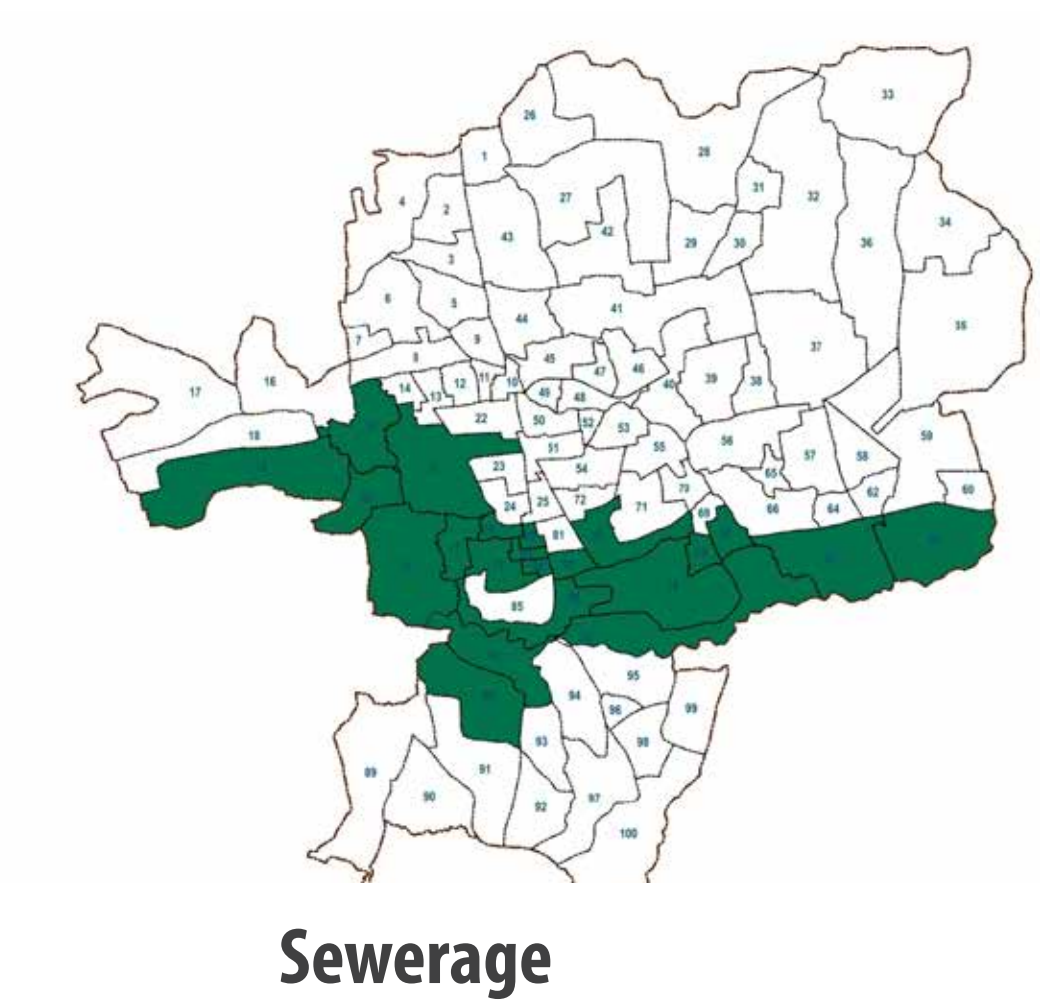
Transport



Water Supply



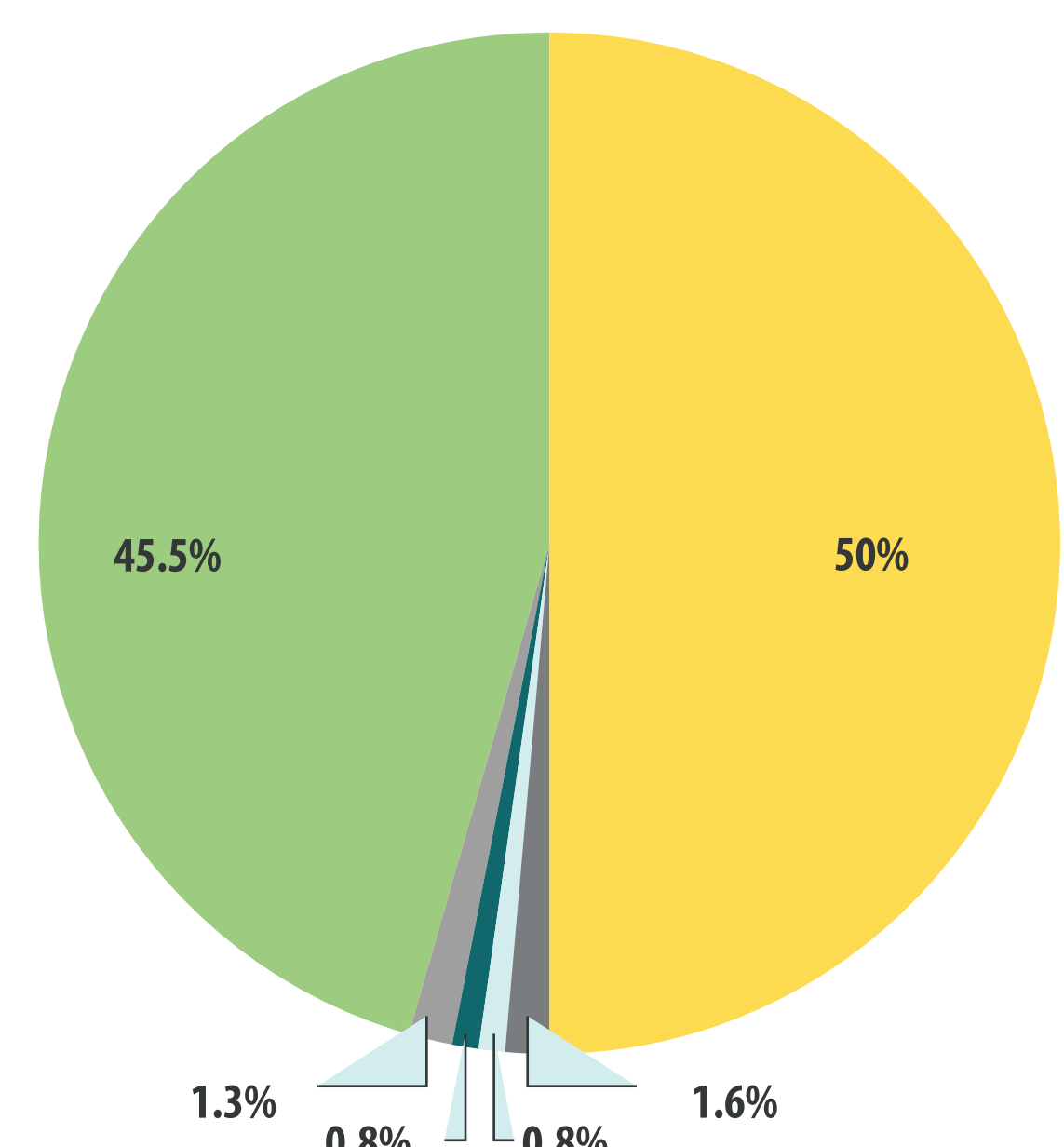
Land-Use



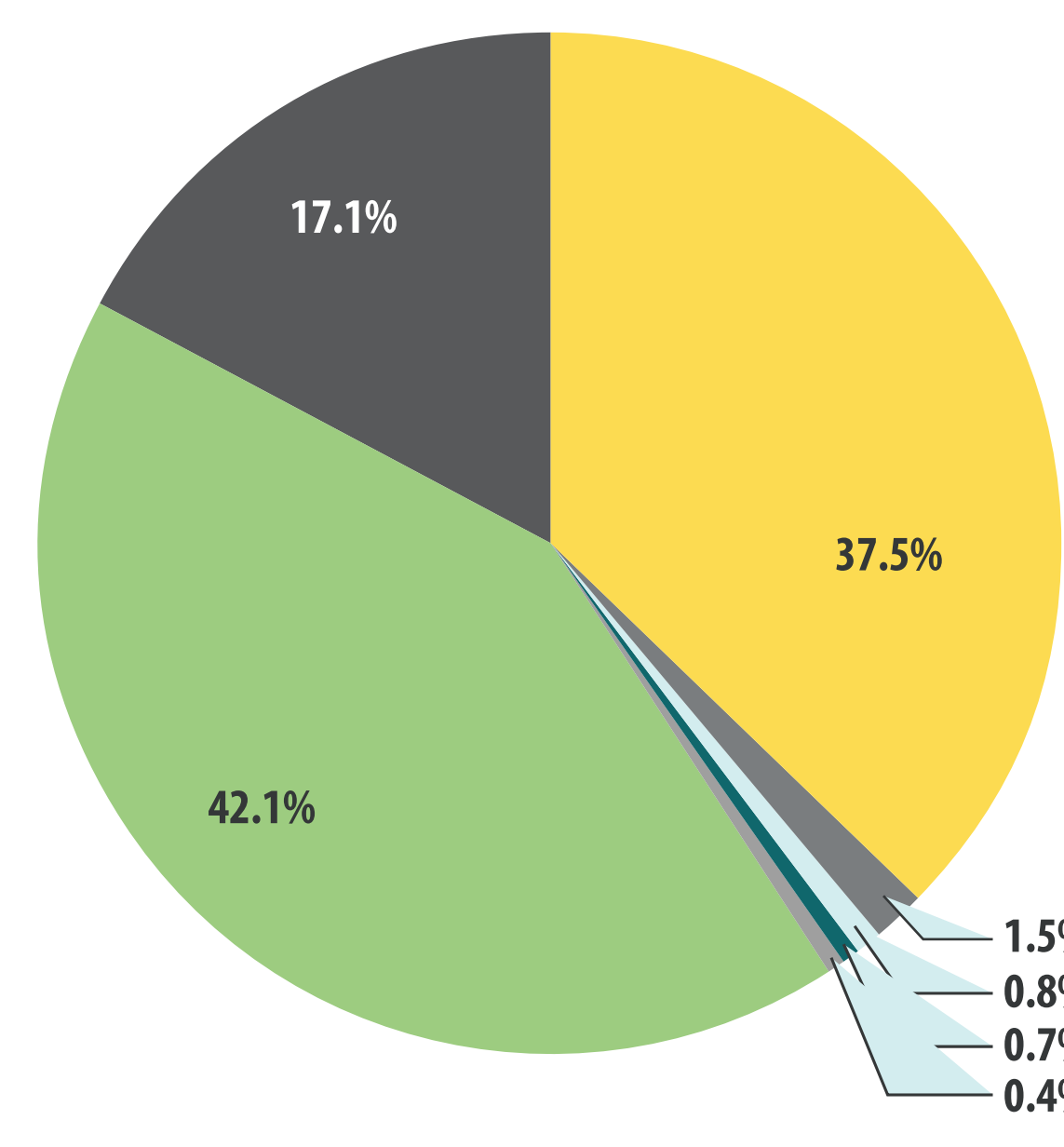
Sewerage

## Climate Resilient City Action Plan

Sector-wise energy reduction potential



Sector-wise mitigation potential



Buildings (Residential, Commercial & Industrial Buildings)  
Transport  
Street Lighting  
Municipal Buildings  
Water  
Industry  
Solid Waste

## Proposed Climate Resilient Interventions in the Action Plan

**Buildings (Residential, Municipal Commercial and Industrial)**

**Example Resilience Interventions**

- Solar PV systems
- Energy Efficient (EE) fixtures (LED lamps, EE fans etc, power factor correction and others)
- Declare and maintain reserved sites as Urban Green Spaces
- Have proper policy to lay the utilities on the road sides on one side so that the other side could be used for tree planting

**Resilience Impact**  
Reduction in urban heat island effect, air quality and micro climate improvement, positive impact on health

**Total Mitigation Potential**  
522,700 tCO<sub>2</sub>e (38% of total reduction potential)

**Solid Waste**

**Example Resilience Interventions**

- 4 Biomethanation plants of total 200 TPD
- Waste incineration facility of 215 TPD
- Establish zone wise collection and processing centers
- Encourage community driven private start ups to manage solid waste in the city
- Develop and implement user charges

**Resilience Impact**  
Improvement in air quality, better health and socio-economic benefits to over 40% of city population

**Total Mitigation Potential**  
233,600 tCO<sub>2</sub>e (17% of sector total)

**Water**

**Example Resilience Interventions**

- Reduction in Non Revenue Water (NRW)
- Analysis of available water sources so as to plan, e.g. Aquifer maps
- Waste water treatment plant connections and network for dual supply
- Separate uses of water with IULW principles

**Resilience Impact**  
Water conservation potential of 92 MLD, benefitting more than 60% city population

**Total Mitigation Potential**  
5,000 tCO<sub>2</sub>e (0.4% of total reduction potential)

**Industry**

**Example Resilience Interventions**

- Energy Efficient pumps
- Energy efficient industrial motors

**Total Mitigation Potential**  
575,960 tCO<sub>2</sub>e (42% of total reduction potential)

**Resilience Impact**  
Enhanced energy resilience

**Transport**

**Example Resilience Interventions**

- Deployment of electric buses
- Public bike-share system

**Total Mitigation Potential**  
20,800 tCO<sub>2</sub>e (1.5% of total reduction potential)

**Resilience Impact**  
Improvement in air quality and reduction in urban heat island effect

**Street Lighting**

**Example Resilience Interventions**

- Energy Efficient Street Lighting (21,000 street lights)

**Total Mitigation Potential**  
11,000 tCO<sub>2</sub>e (0.8% of total reduction potential)

**Resilience Impact**  
Improvement in safety and access to public spaces

**Implementing Partners**

ICLEI  
Local Governments for Sustainability SOUTH ASIA

south pole

econcept  
Research / Consulting / Evaluation

**Knowledge Partner**

NIIA  
National Institute of Urban Affairs