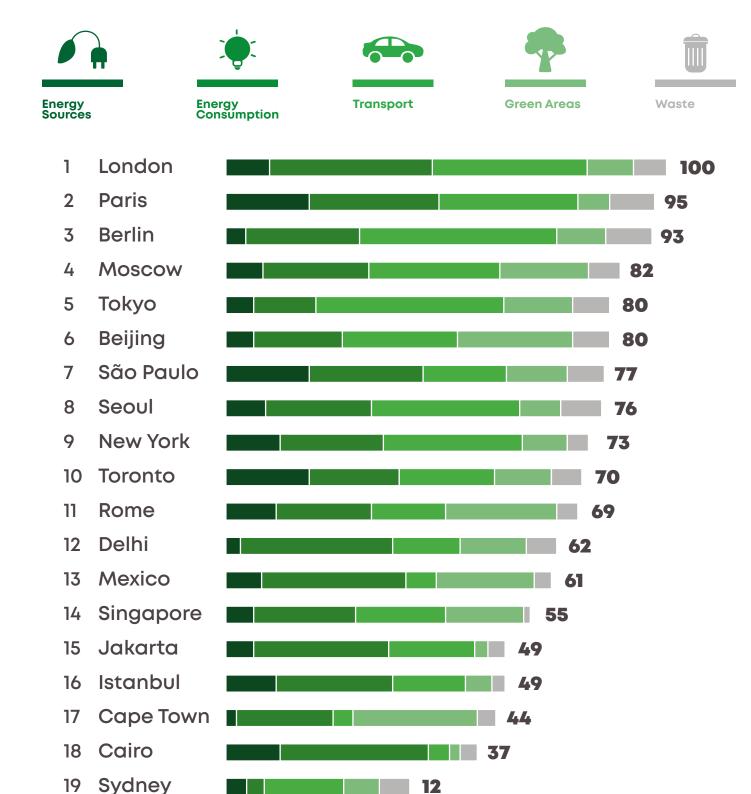


Consolidated Ranking



20 Dubai

Leader Cities

London has become **the top-rated city**. The capital of the United Kingdom secured first place thanks to strong results in each of the categories, hitting the top five in both Energy Sources and Transport.

The United Kingdom (and London) is successfully moving away from coal: over the past 10 years, its consumption has decreased by 90% [9]. In addition, it is promoting renewable energy sources (RESs): according to the data presented to the CDP, the UK produces 23% of all the energy it consumes from renewable sources, while London plans to reach 15% of RESs by 2030.

Ecofriendly transport is widely used in London: there is an extensive underground network and well-developed infrastructure for bicycles, and electric buses are quite common [10]. In addition, a significant proportion of its residents do not use their private cars for daily transportation; among other things, this has been facilitated by restricted entry zones for vehicles that have a negative impact on the environment [11, 12]

Paris came in second; its high position has been secured by great performance in Energy Sources (thanks to the use of nuclear and RESs) and Transport.





In other areas, though, the city comes in closer to the middle of the ranking. Paris is only ninth in the category of Waste: the city generates a large amount of municipal solid waste (MSW) per capita. However, most of the waste is incinerated or recycled, rather than sent to landfills.

Berlin, another European capital, ranked third.

It performed well in the categories of Energy Consumption, Transportation, and Waste. **The city is the most energy efficient among all ranked cities in the developed countries**, which may be due to both the high environmental awareness of its residents and economic disincentives in the form of high energy prices [13, 14].

Berlin's position in the overall ranking was affected by a low score in the category of Energy Sources, with a significant share of the city's energy supply still coming from coal generation.

Clean means of transport are widely utilized in Berlin: about a quarter of residents use bicycles to commute on a regular basis

Moscow ended up in the fourth position thanks to high scores in Transport and Green Spaces. The city has an extensive system of clean urban transport (metro and electric buses), and the authorities continue doing a lot to improve it, with new metro lines being built [15], and the bus fleet being regularly replenished with environmentally friendly vehicles [16]. Green spaces, including parks, squares and forests, account for about 50% of the city's area.

The capital of Russia showed relatively low results in Waste: it generates a significant amount of MSW, with only five ranked cities having higher mass of MSW per inhabitant than in Moscow.

Clean transport in Moscow is well-developed, and about 50% of city area is covered with green spaces

Tokyo rounded out the top five, coming in first in Transport and second in Waste. Tokyo's public transport system (especially its subway) is renowned worldwide for its efficiency [17]. Tokyo's success in waste management is due to the city government's systemic measures to promote the 3R principle: reduce, reuse, and recycle [18].

However, the Japanese metropolis is located closer to the bottom of the ranking in areas related to Energy Sources and Consumption: its energy consumption is relatively high and is supplied predominantly by burning fossil sources (natural gas and coal).

Beijing ranks sixth, with high scores in Transport (a developed subway system and a large number of clean buses), Waste (there is practically no disposal of urban waste in landfills) and Green Spaces and low scores in Energy Sources and Energy Consumption.

Very little MSW is disposed of in a landfill in Beijing





São Paulo comes in seventh. Brazil's largest city performed well in Energy Sources, with the highest share of hydropower in electricity generation among the 20 cities, but ranked below 10th when compared against other cities in Transport and Waste.

A significant share of the electricity consumed in São Paulo is produced in hydroelectric power plants

Seoul, New York, and **Toronto** took eighth, ninth and tenth places, respectively. Each of these cities ranked in the top 5 in one of the categories: Seoul in Waste, New York in Transport, and Toronto in Energy Sources.