



# Sustainable Smart City Assistant Using IBM Granite LLM

Harnessing the power of advanced AI to cultivate intelligent, efficient, and environmentally conscious urban environments for a thriving future.

# Our Visionary Team

Committed to innovating sustainable urban solutions, our dedicated team brings diverse expertise to the forefront of AI-powered city development.

Team ID: NM2025TMID03902

Team Size: 4 dedicated professionals



A collaborative spirit driving urban innovation.



**Vinoth B**

Team Leader



**Tamil Selvan M M**

Team Member



**Chandrasekaran G**

Team Member



**Mohammed Hashwath Khan**

Team Member



# Technical Foundation for Innovation

To ensure optimal performance and seamless operation, our project demands robust computational resources. The following minimum specifications are essential for deploying the Sustainable Smart City Assistant effectively:

## Processor Power

Intel Core i5/i7 or AMD equivalent, ensuring high-speed data processing.

## Memory Capacity

Minimum 8 GB RAM (16 GB recommended) for efficient multitasking and data handling.

## Swift Storage

512 GB SSD or higher for rapid boot times and quick access to large datasets.

## Operating Environment

Windows 10/11 or Ubuntu Linux 20.04+ for a stable and secure development platform.

## Essential Software

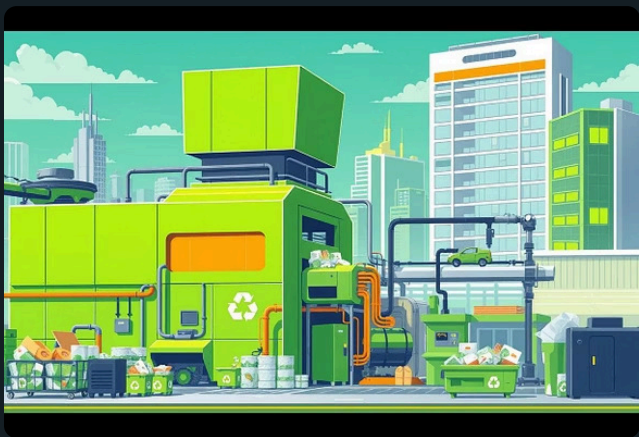
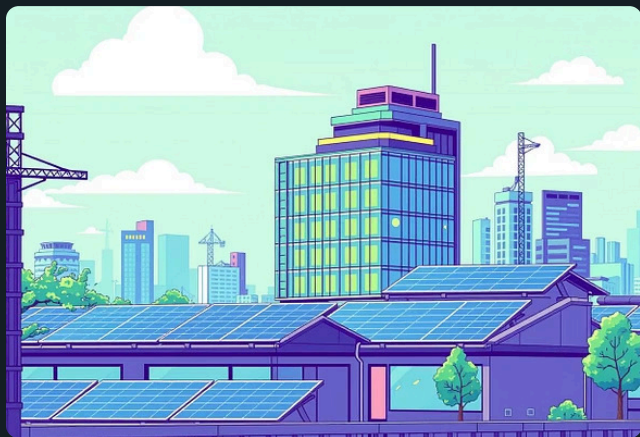
Python 3.10+, IBM Granite LLM APIs, and supporting libraries for core functionality.



These specifications ensure the AI assistant runs efficiently, processing complex urban data with ease.

# Empowering Cities with AI-Driven Sustainability

The **Sustainable Smart City Assistant** using **IBM Granite LLM** is an innovative AI-powered system engineered to significantly improve urban efficiency, sustainability, and overall livability. By harnessing the advanced capabilities of IBM's Granite Large Language Model, this project delivers intelligent insights and actionable recommendations for crucial urban challenges.



Our assistant offers real-time, data-driven solutions, predictive analytics, and robust sustainable resource management strategies to support government officials, city planners, and engaged citizens. The core focus is on fostering eco-friendly, technologically advanced, and people-centric cities where artificial intelligence seamlessly integrates with human needs.

**Energy  
Optimization**



**Citizen  
Engagement**

**Waste  
Management  
+**



**Smart  
Transportati  
on**

This holistic approach ensures that technology serves as a powerful catalyst for creating a more sustainable and harmonious urban future.

# Paving the Way for Future-Ready Urban Environments

The **Sustainable Smart City Assistant** using **IBM Granite LLM** represents a significant leap forward in cultivating urban environments prepared for tomorrow's challenges. It masterfully intertwines artificial intelligence, IoT integration, and sophisticated data analysis to achieve a vital equilibrium between technological progress, ecological preservation, and societal well-being.

## Intelligent Integration

Seamlessly connects AI with IoT to create responsive urban systems.



## Ecological Balance

Prioritises environmental protection through sustainable resource management.



## Human-Centred Design

Focuses on enhancing the quality of life for all urban inhabitants.

This initiative emphatically demonstrates how AI is indispensable in transforming contemporary cities into truly sustainable, smart, and human-centred urban ecosystems for generations to come.