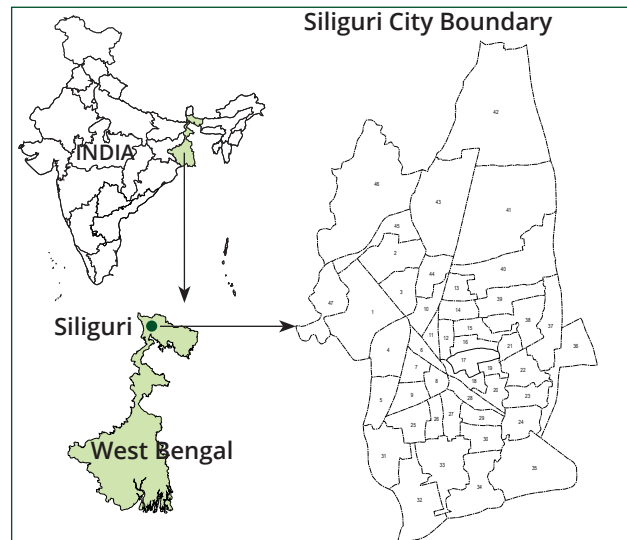




City Climate Profile - Siliguri

Siliguri city is strategically located in the region called Siliguri corridor, an important link connecting mainland India with its neighbouring states and countries. It stretches across the floodplains of the Mahananda River at the foothills of the Eastern Himalayas in the Darjeeling district of North Bengal, surrounded by dense forests. Traditionally the settlement of Siliguri developed as a tea plantation and trading centre and it continues to be one.

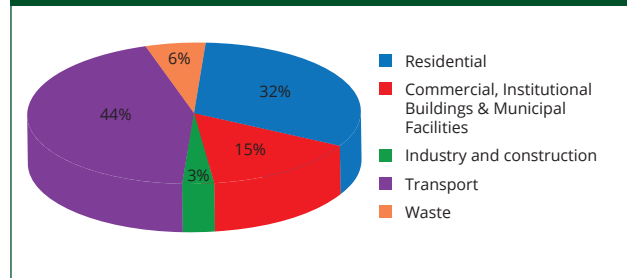
Population: 513,264 (2011 Census of India)
Area: 41.9 sq. km.
No of Wards: 47 wards
Gender Ratio: 946/1000 males
Literacy rate: 77%



Greenhouse Gas Emissions Inventory

A GHG Emissions Inventory for 2015-2016 was developed as a first step in preparing a city climate action plan for Siliguri city. The total GHG emission for Siliguri city was 1.03 million tonnes of carbon dioxide equivalent (CO₂e) in the year 2015-16, translating to an average per capita GHG emission of 1.93 tonnes of CO₂e, which is higher than India's per capita GHG emission 1.56 tCO₂e for the year 2010.

Sector-wise Share of GHG emission in Siliguri, 2015-16



Climate Risk / Vulnerability Assessment

A climate risk assessment and vulnerability assessment of the fragile urban systems of the city was conducted in the city with the help of the Shared Learning Dialogues (SLDs). This was supplemented by the inputs from the Core Team and the Stakeholder Committee of the city.

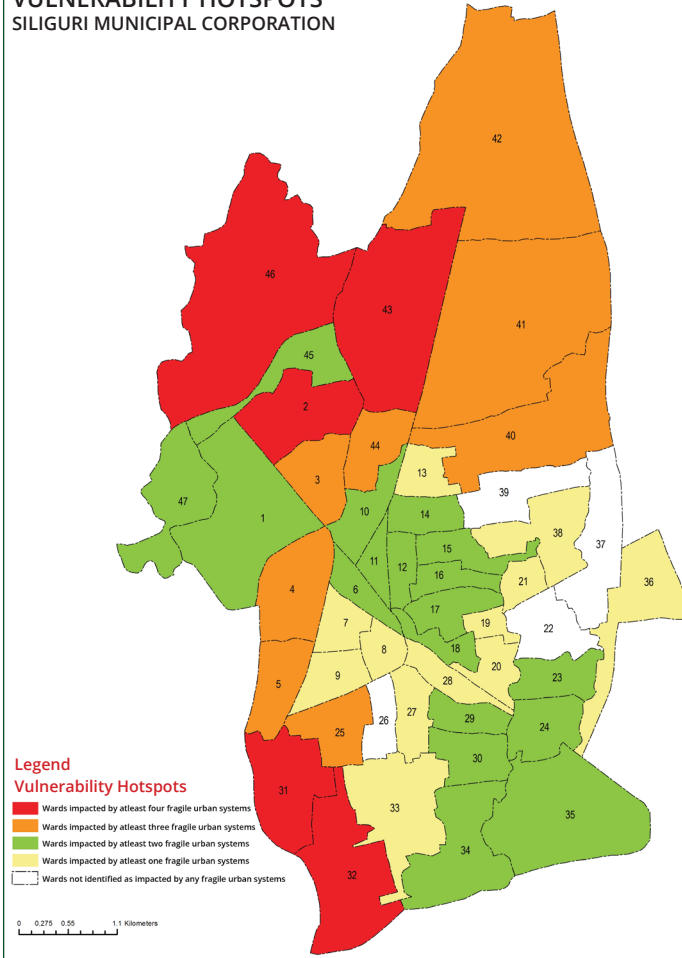
| Fragile Urban Systems | Climate Risks | Climate Fragility Statements | Risk* |
|------------------------|---------------|--|--------------|
| (water) | | <ul style="list-style-type: none"> Increased demand for water posing additional stress on the system. | High (16) |
| (storm water drainage) | | <ul style="list-style-type: none"> Increased chances of greater 'knock-on' impacts on health. | High (16) |
| (sewerage) | | <ul style="list-style-type: none"> Increased chances of greater 'knock-on' impacts on health. The water logging and flooding in vulnerable areas will worsen. | High (16) |
| (SWM) | | <ul style="list-style-type: none"> Decomposition of waste in open dumps will create health hazards. Flooding and choking of drains, impacting health and leading to water logging. | Extreme (20) |
| (Transportation) | | <ul style="list-style-type: none"> Increased use of private AC vehicles in order to maintain comfort, which may lead to more traffic congestion and increased emissions. Increased flooding, resulting in damage to roads, increasing maintenance cost and traffic congestion. | Extreme (25) |

* Risk Score (likelihood x consequence) – Low: 1-4; Medium: 5-10; High: 11-20; Extreme: 20-25

temperature increase; short duration high intensity rainfall



VULNERABILITY HOTSPOTS SILIGURI MUNICIPAL CORPORATION



Low Carbon and Climate Resilient Solutions

Based on the climate risks and vulnerability assessment, the following initiatives have been undertaken through the CapaCITIES project. Some are implementation projects to showcase change (Quick Wins) while others are detailed studies that will lead to financially viable projects (Bankable Projects).

Quick-win Projects

Water

- Providing Two Acoustic Leak Detection Machines, Train a team of Engineers, and Conduct Water Audit in Zone 1 thereby contributing to reduction in GHG emissions and NRW. (Project cost: CHF 34'000)

Urban Planning

- Installation of Four Ambient Air Quality Monitoring Stations providing critical information for transport planning, health impacts and awareness and urban planning. (Project cost: CHF 47'500)

Solid Waste Management

- Decentralised Solid Waste Management System for the Selected Zero Waste Wards (SUNYA) - At source segregation of waste at household level has been initiated in wards 2 and 17. A decentralized waste management plant for biodegradable waste will be designed and installed, thereby reducing GHG emissions. (Project cost: CHF 143'000)

Bankable Projects

Transport

- Pre-feasibility Study to Assess the Viability of Operationalizing a Mass Public Transport System in Siliguri has been initiated to improve travel conditions and reduce on road congestion, improve environment quality, and enhance safety and energy security. (Project cost: CHF 44'500)

Solid Waste Management

- Pre-feasibility Study to Assess the Viability of Partial Closure of the Existing Dumpsite and Exploring Alternatives will be undertaken as the existing dumpsite had reached its capacity in 2014, however, it continues to be used for dumping waste. (Project cost: CHF 38'000)

For more information, please contact:

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