

# Using Geospatial Data to Build Sustainable Cities



Addressing rapid urbanization in a sustainable way is being helped by new and faster mapping techniques. The affordability of these maps is increasing, giving better access to valuable insights for those nations facing the pressing need to plan sustainable housing, water and sanitation.

Implementing a sustainable infrastructure of roads, waste, water and power is not

possible without reliable geospatial data. It provides a single source of accurate, environmental information to allow fast decision-making by governments and policymakers.

To help demonstrate the significance of geospatial data, Ordnance Survey (OS) has published a set of seven [sustainability innovation trends](#) outlining ways in which the wider geospatial industry is working to combat climate change.

The World Bank estimates that 54% of Sub-Saharan African urban-dwellers are living in informal settlements. These informal sites lack the infrastructure required to support sustainable, liveable and productive urban environments.

## Digital base maps for evidence-based environmental solutions

In response to the challenges associated with rapid urban growth, OS, in partnership with the International Growth Centre (IGC) and the Commonwealth Association of Architects (CAA), has piloted the creation of an automated digital base map of Lusaka, Zambia.

Using aerial imagery provided by the Zambia Survey Department in the Ministry of Lands and Natural Resources, OS utilized its advanced automated process to generate a new base map, using artificial intelligence, across 420km<sup>2</sup> of Lusaka. These accurate digital base maps create a vitally important resource for policymakers and planners in the development of evidence-based environmental solutions.

OS mapping data will help identify informal settlements, population and density, the number of built structures, the location of transport infrastructure surrounding formal and informal neighbourhoods, as well as access to electricity, sanitation facilities and clean water.

## Call to action

The UN is urging countries to commit to enhancing inclusive and sustainable urbanization by 2030 as part of its Sustainable Development Goals (SDGs).

OS recently convened an important workshop with senior leaders in the global geospatial community and published a [call to action](#) to governments reiterating the strategic value of location data in the fight against climate change. The Cambridge Conference workshop brought together global mapping agencies to discuss where accurate and trusted geospatial data is already delivering a positive impact and how they will support their governments in achieving [COP26's four key goals](#).

To read the OS sustainability trends report, [click here](#).

To read the national mapping and geospatial agencies government statement, [click here](#).



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(Courtesy: Ordnance Survey)