



GLOBAL PROBLEMS, CITY SOLUTIONS

Come 2050, two-thirds of the globe will be living in cities, and living with the infrastructure decisions our urban planners make today. By some accounts, over 60% of the land projected to become urban by 2030 has yet to be developed. For Green Cities, that's a once 'for a lifetime' opportunity.

In 2050, seven in ten of us humans will be city dwellers, up from just five today. Yet cities already consume over two-thirds of human energy needs and emit more than 70% of our carbon dioxide. It's been said before, but will have to be said many times again: fighting climate change starts in the streets.

The European Bank for Reconstruction and Development's (EBRD) ever-expanding 'Green Cities' programme works from the streets up, investing in middle-income economy cities to tackle climate change, address public health issues and improve citizens' well-being. While not restricted to any specific region, West Balkan cities have been the overwhelming focus up until now, and for a very good reason: carbon intensity in West Balkan cities is "up to five times higher" than other EU cities.

Launched in 2016 with just €250 million of funding, EBRD Green Cities proved so popular that it was replenished within just two years. With over €1 billion now for investment, the funds will scale up green projects and deploy

policy expertise to tackle obsolete infrastructure, reduce GHG emissions and help communities adapt to climate change. In order to make good on the goal of 'improving the lives of 23 million people', EBRD's ambition is to have 100+ cities – each with at least 100,000 people – on its books by 2030. Two years in, Green Cities is exceeding its own expectations. In July 2019, Green Cities added its 30th city – Cairo, Egypt. Notably, every capital city in the Western Balkans is now under the programme, and benefiting from it, including Belgrade (Serbia), Amman (Jordan), Sofia (Bulgaria) and Chisinau (Moldova).

To whet the appetite, Green Cities' participants embark on a 'trigger project' that, as a requirement, must address climate change. With EBRD guidance, each city then creates a comprehensive 'Green City Action Plan' (or GCAP). These plans are expected to locate climate change mitigation and adaptation opportunities and actions within broader urban agendas – including through public transport, urban roads and lighting, energy efficiency and unleashing nature based solutions.

The GCAP of Tirana, the capital of Albania, incorporates plans to plant two million trees by 2030 to create an "Orbital Forest" that encircles the central city and connects 14 thousand hectares of parks, forests and other forms of vegetation around the city. As well as tackling urban sprawl from rapid urbanisation, the new belt of trees will enhance biodiversity, increase public access to green corridors, and improve surface water and flood management.

The Green Cities programme leverages EBRD's decades of experience in municipal and environmental infrastructure investment – already representing investments of over €700 million and 800,000 tonnes of CO₂ mitigated annually.

NATURE'S CLIMATE STATISTICS

"Greening" cities typically brings sustainable infrastructure and smart urban planning to mind. But a more literal greening – nature-based interventions like planting trees – can help cities cope with more people and solve the problems they bring with them. For example, trees in streets and urban areas can help reduce air pollution by filtering fine particulate matter. Fine particulate matter from car exhausts and other pollution sources is a major public health problem, killing an estimated 3.2 million people per year and causing health problems for tens of millions more. Studies have shown that trees already reduce particulate matter exposure for millions of urbanites, and increased tree planting is a cost-effective way to help millions more.

Trees also cool the air, helping offset the 'urban heat island effect'. In the United States, trees are estimated to prevent 1,200 deaths during heat waves each and every per year. Beyond cleaning and cooling the air, trees and parks have multiple other health benefits that cumulatively are quite significant. According to Natural England, for every £1 spent on trees, the UK saves about £7 in healthcare, energy and environmental costs. In London, the estimated 8 million trees that live in the city help save £260 million every year in buildings' energy costs and remove up to 2000 tonnes of pollutants from the air every year.

City planners are beginning to tune in to nature-based solutions. With funding from the EU's Horizon 2020 programme, 'NATure-based URban innoVATION' is a four-year project by Naturvation aiming to help mainstream nature-based solutions in infrastructure decision making. The programme utilises 'urban-regional innovation partnerships' (URIPs) with municipal government, business and civil society organisations. Cities include Leipzig, Newcastle and Barcelona. In the latter, for example, city planners are increasingly using 'green corridors' to help cool stifling summer air. Another initiative, Cities4Forests, is working to raise awareness of the multiple health, climate and biodiversity benefits of "inner forests" – trees. In China, more than 170 cities are involved in its National Forest City programme – in some of these urban spaces, trees had increased to 40% or more by 2015, up from less than 10% in 1981.

The scale of investment needed in our cities to tackle climate change is enormous. The Cities Climate Finance Leadership Alliance estimates that over \$4 trillion will need to be spent on urban infrastructure every year, and an additional \$0.4 to \$1.1 trillion investment to guarantee that it is green, low carbon and climate resilient.

Literal green infrastructure, such as cost-effective nature-based solutions, can help those investments get bang for buck, and address multiple challenges at once.

KEY FIGURES

\$1 BILLION

in funds committed.

THE €2.5 BILLION

that has been invested into municipal projects from 2016 to 2018 has helped reduce 800,000 tonnes of CO₂ per year. (ref)

Between November 2016 and June 2019,
EBRD Green Cities has

**REDUCED
372,000
TONNES OF CO₂**

of CO₂, equivalent to permanently removing 80,000 cars from roads.

30

cities.

Will benefit an estimated
**23 MILLION
PEOPLE**

and lead to almost 12 million tonnes of CO₂ savings, equivalent to the GHG emissions from over 2.3 million passenger vehicles a year.

PROJECT BACKGROUND

The Green Cities programme was established to provide a systematic approach to planning and identifying the investment needs of cities in the EBRD regions to address their most pressing environmental and climate change challenges. It began with an initial pilot period focusing on the Caucasus and Western Balkans.

EXECUTING ENTITY

The European Bank for Reconstruction and Development (EBRD) and 30+ cities, mostly from the Western Balkans. Cities include Kiev, Belgrade, Tbilisi, Tirana, Minsk, Sofia, Chisinau, Mariupol, Alexandria and Cairo.

SDGs



LOCATION



VIDEOS & STORIES

<https://youtu.be/nx5g9z-diSY>

<https://youtu.be/OIUGO7IPjdc>

FUNDING

Various donors including the Green Climate Fund and the European Union.

CONTACT

greencities@ebrd.com

info@cities4forests.com