

Frankfurt, the 5th largest city in Germany, is considered a global hub for commerce, culture, education, tourism, and transportation. It's also a smart city on the rise. It ranks 33rd out of 174 in the Cities in Motion Index (up three spots from last year), and 15th in the KPMG global survey of Technology Innovation Hubs--breaking into the top 20 for the first time. It ranked 43rd in the EasyPark 2019 Smart City Index, scored a perfect 10 in the smart buildings dimension, took second place overall for waste disposal and recycling, and came in 14th for its blockchain ecosystem. Frankfurt is also internationally ranked as a green and clean city, coming in 7th place in the Mercer Quality of Living Index, and 10th in the 2018 Arcadis Sustainable City Index.

In a study exploring smart city expectations, conducted by The Economist Intelligence Unit and sponsored by Nutanix, Frankfurt's citizens and business executives echoed their city's commitment to environmental sustainability by singling it out as one of their top priorities. Citizens also cited personal safety as a key priority, while business executives ranked improving the efficiency and reliability of services (such as transport and utilities), as well as the innovation environment, as their top concerns for smart urban development.



Citizen Priorities: Sustainability and Safety

Frankfurt's citizens ranked environmental sustainability as their #1 priority for smart city initiatives--more than any other city surveyed, at 39%.

Nearly half (48%) specified improving the efficiency of public transport, such as buses and trains, as the best way smart city initiatives could help achieve this objective (the highest average globally).





1 in 3 also cited reducing road congestion through more efficient traffic management.

31% named improving **personal safety** as a top smart city priority, and once again focused on the environment and transport.

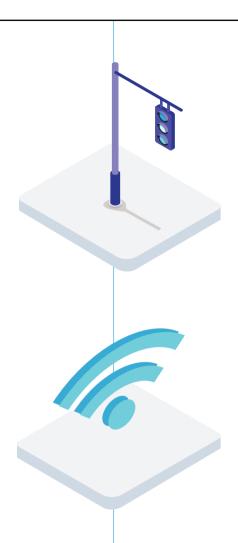
35% cited improving air and water quality, and another 35% named improving road safety, more than any other city globally.

A whopping 60% named encouraging the growth of low-cost transport options as a priority for making Frankfurt more affordable--a full 20 points above the global average. 30% also cited expanding the availability of free internet access in public spaces.

In order to improve **employment** opportunities in Frankfurt, 31% of surveyed citizens believe that expanding training on advanced technologies in vocational institutions should be a priority. 30% also named expanding digital-skills training in primary and secondary schools.



Frankfurt's citizens are, however, notably dubious about the value of smart city initiatives overall. Only 57% agree that they make Frankfurt a more appealing place to live (second lowest approval globally), and a mere 34% agree that the benefits of these initiatives outweigh the loss of personal privacy--less than any other city surveyed.



Only 56% agree that using facial recognition to fight crime does more good than harm (10 points below the global average).

And despite reporting real concerns about traffic problems in their city, only 66% would be comfortable with the city using their personal data to reduce road and transport congestion (8 points below the global average).

Business Priorities: Sustainability, Services, Innovation



The benefits that Frankfurt's business executives want most from smart city initiatives are greater efficiency and reliability of services, such as transport and utilities (42%), improved environmental sustainability (36%), and a stronger innovation environment (36%--the third highest globally).

As noted above, Frankfurt has a growing reputation as an innovation hub. 64% of business executives believe that smart city projects can best support this standing by deploying ultra-highspeed broadband networks (such as fibre and 5G mobile)--more than any city surveyed, and twice the global average.

This focus may be influenced by the fact that Frankfurt houses the world's leading internet exchange, DE-CIX, which supports its status as Europe's datacenter capital. Another innovation priority for business executives is facilitating greater research and development collaboration between universities and businesses (36 percent).





In keeping with Frankfurt's interest in environmental sustainability, 38% of business executives believe that smart city initiatives can make their city more **affordable** by improving the ability of energy and water utilities to vary pricing according to usage or time of day:



34% cite improving the energy efficiency of buildings; and another 34% rank improving the ability of transport providers to vary fares according to demand or time of day.



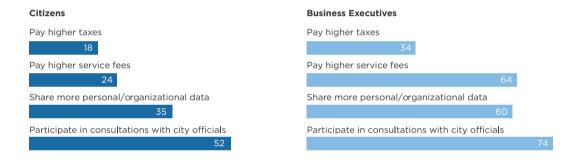
42% of business executives believe that smart city projects can make more talent available to their organizations by expanding the availability of affordable housing for workers. 24% also cited encouraging the growth of digital platforms for on-demand work.

Business executives hope that smart city projects will create new market opportunities from partnering with large technology companies in Frankfurt, as well as partnering with local universities and research institutes--40% for both.

Trade-Offs: Citizen and Executives Split

Frankfurt's citizens and business executives are split in their willingness to give money, time, and data to receive the benefits of smart city initiatives. Citizens from Frankfurt are less willing than those from any other city surveyed to pay higher taxes or fees, and among the least willing to share personal data or participate in consultations with city officials. While Frankfurt's business executives are among the least willing to pay higher taxes (third lowest globally), they are in line with global averages regarding paying higher service fees, sharing their organization's data, and participating in consultations with city officials.

In exchange for benefits of smart city initiatives, are you or your organization willing to . . . (% of respondants)



Kev Takeaway: Once again, communication is key. Only 19% of Frankfurt's citizens report that their city provides sufficient information to the public about smart city initiatives, and only 20% say they are familiar with their city's smart initiatives. Given their unfamiliarity with their city's projects, and the outcomes of those projects, it is not surprising that they are dubious about the possible benefits.

In contrast, business executives are only somewhat below the global average in terms of familiarity with their city's initiatives (52%). While only 48% agree that Frankfurt has taken a proactive role in including the business community in the development of its smart city initiatives, the fourth lowest globally, 86% agree that these initiatives make Frankfurt a more appealing place to do business, five points above the global average. Frankfurt appears to have substantial room for improvement in terms of keeping its stakeholders informed about the variety and value of its initiatives.