

Sustainable cities and tourism: 9 European Capitals compared



Creating sustainable cities presents a significant challenge for major international capitals. It requires merging environmental stewardship with the development of a fair, inclusive, and equitable

society. This includes fostering harmonious living between tourists and locals, as well as balancing traditional values with modern advancements.

Yet, can this be realised?

To gauge the progress in this transition towards sustainability, we've assessed and analysed the performance of nine capitals across Europe using our [Destination Sustainability Index](#):

- Amsterdam
- Berlin
- Copenhagen
- Dublin
- London
- Madrid
- Paris
- Rome
- Vienna

This proprietary index offers a comprehensive understanding of destination sustainability, taking into consideration various perspectives, including the effects of tourism on the destination.

Let's examine the unique features of the nine cities and the strategies they've adopted in recent years to tackle the climate emergency and align with the new standards set by the United Nations.

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What makes a city sustainable?

Environmental sustainability is the first — if not the only — thing that comes to mind when we think of a sustainable city.

Sustainability is however a much broader concept.

The definition of a sustainable city is aligned with the Sustainable Development Goals (SDGs) set by the UN in 2015, which now serve as a cornerstone for analysing sustainability, even within the tourism sector.

The **UN's Goal 11** is to “**Make cities and human settlements inclusive, safe, resilient and sustainable.**”

This means that sustainable cities should not only safeguard the environment, but also be inclusive, safe and adaptable.

Today, around 50 percent of people live in cities.

By 2030 this number will grow to 60 percent.

So ensuring that future urban scenarios are sustainable in all its facets is becoming an increasingly top priority for governments.

Although cities serve as hubs for cultural exchange and progress, they are also vulnerable to significant social, economic, and environmental disparities.

According to the UN, 828 million people live in slums.

Cities occupy only 3% of the earth's surface, but are responsible for up to 80% of energy consumption and 75% of carbon emissions.

The UN's goal is to significantly alter the trajectory by 2030.

But time is running short.

And not all cities have embraced the necessary mindset and resources to achieve this.

Which are the most sustainable cities?

We used our Destination Sustainability Index (DSI) to evaluate the sustainability of nine European cities—Amsterdam, Berlin, Copenhagen, Dublin, London, Madrid, Paris, Rome, and Vienna.

The Destination Sustainability Index supports destinations in measuring and benchmarking their environmental, economic, social and governance aspects.

It looks at four main pillars to calculate the sustainability of a destination: Environmental, Socio-Cultural, Overtourism, and Destination Management.

The results for these pillars, in turn, are calculated from an additional 17 specific sub-indices.

Both Data Appeal's proprietary data and third-party data, which encompasses satellite environmental monitoring data, play a role in the calculation of the index. **We rely on the European Commission's European Tourism Indicator System (ETIS) as our benchmark;** it stands as the most renowned and frequently referenced methodology for assessing tourism sustainability at the destination level.

What are the main findings of our analysis?



1 – The overall scores of all cities surveyed ranged from 65/100 to 77/100, indicating a positive performance across the board

This figure shows that the efforts made in recent years are paying off, even if there is still ample room for improvement in several aspects, especially the fight against pollution.

2 – Madrid achieved the highest overall score of 77/100

This result is mainly driven by the impressive scores obtained in the sub-indices related to destination management (91/100) and the Socio-Cultural Pillar (78/100). Madrid's consistent performance across all pillars, along with a notable score in environmental aspects (65/100), highlights its holistic approach to sustainability.

It is no coincidence that as of 2022 [Madrid has approved a plan of action](#) to decrease the concentration of substances harmful to health and the environment in the most polluted areas. For example, 350 million euros have been invested in the total renewal of the low-emission city bus fleet.

DESTINATION SUSTAINABILITY INDEX

This index measures the level of sustainability performance in your destination.



Destination Sustainability Index	▲ 76.9 /100	👁
Social-Cultural Pillar	▲ 78.4 /100	>
Destination Management Pillar	▼ 90.8 /100	>
Overtourism Pillar	▲ 74.3 /100	>
Environmental Pillar	▬ 64.2 /100	>

High level of destination sustainability.

3 – Rome is the capital city with the highest score in the Social-Cultural Pillar (79/100)

The Social-Cultural Pillar focuses on the social and cultural aspects of a destination, such as urban green spaces, cultural vibrancy, and public transportation. It's no surprise, considering the wealth of cultural assets that benefit both residents and tourists alike. Additionally, Rome stands out for its exceptional inclusivity within the LGBTQ+ community, as reflected in its impressive [LGBTQ+ Index](#) score of 88/100.



4 – Paris stands out as the leading destination in effectively managing tourist influx, with a

score of 85/100



Paris performs exceptionally well in managing overtourism, suggesting that it has implemented more effective strategies than other destinations to prevent overcrowding that could disrupt residents' lives.

Last year, [the French government introduced a plan to regulate visitor numbers](#), aiming to reduce congestion during peak times in specific destinations. This plan involves setting up a national observatory for major tourist sites, evaluating local sentiment towards visitor numbers, and increasing awareness among tourists and influencers.

In terms of our index, Paris also scores lowest in the Environment category (44/100), indicating areas where environmental sustainability can be improved.



5 – Vienna achieves the highest score in Governance & Destination Management (91/100)

This high score highlights Vienna's success in visitor satisfaction, effective management of tourism services and overall governance that supports sustainable tourism development.

It's worth noting, however, that in this area all nine capitals show very positive performance, slightly below Vienna. In particular, Amsterdam, Berlin, Madrid, and Dublin have a score of 90/100.



6 – All cities rate poorly in terms of the environment, with scores ranging from 39 to 64 out of 100.

This suggests notable shortcomings, especially regarding air quality and the amount of green space compared to populated areas. Rome and London have the lowest scores, while Amsterdam, Dublin, Vienna, and Madrid perform better.

Data analysis for more sustainable cities

Institutions and Destination Management Organizations (DMOs) have multiple options to enhance the sustainability of a destination. These include improving accessibility in public spaces, providing incentives for using public and electric vehicles, and launching initiatives to assist elderly and economically disadvantaged families.

The UN Agenda 2030 sets ambitious goals, for example:

- **Ensure access to adequate, safe and affordable housing and basic services for all and regenerate slums**
- **Ensure access for all to a safe, affordable, accessible and sustainable transport system**
- **Reduce the negative per-capita environmental impact of cities**, paying particular attention to air quality and the management of municipal and other waste.

But first, cities must become aware of their own performance and define their current level of sustainability.



Only by accurately measuring every aspect of the city will it be possible to define targeted interventions and set priorities for action.

As Prof Harold Goodwin explained in an in-depth look at [overtourism](#):

“You can’t manage what you can’t measure.”

Would you like to analyse the level of sustainability of your city?

The Destination Sustainability Index is available on demand within D/AI Destinations, Data Appeal’s destination management platform.

[Find out more](#)