Cities Take the Lead on Climate Change

By Clayton Lane, CEO



Climate change is here. As our national leadership denies this reality, this summer brought Americans powerful images of climate-related loss: heroes carrying the vulnerable out of floods in Houston, grief from lost houses and relatives in the fires of California and Oregon, and US citizens struggling for clean water, food, and electricity after hurricanes in Puerto Rico and the Virgin Islands.

Extreme weather events have increased by 46 percent since 2000¹. Seas have risen 8 inches and could rise 8 feet by 2100², respecting no boundaries or politics. Worsening hunger, malnourishment, and the increasing spread of infectious disease already affect hundreds of millions of people globally. Solutions are urgently needed to protect lives and livelihoods today.

At the center of the issue is transport, the fastest growing sector of greenhouse gas emissions (GHGs), and a powerhouse of economic growth – making transport a major reason national governments find it so difficult to

reign in greenhouse gas emissions (GHGs). Transport emissions currently comprise 23 percent of global GHGs and are expected to double by 2050.

I was excited to see cities and regions take center stage at this year's COP23 climate summit in Bonn, Germany, pledging to deliver national climate pledges with or without country leadership. ITDP's joint research with UC-Davis shows that 83 percent of urban transport GHGs could be avoided by 2050 through compact land use and sustainable urban mobility – and that cities worldwide could save over \$100 trillion due to less infrastructure and lower vehicle and fuel costs.

ITDP is taking a leading role to support cities worldwide, helping to inspire and create iconic examples of innovative good practices, and scale them up by shaping national policy, spurring finance, and facilitating city-to-city learning. With climate change affecting human lives today, the need for cities to take bold action has never more urgent. From major parking reform in Mexico City to low-carbon urban development in India, where cities and regions are taking bold action to improve lives and curtail climate change.

We're thrilled to celebrate Dar es Salaam, for creating East Africa's first high-quality rapid transit corridor, complete with safe pedestrian infrastructure, dedicated cycle paths, the city's first formal bus system, and a Silver-standard BRT line expected to carry 400,000 daily passengers.



Pedestrian bump-outs, protected bike lanes, and road diets are just few design elements that Mexico City has implemented – in addition to eliminating parking minimums – to promote low-carbon walking and cycling.

¹ http://www.lancetcountdown.org/the-report/

³ https://science2017.globalchange.gov/





The low-carbon, high-quality mobility gives hope to a city in great need where urban population is expected to double to 10 million people by 2030. Dar plans to expand the system to several corridors citywide. Nairobi, Kampala, Addis Ababa, and Cairo are also developing BRT systems and looking to Dar for lessons and inspiration. Dar is winning the international 2018 Sustainable Transport Award for its bold step forward for East Africa, and is just one example.

Mexico City took a leadership role this year by abolishing parking minimums and charging fees for approaching new maximums. The policy, among the most progressive of its kind, will significantly curb greenhouse gas emissions by limiting car use, densifying the city, and generating enough revenue to build potentially one new bus rapid transit (BRT) line per year. The city has also reduced cyclist deaths by 78 percent and pedestrian deaths by 24 percent in just one year, by reducing speed limits citywide and reconstructing 50 dangerous intersections to improve safety for low-carbon walking and cycling.

Globally, dozens of cities are taking major steps to curtail car use. Not to be outdone, London recently pledged to eliminate all new parking construction in transit-accessible residential and office developments. Singapore recently banned new motor vehicle purchases until 2021 while the city expands rapid transit, and 14 Chinese cities are now restricting motor vehicle purchases or use.

Guangzhou, China, inspired by a study tour to Mexico City, has embarked on an ambitious \$450 million USD "complete streets" program to improve walkability and cycling citywide. Initial efforts include 48 walking and cycling demonstration projects on 114 city streets, as well as a recently published Street Design Guide that prioritizes non-motorized transport as a standard practice. In addition, Guangzhou is now planning an ambitious 72 Transit-Oriented Developments (TODs) to accommodate rapid population growth - livable, vibrant, compact neighborhoods built around rapid transit.

In China, private companies have deployed over 11 million dockless shared bicycles in Chinese cities over the past year, prompting a cycling Pune budgeted \$150 million annually to non-motorized transport, drafted a Cycle Plan with public bike sharing, identified 27 km for "complete streets" in its Smart City proposal, reformed city-wide parking policies, and invested \$20 million to improve 13 bus terminals and depots along its new BRT.

renaissance. The dockless systems cost only a fraction as much as traditional bike share programs, as wireless technology replaces the need for expensive kiosks and docks. Anecdotally, cycling has risen dramatically near ITDP's offices in Guangzhou and Beijing. Beijing's cycle mode share has doubled to 11 percent in one year, while the city's car trips have declined for the first time ever.

Dockless systems have encountered many operational and maintenance problems as companies have competed for market share. ITDP worked with Tianjin and Guangzhou to regulate bike parking, deployment, maintenance, and quality - two of the first cities to take such action. Today, 17 Chinese cities have issued similar regulations, and China's Ministry of Transport also released a new DBS policy to guide their orderly deployment. Early lessons from China could help cities globally to ensure high-quality service and expand the benefits of low-carbon cycling.

India is also making massive progress. Five midsized cities - Coimbatore, Chennai, Pune, Ranchi, and Nashik - have committed over half their transport budgets to low-carbon walking, cycling, and public transport, a major shift from previous policy that favored cars. Combined with the national Smart Cities program, about \$500 million USD is shifting toward sustainable mobility. These five cities, along with several others in the Smart Cities program, will serve as "lighthouse" examples for replication nationwide.

We have entered a new era, when curtailing GHG emissions in rapidly developing cities affects our daily lives. Helping to lessen grief and economic loss worldwide, these cities and many like them are taking bold action to tackle climate $\frac{a}{\beta}$ change. They show us that massive progress is possible with or without US national leadership.