



QUICK WIN PROJECT – SILIGURI AMBIENT AIR QUALITY MONITORING STATION (AAQMS)

About Siliguri

Siliguri city is strategically located in the Siliguri corridor, an important link connecting mainland India with its neighbouring countries. The city is located at 26° 42' 57" N latitude and 88° 25' 24" E longitude. 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.

CapaCITIES Project

Cities account for approximately two-thirds of global energy use and over 70 percent of energy-related greenhouse gas (GHG) emissions that drive global climate change. In India, increased demand for energy, infrastructure and services is putting city systems under pressure. This will be accentuated further by growing risks caused by climate variability. Poor and vulnerable segments of the city populations will be affected most. Through the Capacity Building for Low Carbon and Climate Resilient City Development project (CapaCITIES), SDC's Global Programme Climate Change will support and accelerate the Government of India's efforts for sustainable urbanization.

Sensor based AAQMS

Given the strategic location of Siliguri in the region, its connectivity to the north east and to Nepal and Bhutan, as described above, traffic movement and resultant vehicular congestion are critical issues that the City is grappling with. Integrated public transport system does not exist in the city of Siliguri or the Siliguri Jalpaiguri Development Authority region. There is a heavy reliance on intermediate public transport (IPT) (minidors and auto rickshaws) and private modes of travel which has led to saturation of on-road traffic,

especially in the cities of Siliguri and Jalpaiguri, and consequently congestion, increased fuel consumption, time and economic loss. Consequently, air pollution is a significant health concern for people of the City. The City, however, lacks the monitoring infrastructure, with only one, intermittently functioning continuous ambient air quality monitoring station, location in the outskirts.

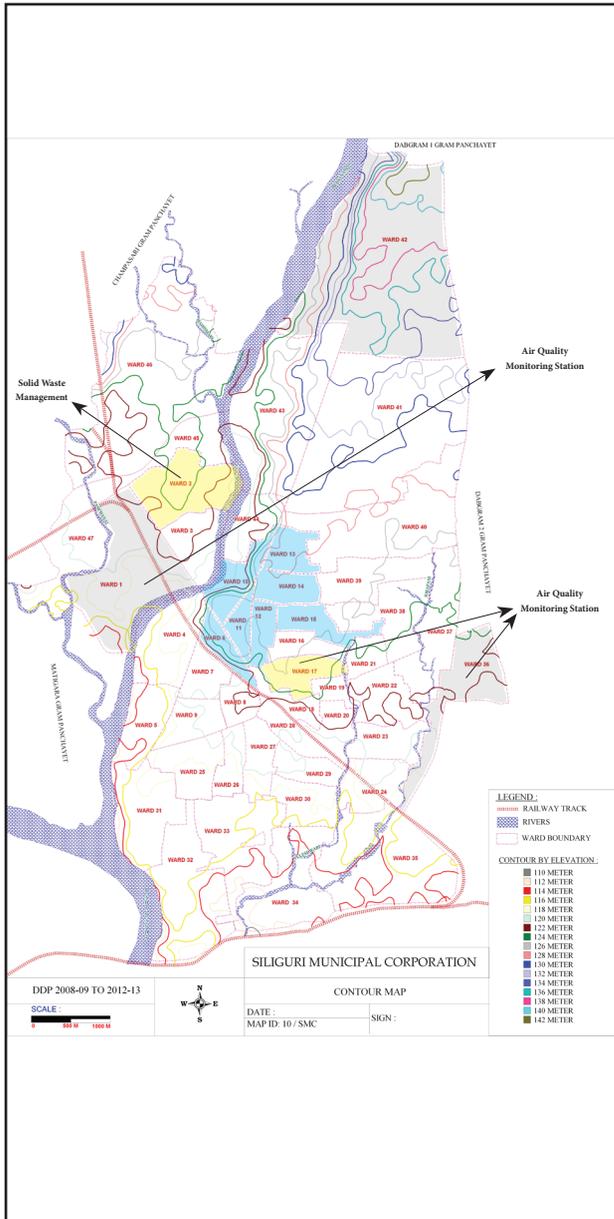
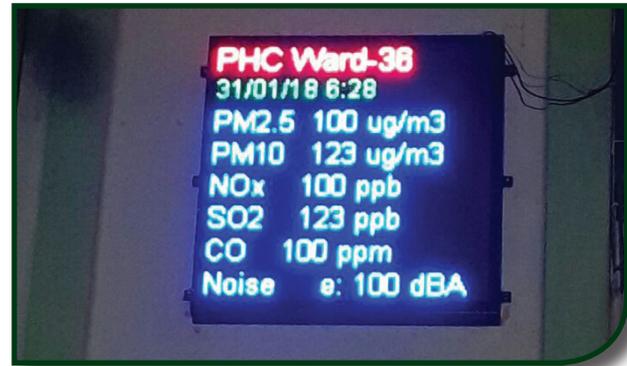
Therefore, given the need for better transport and traffic planning in the City and its potential impacts on improving air quality in the City, the CapaCITIES project has installed four sensor based ambient air quality monitoring stations in Siliguri at the following locations:

- Siliguri Municipal Corporation main administrative building
- Primary Health Center (PHC) in ward 36
- Bhakti Nagar Police Station
- Mallaguri Police Outpost





A digital display board that would continuously report data from all the 4 sensors has been installed at the administrative building of the Siliguri Municipal Corporation



GHG Emission Reduction / Adaptation Impact

This information can be used to make knowledgeable decisions about traffic and transport planning in the city. This planning will help to reduce the GHG emissions. More importantly, the data can be interpreted to assess the impacts of observed air pollution levels on the health of citizens and mitigative measures can be appropriately proposed.

Beneficiaries

Project beneficiaries include Siliguri Municipal Corporation, Public Works Department (Government of West Bengal), Public Health Engineering Department (Government of West Bengal), Department of Transport, Government of West Bengal and the citizens of Siliguri.

Potential for Replication

The pilot project can be scaled up with installation of more machines and data from all stations can be integrated on a single server

Project Investment

The total project investment is CHF 25'730

For more information, please contact:

ICLEI- Local Governments for Sustainability, South Asia
 C-3 Lower Ground Floor, Green Park Extension, New Delhi 110 016, Tel: +91-11-4974 7200, Fax: +91-11-4974 7201
 Email: iclei-southasia@iclei.org, Siliguri Contact: +91-9643633243