# London hosts landmark summit showcasing digital twins and urban climate innovation ahead of COP 30



In June 2025, London became a focal point for climate leadership as representatives from the world’s smartest cities gathered for the Cities Climate Action Summit, an integral part of London Climate Action Week 2025. This summit created a unique platform for policymakers, technologists, financiers, and city leaders to exchange insights on effective urban climate solutions ahead of the United Nations Climate Change Conference, COP 30, scheduled for November 2025 in Brazil. As cities are expected to house 68% of the global population by 2050, their role in shaping climate policy, resilience planning, and sustainable urban development has never been more critical.

The summit’s agenda focused strongly on scaling local-level climate action and enhancing city governance to meet ambitious climate targets. Discussions emphasised adaptation and resilience, with a clear recognition that cities are pivotal in driving emissions reduction and sustainable development. Emma Howard Boyd, Chair of the London Climate Resilience Review, highlighted how climate action can fuel innovation, stimulate citizen engagement, and tailor solutions to community-specific needs. Former Bristol Mayor Lord Marvin Rees, reflecting on his experience leading one of the UK’s largest cities, underscored the absence of a central government roadmap to achieve net zero carbon emissions by 2050. To tackle this gap, he spearheaded initiatives such as the Cities Climate Investment Commission (3Ci) and Bristol City Leap, a pioneering 20-year partnership aiming to channel £1 billion into Bristol’s energy system decarbonisation.

One of the transformative technologies spotlighted at the summit was the use of digital twins—virtual models of physical urban environments that enable simulations and real-time data analysis for better climate response. Notably, Nvidia presented its Earth-2 climate digital twin cloud platform, which employs AI and physical simulations to deliver highly detailed climate predictions. The platform includes the innovative cBottle model ("Climate in a Bottle"), designed to generate realistic atmospheric simulations at kilometer resolution, offering unprecedented tools for understanding and anticipating complex natural systems.

Electric vehicles (EVs) and sustainable urban mobility also featured prominently, with a panel including representatives from cities in Europe and North America, and corporate leaders like Uber’s global head of sustainability. The session highlighted partnerships such as the one between C40 Cities and Uber, which is accelerating EV charging infrastructure in Phoenix, Boston, and London. This effort is particularly focused on supporting high-mileage commercial drivers, ensuring that clean air initiatives also foster green job growth and equitable mobility access.

The Cities Climate Action Summit is part of a broader movement exemplified by London Climate Action Week, Europe’s largest city-wide climate festival, which during 21-29 June 2025, engaged over 45,000 participants across hundreds of climate-focused events. The week harnessed London’s unique positioning to mobilise a vibrant ecosystem of organisations—from local communities to global institutions—aimed at accelerating climate action and cementing London’s role as a global climate leader.

Additional programming during the week included significant contributions from institutions such as the Grantham Research Institute at the London School of Economics, which hosted discussions on financing the climate transition, particularly in the bioeconomy sector, and spotlighted the rising importance of climate litigation globally. These events contributed a vital layer of academic insight and policy analysis to the summit’s practical focus on city-led climate solutions.

With the COP 30 conference on the horizon, voices from C40 Cities emphasised how mayors and urban leaders are at the forefront of climate governance, delivering science-based, people-centred urban transformation strategies. The forthcoming C40 World Mayors Summit in Rio de Janeiro—held shortly before COP 30—promises to showcase further how cities worldwide are collaborating to meet pressing climate challenges with urgent and ambitious action.

Thus, the London summit and the wider climate week not only crystallised the critical role of cities but also showcased innovative initiatives and partnerships that could serve as blueprints for urban climate resilience and sustainability globally as the international community prepares for the next phase of climate negotiations.

### 📌 Reference Map:

* Paragraph 1 – [[1]](https://www.verdict.co.uk/climate-challenge-for-cities/), [[4]](https://www.londonclimateactionweek.org/), [[5]](https://www.c40.org/events/london-climate-action-week-2025/)
* Paragraph 2 – [[1]](https://www.verdict.co.uk/climate-challenge-for-cities/), [[2]](https://www.londonclimateactionweek.org/event/cities-climate-action-summit/), [[5]](https://www.c40.org/events/london-climate-action-week-2025/)
* Paragraph 3 – [[1]](https://www.verdict.co.uk/climate-challenge-for-cities/), [[2]](https://www.londonclimateactionweek.org/event/cities-climate-action-summit/), [[3]](https://www.smartcitiesworld.net/cities-climate-action-summit-2025/cities-climate-action-summit-2025)
* Paragraph 4 – [[1]](https://www.verdict.co.uk/climate-challenge-for-cities/), [[3]](https://www.smartcitiesworld.net/cities-climate-action-summit-2025/cities-climate-action-summit-2025)
* Paragraph 5 – [[4]](https://www.londonclimateactionweek.org/), [[5]](https://www.c40.org/events/london-climate-action-week-2025/)
* Paragraph 6 – [[6]](https://www.lse.ac.uk/granthaminstitute/london-climate-action-week-2025/)
* Paragraph 7 – [[1]](https://www.verdict.co.uk/climate-challenge-for-cities/), [[5]](https://www.c40.org/events/london-climate-action-week-2025/)

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## Bibliography

1. <https://www.verdict.co.uk/climate-challenge-for-cities/> - Please view link - unable to able to access data
2. <https://www.londonclimateactionweek.org/event/cities-climate-action-summit/> - The Cities Climate Action Summit (CCAS25) is a pivotal event during London Climate Action Week 2025, dedicated to addressing urban climate challenges. Scheduled for 24-25 June 2025 at County Hall, London, the summit aims to drive change by sharing knowledge, inspiration, and strategies through a lineup of senior speakers and influencers from across the globe. Attendees will engage in dynamic discussions, exclusive roundtables, and panel debates, gaining insights to develop strategies for building smart, resilient cities that address climate change while considering liveability, equity, and long-term sustainability. The core themes include policy development, climate finance, technology deployment, sustainable mobility, built environment, and energy transition. Notable speakers include the Deputy Mayor for Energy and Environment of Greater London Authority, Leader of Glasgow City Council, Chief Heat Officer of Miami-Dade County, Mayor of City of Tauragė, Mayor of Braga City Council, Deputy Mayor of Municipality of Bologna, and Global Chief Heat Officer of UN-Habitat. The summit is organised by Smart Cities World, a platform with over 50,000 members from the public, private, and non-profit sectors, and is part of their larger Cities Climate Action Campaign, which includes research, trend programmes, workshops, and ongoing media outreach designed to convene, educate, and inspire accelerated climate action.
3. <https://www.smartcitiesworld.net/cities-climate-action-summit-2025/cities-climate-action-summit-2025> - The Cities Climate Action Summit 2025, organised by Smart Cities World, is a two-day event (one virtual, one in-person) scheduled for 24-25 June 2025 in London. The summit aims to connect cities for a resilient future by bringing together visionary city leaders, policymakers, green finance experts, and technology innovators to discuss urban climate challenges. The event will feature over 60 speakers and 2,500 delegates, with more than 30 sessions covering topics such as policy development, climate finance, technology deployment, transportation, energy and utilities, and the built environment. Attendees can expect networking opportunities, roundtables, keynotes, panel discussions, and an exhibition. The summit is part of Smart Cities World's larger Cities Climate Action Campaign, which includes research, trend programmes, workshops, and ongoing media outreach designed to convene, educate, and inspire accelerated climate action.
4. <https://www.londonclimateactionweek.org/> - London Climate Action Week (LCAW) is the largest city-wide climate festival in Europe, attracting over 45,000 people annually. Scheduled for 21-29 June 2025, LCAW provides a platform under which hundreds of organisations, communities, and individuals host events, creating a large and vibrant programme of climate-focused activities. The week aims to harness London's unique power for global and local climate action, mobilising the city's unparalleled ecosystem of climate and non-climate organisations to accelerate global climate action and support action in London to ensure it acts as a global climate leader.
5. <https://www.c40.org/events/london-climate-action-week-2025/> - C40 Cities is actively participating in London Climate Action Week 2025, taking place in London between 21-29 June 2025. The event brings together mayors, governors, and global leaders to mark 20 years of C40 Cities and reflect on a decade since the Paris Agreement. Amid geopolitical instability and growing climate impacts, mayors are redefining climate leadership. With COP30 on the horizon, the week will spotlight how cities are stepping up and standing together to drive urgent climate action. C40 mayors are delivering science-based, people-centered solutions for fairer, healthier, and more resilient urban futures, proving that city-led collaboration works.
6. <https://www.lse.ac.uk/granthaminstitute/london-climate-action-week-2025/> - The Grantham Research Institute on climate change and the environment at the London School of Economics (LSE) is hosting several events during London Climate Action Week 2025. These include 'From risk to resilience – financing the bioeconomy–climate transition' on 26 June 2025, examining strategic investment in bioeconomy solutions; the launch of the 'Global Trends in Climate Litigation 2025 Snapshot Report' on 26 June 2025, providing an overview of key developments in climate litigation worldwide; and a panel discussion on 'Navigating the headwinds: uncertainties and resilience of a just transition future' on 27 June 2025, addressing challenges and prospects for equitable climate action in the lead-up to COP30.