



# Climate Neutral Smart Cities Futuristic Approach of Development

The concept of 'Climate Neutral Smart Cities' mainly stands on four important pillars - governance engineering, adaptability to regular planning, breaking free from systematic dependencies and leveraging local energy support, writes Prabhakar Kumar.

Pollution and climate change have become the talk of the town across the globe. When it comes to a country like India, these issues look momentous, as the country is undergoing fast paced development due to various government initiatives being in the implementation stage along with real estate market looking for revival.

While we talk about major pollutants, vehicular emission, solid waste, e-waste, factories along with construction sites are some of the major contributors but when we talk about futuristic approach of development we would emphasize on construction sites. As per a rough estimate, the construction sites contribute 20 per cent to the

total pollution which poses a serious threat to the living conditions for the citizens. The government tends to provide a comfort of living to its citizens by developing smart cities under its Smart Cities Mission but will these smart cities be sufficient to tackle the ever-growing monstrous problem of pollution?

Till the time these smart cities will be developed, the pollution level might take a plight on the dwellers. In order to tackle the challenge to the environment, Climate Neutral Smart Cities can be thought of as a possible solution.

It is important to understand that the conceptualization of 'Climate Neutral Smart Cities' is not possible without addressing the structural reliance that cities have on fossil fuels (including





'governance engineering' is thus needed when it comes to cities mounting complex agreements and partnerships with their local stakeholders, such as distribution operators, citizens and other economic operators. In parallel, local governments should benefit from research and innovation support to adapt their entire economic and institutional functioning around the climate issue.

**Adaptability to Regular Planning** -

Research and Innovation priorities cannot be set in stone for too long, otherwise running the risk of creating lock-ins. The development of Climate Neutral Smart Cities should thus heavily rely on regular feedback loops from local authorities to ensure a flexible and modular workplan, responsive to the constantly evolving needs of cities.

**Breaking Free from Systematic Dependencies** -

It is important to understand that in order to develop a Climate Neutral Smart City we need to break free from the dependency on some of the resources like cars, external resources for energy etc and make more use of natural resources.

**Leveraging Local Energy Support** - In order to achieve success in developing futuristic cities, it is important to leverage the local energy support to climate action in an efficient and systemic way.

It is also important to understand that unless we start planning for such cities today we won't be able to match up the pace of the rest of the world in terms of development because it will take almost 8-10 years to complete the development of such

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natural gas), the prevalent use of cars (whatever their fuel) in city centres and the reliance on external resources (for energy and food consumption).

The concept of 'Climate Neutral Smart Cities' mainly stands on four important pillars - Governance Engineering, Adaptability to regular planning, Breaking free from Systematic Dependencies and Leveraging Local Energy Support.

**Governance Engineering** - Cities are the nodes of the future energy system. A genuine

cities. The Climate Neutral Smart Cities not only address the pollution of the construction sites but also addresses the issue of vehicular emission and other pollutants as it would aim to provide holistic solutions to its dwellers. **CT**



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