MIT, UPM, the World Bank Group, and UT Austin launch a global forum in Madrid to shape the future of infrastructure

The World Infrastructure Forum aims to become the leading international platform for dialogue on the infrastructure challenges of the future

Madrid, July 15, 2026. – Infrastructure is undergoing its most profound transformation since the Industrial Revolution. The energy transition, artificial intelligence, digitalization, climate resilience, the security of critical infrastructure and rapid urbanization are redefining how the major systems that underpin our societies are planned, financed and managed.

With the aim of fostering an international dialogue on these challenges, the Massachusetts Institute of Technology (MIT), the Polytechnic University of Madrid (UPM), the World Bank Group, and the University of Texas at Austin (UT Austin) have joined forces to establish the World Infrastructure Forum (WIF)**,** an initiative designed to become the world's leading international platform for thought leadership, collaboration and strategic dialogue on 21st-century infrastructure. The inaugural edition of the Forum will take place in Madrid on October 28 and 29.

As José Miguel Atienza, Director of the School of Civil Engineering at UPM and Co-Founder of the WIF, Carmen Marín, Executive Director of the WIF, Ali Jadbabaie, Head of the Department of Civil and Environmental Engineering at MIT, and Stéphane Straub, Chief Economist for Infrastructure at the World Bank Group, explain, the future of infrastructure has become one of the defining strategic challenges for economic development, sustainability and global competitiveness.

Investment needs

According to estimates published by McKinsey & Company in *The Infrastructure Moment* (2025), the world will need to mobilize approximately US$106 trillion in infrastructure investment by 2040 to meet the demands of growth, renewal and transformation across the world's major economic systems. Transport is expected to account for the largest share of investment, followed by energy, digital infrastructure and social infrastructure.

Long-term projections point in the same direction. The *Global Infrastructure Outlook* 2025–2050 report, prepared by PwC and Oxford Economics and published in 2026, estimates that cumulative global infrastructure investment could reach US$151 trillion by 2050—almost double the amount invested over the previous quarter century. Annual investment is projected to rise from approximately US$4.4 trillion in 2024 to nearly US$6.9 trillion by 2050, driven by the modernization of existing infrastructure, the energy transition, digital transformation and urban growth.

José Miguel Atienza emphasizes that infrastructure has evolved far beyond being a standalone sector and now represents the systems that underpin the functioning of modern societies. "When we talk about infrastructure today, we are no longer referring only to roads, bridges or railways. We are also talking about energy grids, data centers, telecommunications networks, water infrastructure, ports and airports. More than that, infrastructure is no longer a collection of relatively independent sectors but has become a deeply interconnected system on which economic competitiveness, climate resilience, energy security, strategic autonomy, and societal well-being increasingly depend", he said.

The Director of the School of Civil Engineering at UPM highlights that the convergence of major challenges—including the energy transition, digitalization, artificial intelligence, climate change and geopolitical realignment—requires a fundamental rethink of how the world approaches infrastructure. " Infrastructure is undergoing one of the most profound transformations in its history. This transformation goes far beyond technological change. The real challenge is no longer simply how much we need to invest but answering a far more strategic question: what infrastructure will the world need over the coming decades?"

In this context, he emphasizes the role of universities as centers of knowledge generation and foresight, capable of connecting research, innovation, industry and public institutions to support better decision-making. That position enables them also to serve as an intellectually independent forum, capable of bringing together diverse perspectives without being driven by immediate commercial, political, or regulatory objectives.

The need for collaboration

According to Ali Jadbabaie, we are at a defining moment for the future of infrastructure. "We are living through technological change on a scale that may rival or exceed the industrial revolution—and its direction will be determined by how the race for infrastructure unfolds over the coming decades." The defining challenges of our time—the energy transition, artificial intelligence, digitalization, climate change, and the resilience of our cities—are transforming how the systems underpinning our economies and societies are designed, built, and managed.

"Infrastructure can no longer be understood as a collection of isolated assets," Jadbabaie argued. "It is a web of complex, interdependent systems whose planning, construction, and resilience demand a far more integrated approach—and an unprecedented level of collaboration across disciplines and sectors."

Yet infrastructure remains a capital-intensive, low-margin business, and the industry has historically been slower to change than other sectors. No single institution, country, or discipline can meet a challenge of this scale alone. "That is why initiatives such as the World Infrastructure Forum matter," he concluded. "By bringing together universities, international organizations, businesses, and public decision-makers, they allow us to share knowledge and build a common vision for 21st-century infrastructure. International cooperation and knowledge exchange will be essential to the decisions that will shape the future of our societies."

For her part, Carmen Marín explains that the WIF was created precisely to address the need for an ongoing international conversation about the future of infrastructure. "We are living in a time when more knowledge exists than ever before, yet it is increasingly fragmented. Universities conduct research, companies innovate, multilateral organizations provide financing and governments develop public policy. What we need are spaces where all this knowledge can come together and be transformed into better decisions."

Independent and non-profit

Marín explains that the World Infrastructure Forum has been conceived as an independent, non-profit, invitation-only international platform designed to foster dialogue among governments, multilateral organizations, universities, companies, investors and knowledge institutions through an open and cross-sectoral approach. She also highlights that the initiative is driven by internationally recognized institutions, reflecting the Forum's commitment to combining academic excellence, innovation capacity, technical expertise and a global perspective.

According to Marín, the ambition of the WIF goes far beyond the organization of an international gathering. "We do not simply want to organize another conference on infrastructure. We want to build an international community capable of generating knowledge, fostering partnerships and helping improve the decisions that will define the infrastructure of the future."

Marín and Atienza highlight Madrid's role as the host city for this international initiative. They point out that the Spanish capital has established itself as one of Europe's leading hubs for business, innovation and knowledge, with a long-standing tradition and international reputation in civil engineering, while also serving as a natural bridge between Europe, Latin America and other regions of the world. These characteristics make Madrid an ideal location to host a global conversation on the major challenges facing infrastructure.

The World Infrastructure Forum aims to become a permanent platform where governments, universities, companies, multilateral organizations, investors and international leaders can exchange knowledge, promote collaboration and develop proposals that contribute to designing the infrastructure needed for a more sustainable, resilient, digital and competitive economy.

According to Stéphane Straub, Chief Economist for Infrastructure at the World Bank Group, "Infrastructure is one of the main drivers of economic growth, competitiveness, and social development. However, the challenge we face today is not simply to mobilize more investment, but to ensure that such investment responds to the needs of a world profoundly transformed by the energy transition, digitalization, climate change, and rapid urbanization. Investing better is just as important as investing more, and this requires a shared strategic vision and ever closer cooperation among governments, financial institutions, businesses, and knowledge institutions."

Straub adds that “initiatives such as the World Infrastructure Forum play a vital role in creating that space for international dialogue and cooperation. Bringing together public decision-makers, multilateral organizations, universities, businesses, and investors to exchange experiences, identify best practices, and promote innovative solutions is essential to improving the quality of decision-making and accelerating the development of more sustainable, resilient, and inclusive infrastructure. In an increasingly complex global context, shared knowledge is itself a strategic development asset”.