Infrastructure: An Instrument for Mitigating the Impacts of Climate Change

09.11.2021 2 min read

Authors

Ana Cândida de Mello Carvalho

Related areas

Infrastructure and Regulatory & Government Affairs

Topics

Carbon Infrastructure and Regulatory & Government Affairs Infrastructure

In the context of the 26th UN Climate Change Conference of Parties (COP26), a study developed through collaboration between UNOPS (the United Nations agency focused on infrastructure projects), UNEP (the United Nations Environment Programme) and the University of Oxford concluded that the infrastructure sector is fundamental to realizing the commitments made under the Paris Agreement and to achieving the Sustainable Development Goals (SDGs).

The study, entitled "Infrastructure for Climate Action", examines how the energy, transportation, water, waste, digital communications and construction sectors influence climate action, and reveals a disturbing fact: infrastructure is responsible for 79% of all greenhouse gas emissions, and 88% of all adaptation costs. Of the various sectors, energy, transportation and construction are the largest sources of GHG emissions.

According to the report, facing climate change will require that governments radically rethink how infrastructure is planned, designed and managed, in order to make it more resilient and better adapted to a low GHG emissions future.

Use of sustainable materials and technologies, improved energy efficiency, and adoption of policies that can integrate infrastructure projects into the natural and built environment (along with appropriate governance and regulation) are some of the actions that the report suggests to ensure that infrastructure projects incorporate climate adaptation and mitigation measures while contributing to sustainability over the long term.

Awareness, engagement and coordination among stakeholders in the lifecycle of infrastructure, and deciding on the concrete measures that must be put into practice to achieve climate objectives are decisive steps to success in this process. Coordination between governments and key players – especially those involved in the initial phases of the lifecycle of infrastructure projects – is also essential to incorporating climate objectives into strategic infrastructure planning, the methodology for prioritizing projects, and the guidelines for structuring each individual project.

Precisely because it is responsible for such a large percentage of GHG emissions, investment in infrastructure can have a key role in making it possible to achieve the Paris Agreement targets. For infrastructure to play its role, however, there has to be a paradigm shift in the way projects are selected, structured, implemented and managed, so that they can be seen as instruments for mitigation and of the effects of climate change. Making the shift will generate lasting, high impact effects for sustainable development.

› PROFESSIONALS

Professionals who combine legal insight and market perspective

Ana Cândida de Mello Carvalho