

CREATING IMPACT THROUGH TECHNOLOGY-ENABLED INFRASTRUCTURE

Adaptive traffic
signal timing

Safety
analytics

Live traffic
flow monitoring

Bus travel
time reliability

Idling
reduction
analysis

Pavement
condition
monitoring



ASIAN INFRASTRUCTURE
INVESTMENT BANK

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ABBREVIATIONS

3D	—	three-dimensional
4D	—	four-dimensional
AI	—	artificial intelligence
AIIB	—	Asian Infrastructure Investment Bank
CBTC	—	communications-based train control
CO ₂	—	carbon dioxide
DI	—	Digital Infrastructure
DNA	—	deoxyribonucleic acid
ESG	—	environmental, social and governance
EU	—	European Union
EV	—	electric vehicle
GI Hub	—	Global Infrastructure Hub
IEA	—	International Energy Agency
ICT	—	information and communications technology
IoT	—	Internet of Things
KPI	—	key performance indicator
MSEDCL	—	Maharashtra State Electricity Distribution Company Limited
SCADA	—	supervisory control and data acquisition
TEI	—	technology-enabled infrastructure
UK	—	United Kingdom
USD	—	US Dollar
VC	—	venture capital

MESSAGE FROM THE PRESIDENT



ZOU JIAYI

President and Chair of the Board of Directors
Asian Infrastructure Investment Bank

Infrastructure today is under growing pressure: to deliver more, to last longer, to serve people better. Climate risks are intensifying. Demographic change and rapid urbanization are reshaping demand. At the same time, fiscal constraints are forcing countries to achieve stronger outcomes with limited resources. In this environment, the success of infrastructure is measured not only by how much is built, but by how well it performs over time – and by the difference it makes in people's lives.

Technology is providing solutions to these challenges, as well as posing new challenges. With the rapid development of technology, the gap between developed and developing economies may be further enlarged. The only way to close the gap is to support developing economies in embracing technology. When applied effectively, it can strengthen infrastructure across its full lifecycle. It can improve how projects are planned and designed. It can enhance operational efficiency and resilience. And it can help deliver more reliable and affordable services for communities and businesses. These advances are no longer confined to specific sectors or regions. They are becoming a defining feature of modern infrastructure systems worldwide.

For AIIB, our mission of Financing Infrastructure for Tomorrow implies not only supporting infrastructure, but more importantly, modern infrastructure. Delivering on that mission requires looking beyond physical construction alone. It means focusing on long-term performance, institutional capacity and sustainability. Technology solutions can help our Members do exactly that – supporting better-managed assets and infrastructure systems that are aligned with national priorities and local conditions.

Technology-enabled infrastructure illustrates how AIIB seeks to add value in practice. It brings together three essential elements that guide our approach. Integrity, by ensuring that technology is deployed to benefit the majority rather than a few. Technology-enabled infrastructure is the embodiment of technology for good. It can also strengthen integrity by improving transparency, accountability and oversight through better data and insights into asset performance and operations. Innovation, by applying technological innovations to respond to evolving infrastructure challenges, for instance, to achieve energy transformation. And impact, by maintaining a clear focus on whether technology amplifies the financial, environmental and social impact of infrastructure investments, delivering measurable, lasting improvements in opportunity, resilience and quality of life.

This report highlights how AIIB is working with our Members and partners across sectors and country contexts. It showcases practical examples and draws lessons from implementation. Above all, it reinforces a central insight: development financing does not only provide financial resources, but also enables technological innovation to benefit developing countries. Technology delivers its greatest value when it is paired with capable institutions, sound policies and a clear focus on outcomes for people.

Looking ahead, AIIB will continue to support infrastructure with modern technology, so that technological innovation can serve as a driving force towards sustainable development. As AIIB enters its second decade, this approach will remain central to how we finance infrastructure for tomorrow.

FOREWORD



HUN KIM

Chief Partnerships Officer and
Director General, Sectors, Themes and Finance Solutions
Asian Infrastructure Investment Bank

AIIB's Corporate Strategy defines four thematic priorities through which AIIB projects are expected to deliver added value for clients. The thematic priority "technology-enabled infrastructure" reflects the role that technology plays in improving infrastructure across the lifecycle. Advances in equipment, systems and processes are enabling infrastructure assets to operate more effectively, adapt to risk and deliver more reliable services. For many clients, technology has become an integral part of strengthening infrastructure performance rather than a separate investment consideration.

Across AIIB's portfolio from 2016 to 2025, technology-enabled infrastructure is reflected in 93 approved projects, representing 32% of all approvals reflected in this report. These projects span multiple sectors and are distributed across 21 Members, with a mix of sovereign-backed and nonsovereign-backed financing.

This publication explains what technology-enabled infrastructure means in practical terms for AIIB. It outlines how the Bank defines and assesses alignment with this thematic priority, how the Bank aims to add value, and how technology contributes to improved outcomes in projects. This report complements the Corporate Strategy and other institutional reporting by offering a more focused view of how one thematic priority is implemented in practice.

Selected project examples illustrate how technology is embedded within broader investment programs. These applications support stronger delivery, more effective operations and better risk management over the life of infrastructure assets. The report also reflects AIIB's engagement with partners and the wider InfraTech ecosystem, for example through the InfraTech Portal, supporting collaboration and knowledge-sharing to scale effective solutions.

I am pleased to share this report with all our Members and partners to support continued dialogue on how technology can be applied in infrastructure operations to respond to evolving development needs and create greater impact.

1

INTRODUCTION TO TECHNOLOGY-ENABLED INFRASTRUCTURE

Robotic welding systems combine automation, precision control and real-time monitoring to improve consistency, productivity and safety in manufacturing processes that support infrastructure supply chains.



1.1 The Challenge

Infrastructure is the backbone of socioeconomic development. It enables the flow of goods and people, powers homes and industries, and secures access to critical resources. Without reliable infrastructure, economies cannot grow, businesses cannot thrive and societies cannot achieve their full potential.

Infrastructure faces unprecedented pressures. Fiscal constraints and rising debt burdens limit the public resources available to finance infrastructure. Tighter budgets and rising costs demand stronger project governance, more efficient delivery and innovative financing models. At the same time, climate change heightens the physical risks to assets. Extreme weather events and shifting environmental conditions raise adaptation costs and intensify the urgency of building low-carbon, resilient solutions. Continued urbanization intensifies pressure on infrastructure systems. Rapid population growth in cities increases demand for transport, housing, energy and water services, while overstretching existing networks and creating challenges for sustainable planning and delivery. Meanwhile, geopolitical tensions and the risks of trade fragmentation underscore the importance of regional connectivity. As vital networks become more fragmented, infrastructure must link diverse markets and support more complex trade flows.

These challenges are being exacerbated by long-standing structural weaknesses facing the sector. Uneven development remains a persistent issue, with up to 70% of water leaking from urban supply systems in some emerging economies, compared with 10% in advanced ones. Poor project management continues to erode value; in a study across a sample of more than 500 large projects, average cost overruns neared 80% relative to initial budget estimates and delays were 52% of initial timelines.¹ Vulnerability to climate risks is widespread, as 83% of cities report significant climate hazards.² And infrastructure is a significant contributor to emissions, directly or indirectly accounting for roughly 79% of global greenhouse gases.³

1.2 The Role of Technology

The application of technology to infrastructure – InfraTech – can significantly improve infrastructure along its entire lifecycle. Used appropriately and effectively, technology can improve traditional infrastructure by streamlining processes, enhancing economic and social benefits, and promoting sustainability, quality and safety. There are many examples of successful implementation of technology across infrastructure sectors that prove the value potential.

¹ McKinsey & Company. 2023. Seize the decade: Maximizing value through preconstruction excellence. <https://www.mckinsey.com/capabilities/operations/our-insights/seize-the-decade-maximizing-value-through-pre-construction-excellence>

² CDP. 2024. 83% of world's cities report significant climate hazards. <https://www.cdp.net/en/press-releases/83-of-worlds-cities-report-significant-climate-hazards>

³ UNEP. 2021. New report reveals how infrastructure defines our climate. <https://www.unep.org/news-and-stories/press-release/new-report-reveals-how-infrastructure-defines-our-climate>



Technology can help water treatment facilities improve process control, monitor water quality and optimize energy use, supporting safer, more reliable and more efficient water services.

Energy



Energy systems need bigger, smarter grids and innovative ways to match supply and demand. The International Energy Agency (IEA) estimates that the world must add or replace about 80 million kilometers of power lines by 2040.⁴ At the same time, around 1,650 gigawatts of wind, solar, and hydropower projects in the advanced stages of development are waiting for grid connections, showing the widespread presence of bottlenecks.⁵ In the IEA Net Zero pathway, demand response – shifting or reducing electricity use for short periods in response to grid needs or price signals – together with batteries, provides roughly one-quarter of the

flexibility needed, meaning the capacity to balance supply and demand quickly as renewable output changes. Technology can facilitate this kind of system flexibility. EU studies suggest that fully activating demand-side flexibility could avoid EUR11-29 billion of distribution grid investment each year this decade.^{6,7} Managed (smart) electric vehicle (EV) charging is a practical example and is flagged by the IEA as a near-term priority to keep peaks under control and defer costly upgrades.⁸ Technology can also help drive the reduction of demand. A 2023 evidence review for the UK government's energy department finds that smart meters paired with consumer feedback reduce household electricity use by an average of 3.4% and gas by 3.0%.⁹

⁴ IEA. 2023. Lack of ambition and attention risks making electricity grids the weak link in clean energy transitions. <https://www.iea.org/news/lack-of-ambition-and-attention-risks-making-electricity-grids-the-weak-link-in-clean-energy-transitions>

⁵ IEA. 2024. Renewables 2024: Electricity. <https://www.iea.org/reports/renewables-2024/electricity>

⁶ IEA. 2024. Demand response. <https://www.iea.org/energy-system/energy-efficiency-and-demand/demand-response>

⁷ DNV. 2023. Demand-side flexibility: Quantification of benefits in the EU.

<https://www.dnv.com/publications/demand-side-flexibility-quantification-of-benefits-in-the-eu-232342>

⁸ IEA. 2024. Global EV Outlook 2024. <https://iea.blob.core.windows.net/assets/a9e3544b-0b12-4e15-b407-65f5c8ce1b5f/GlobalEVO Outlook2024.pdf>

⁹ UK Department for Energy Security & Net Zero. 2023. Energy supplier review of smart meter energy consumption impacts. <https://assets.publishing.service.gov.uk/media/64831d59103ca60013039c7a/energy-supplier-review-of-smart-meter-energy-consumption-impacts.pdf>

Water



Accelerating technology adoption is central to expanding access to water, as 2.2 billion people still lacked access to safely managed drinking water in 2022.¹⁰ Many AIBB Members

face growing water stress as aging networks, rising demand and climate volatility strain service reliability and affordability. Many utilities still operate with limited network visibility and reactive maintenance, which drives losses and energy costs and slows service expansion. Globally, water utilities lose an estimated 346 million cubic meters of treated water each day (about 126 billion cubic meters a year), conservatively valued at roughly USD39 billion.¹¹ Technology can help address this gap: continuous pressure management and district metering localize bursts quickly; acoustic sensors and satellite-based analytics identify hidden leaks; and supervisory control and data acquisition (SCADA) with Internet of Things (IoT) telemetry enables near-real-time response.¹² Utilities also struggle with inaccurate or delayed billing and unmanaged peaks. Smart meters and analytics support demand management and anomaly detection to reduce losses in revenue and shorten billing cycles, strengthening utility finances. Aging assets and high energy use make operations costly. Hydraulic modeling and digital twins help target pipe renewal for the greatest impact and optimize pump schedules to lower electricity consumption.¹³ Technology also safeguards quality and resilience: sensors and alerts enabled by artificial intelligence (AI) reduce contamination risks, while flood and drought forecasting improves planning for variable climate conditions.

Transport



Transport systems need to enable smoother, safer and more predictable trips. Data-driven signal timing and targeted priority for public transport reduce stop-go delays, improve

reliability and cut fuel use, especially at congested junctions. In China, a large-scale study across the country's 100 most congested cities found that data-driven adaptive traffic signals cut peak-hour trip times by about 11%, with estimated annual CO₂ reductions of roughly 31.7 million metric tons as smoother flows reduce idling and stop-go driving.¹⁴ In India, Delhi Metro's Magenta Line now runs fully autonomously using communications-based train control (CBTC), offering safer and more reliable operations. CBTC allows trains to safely run closer together, enabling design headways of about 90 seconds.¹⁵ More frequent and reliable service helps shift passengers from cars to public transport, reducing congestion and emissions. At seaports, terminal automation (e.g., automated stacking cranes with an advanced terminal operating system) has been associated with productivity gains on the order of 10-35% and operating cost reductions of 15-35%, shortening vessel turnarounds and cutting idle emissions.¹⁶ Similarly, in other transport subsectors such as airports and waterways, digital operations and automation are improving throughput and service quality.

¹⁰ WHO/UNICEF Joint Monitoring Programme. 2023. Progress on household drinking water, sanitation and hygiene 2000–2022. <https://washdata.org/reports/jmp-2023-wash-households>

¹¹ Liemberger, R., & Wyatt, A. 2019. Quantifying the global non-revenue water problem. *Water Supply*, 19. <https://iwaponline.com/ws/article/19/3/831/41417/Quantifying-the-global-non-revenue-water-problem>

¹² JICA and BCG. 2025. Water DX Report: A guide for enabling the digital transformation of water utilities. https://www.jica.go.jp/english/about/dx/project/detail/___icsFiles/afiedfile/2025/04/30/20250407_JICA_BCG_Water_DX_Report_1.pdf

¹³ Lumley, D. J. et al. 2024. Connecting digital twins to control collection systems and enable real-time decision support. *Water Practice and Technology*, 19. <https://iwaponline.com/wpt/article/19/6/2267/102284/Connecting-digital-twins-to-control-collections>

¹⁴ Wu, K., et al. 2025. Big-data empowered traffic signal control could reduce urban carbon emission. *Nature Communications*, 16. <https://www.nature.com/articles/s41467-025-56701-4>

¹⁵ Agarwal, P. 2025. Delhi Metro's Magenta Line goes fully driverless; Pink corridor to follow. *Times of India*. <https://timesofindia.indiatimes.com/city/delhi/delhi-metro-goes-fully-driverless-on-magenta-line-pink-corridor-to-follow-soon/articleshow/123169324.cms>

¹⁶ McKinsey & Company. 2018. The future of automated ports. <https://www.mckinsey.com/industries/logistics/our-insights/the-future-of-automated-ports>

Sustainable Cities



Cities can deliver rapid, visible improvements by standardizing how they plan, build and operate. During construction, the usage of prefabricated and modular components can shorten delivery by roughly 20-50% and reduce construction costs by up to about 20% when designs and supply chains are optimized.¹⁷ Waste management is another key issue that requires cost-effective technology solutions. Municipal solid waste could rise to about 3.4 billion metric tons by 2050; in many low- and middle-income cities, it consumes roughly 20-50% of municipal budgets and at least one-third of waste is not safely managed.¹⁸ Smarter routing, advanced sorting and treatment of organic waste can lower operating costs and cut methane gas emissions. Urban planning and service coordination also face growing complexity as cities expand and infrastructure networks interconnect. Digital twins and analytics address these challenges by integrating geospatial, sensor and administrative data into a single model that reflects the city's conditions. This enables cities to test scenarios before construction, target maintenance and flood-mitigation investments, optimize traffic and public transport, and coordinate emergency response – improving day-to-day reliability and resilience across systems.¹⁹ Integrating data across the full infrastructure lifecycle – from planning and design to construction, operation and renewal – enhances efficiency and asset performance. Studies of lifecycle building information modeling (BIM) show that such integration can accelerate project delivery by around 20% and reduce costs by about 15%, while also improving long-term operation and maintenance outcomes.²⁰

Digital Infrastructure



Digital networks need to expand coverage and capacity while lowering cost and energy use; targeted technologies make that possible. Closing the digital divide remains urgent, with an estimated 2.6 billion people still offline in 2024, disproportionately in lower-income countries.²¹ As a crucial core component of modern digital connectivity, fiber is inherently more energy-efficient than copper, and migration to full fiber access is recognized as the most energy-efficient pathway for fixed networks; performance can improve further with technologies that enable more efficient sharing of fiber resources. Affordability and reach also improve through smart design choices: infrastructure sharing can reduce costs of 5G networks by 40%.²² Data centers play a central role in catering to the world's rapidly growing data demands, and require large amounts of electricity to run; data centers already consume an estimated 2-3% of global electricity and could double to about 945 terawatt hours by 2030 as AI workloads expand.²³ Efficiency gains are therefore critical: best-in-class data centers are able to operate with significantly better power usage effectiveness achieved through technologies such as advanced cooling, AI-assisted resource management and waste heat recovery.

Health



Technology can expand access, enhance quality and ease capacity constraints across health systems. Telemedicine is expanding access to health services across Asia: India's e-Sanjeevani platform has delivered more than 360 million teleconsultations since 2020; and China counts

¹⁷ McKinsey & Company. 2023. Making modular construction fit. <https://www.mckinsey.com/capabilities/operations/our-insights/making-modular-construction-fit>

¹⁸ World Bank. 2021. What a Waste 2.0 : A Global Snapshot of Solid Waste Management to 2050. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/697271544470229584/what-a-waste-2-0-aglobal-snapshot-of-solid-waste-management-to-2050>

¹⁹ World Economic Forum. 2023. Digital Twin Cities: Key Insights and Recommendations. https://www3.weforum.org/docs/WEF_Digital_Twin_Cities_2023.pdf

²⁰ Das, K., S. Khursheed, & V. K. Paul. 2025. The impact of BIM on project time and cost: insights from case studies. *Discover Materials*, 5. <https://link.springer.com/article/10.1007/s43939-025-00200-2>

²¹ ITU. 2024. Facts and Figures 2024: Internet Use. <https://www.itu.int/itu-d/reports/statistics/2024/11/10/ff24-internet-use/>

²² ITU and Centre for Development of Telematics. 2024. Telecom Infrastructure Sharing Best Practices (Workshop). <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/2024/0408/Documents/Rajkumar%20Upadhyay.pdf>

²³ IEA. 2025. Energy and AI. <https://www.iea.org/reports/energy-and-ai>

over 3,000 registered internet hospitals serving hundreds of millions of users, a virtual healthcare model that uses technology to provide medical services online and in combination with offline clinics.^{24,25} Remote patient monitoring is driving positive health outcomes: a 2024 systematic review reports an average 9.6% reduction in hospitalizations across conditions, and meta-analysis of chronic heart failure indicates about 30% fewer heart failure hospitalizations versus usual care.^{26,27} Diagnostic accuracy can also improve further: real-world and trial evidence in mammography finds radiologists that use AI are able to detect 18% more cancers without raising false positives, while materially reducing workload.²⁸

Climate



Technology is integral to strengthening the role of infrastructure in addressing climate change, spanning mitigation, adaptation and nature. On mitigation, technology supports the transition by enabling clean power, improving system efficiency and addressing hard-to-abate emissions. For example, grid-scale storage helps integrate variable renewables more reliably, while industrial heat pumps can replace fossil boilers in parts of manufacturing. Digital twins and scenario modeling are already delivering resilience and efficiency gains; for example, at the Port of Grimsby in the United Kingdom a building-level twin reduced energy use by 25% and CO₂ by 15%.²⁹ Adaptation technologies strengthen the full cycle of resilience. They improve how governments and operators comprehend evolving risks and

opportunities, design assets that can withstand future shocks and respond dynamically when impacts occur.³⁰ AI-enabled climate analytics are refining local risk baselines and guiding investment choices, while city- and system-level digital twins allow teams to test options under heat, flood and storm scenarios before committing capital. When hazards strike, early warning and decision-support tools help authorities apply protective measures and deploy resources. Issuing early warnings 24 hours ahead of a hazard striking can reduce damage by about 30%, underscoring the value of timely, actionable information.³¹ Nature and biodiversity solutions complement mitigation and adaptation by protecting ecosystems that buffer climate impacts and store carbon. Remote sensing can identify critical habitats and track restoration outcomes at scale, while using environmental DNA helps detect biodiversity changes that are not visible on the surface. Lastly, advanced analytics that quantify potential climate benefits help demonstrate the value of technology in mobilizing much-needed financing for climate technology. These insights inform projects that conserve wetlands, forests and watersheds – natural assets that safeguard water quality, reduce flood peaks and support livelihoods.

Across sectors, technology is proving to be a practical lever for better infrastructure. It makes infrastructure efficient, productive, resilient, cost-effective and accessible. Many of these tools are no longer experimental – they are already mature and in use, delivering significant benefits. What remains is to scale up these solutions more widely so that infrastructure systems can keep pace with growing needs and rising pressures.

²⁴ Indian Ministry of Health & Family Welfare. 2025. Strengthening Indian Healthcare for a Resilient Future. <https://www.mohfw.gov.in/?q=%2Fpress-info%2F8677&>

²⁵ Zhong, Y. et al. 2024. Telehealth Care Through Internet Hospitals in China: Qualitative Interview Study of Physicians' Views on Access, Expectations, and Communication. *J Med Internet Res*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11015369/>

²⁶ Tan, S. Y. et al. 2024. A systematic review of the impacts of remote patient monitoring (RPM) interventions on safety, adherence, quality-of-life and cost-related outcomes. *npj Digital Medicine*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11258279/>

²⁷ Iqbal, F. M. et al. 2021. Clinical outcomes of digital sensor alerting systems in remote monitoring: systematic review & metaanalysis. *npj Digital Medicine*, 4. <https://www.nature.com/articles/s41746-020-00378-0>

²⁸ Eiseman, N. et al. 2025. Nationwide real-world implementation of AI for cancer detection in population-based mammography screening. *Nature Medicine*, 31. <https://www.nature.com/articles/s41591-024-03408-6>

²⁹ Petri, I. et al. 2025. Digital twins for dynamic life-cycle assessment in the built environment (Port of Grimsby case). *Science of the Total Environment*, 993. <https://www.sciencedirect.com/science/article/pii/S0048969725015700>

³⁰ World Economic Forum and BCG. 2024. Innovation and Adaptation in the Climate Crisis: Technology for the New Normal. https://www3.weforum.org/docs/WEF_Innovation_and_Adaptation_in_the_Climate_Crisis_2024.pdf

³¹ UNDRR. 2023. Early Warnings For All initiative scaled up into action on the ground. <https://www.undrr.org/news/early-warnings-all-initiative-scaled-action-ground>

2

AIIB'S FOCUS ON TECHNOLOGY

Satellite ground stations support technology-enabled infrastructure by transmitting data across long distances, enabling remote monitoring, operational coordination and digital services where terrestrial networks are limited.



2.1 AIIB's Corporate Strategy

The Asian Infrastructure Investment Bank (AIIB) Corporate Strategy outlines the Bank's vision, mission and strategic choices. AIIB's mission is Financing Infrastructure for Tomorrow.³² By investing in sustainable infrastructure, AIIB unlocks new capital, new technologies and new ways in which to address climate change and connect Asia and the world.

AIIB's Corporate Strategy also sets a clear focus for the Bank by requiring that all AIIB investments across infrastructure and other productive sectors should ordinarily add value through one or more of the four cross-cutting themes (referred to as thematic priorities):

- Green infrastructure.
- Private capital mobilization.
- Connectivity and regional cooperation.
- Technology-enabled infrastructure.

The introduction of a thematic priority on technology-enabled infrastructure (TEI) recognizes the importance of technology in helping our Members address the infrastructure challenge. AIIB's Corporate Strategy states:

“The adoption of technologies, including digital infrastructure, has generally had a significant positive effect on growth, jobs and welfare. But there are stark and persistent disparities in the application of technologies across Asia that inhibit local growth and development outcomes. This applies particularly where there is a clear need to better integrate technology into infrastructure to improve its efficiency, accessibility, resilience and lifespan.”

At the same time, despite increasing recognition of the need to accelerate the adoption of technology in infrastructure, the pace of innovation and development of technologies for infrastructure and their adoption at scale remain slower than in other sectors. Challenges hampering the adoption of infrastructure technology include constrained public budgets for technology, limited awareness of new solutions, their value proposition and available providers, and insufficient dialogue between infrastructure and technology decision makers. Addressing the gap will require capital mobilization and knowledge sharing, and the facilitation of dialogue and partnerships. As a multilateral development bank established in the digital era, AIIB seeks to leverage technology as a core comparative advantage to support its Members to transform their infrastructure and other productive sectors.

³² AIIB. 2025. AIIB Corporate Strategy—Financing Infrastructure for Tomorrow. <https://www.aiib.org/en/policies-strategies/strategies/corporate-strategy.html>

Note: Figures in this section show approved projects aligned with TEI, excluding projects approved under AIIB's COVID-19 Crisis Recovery Facility. The Facility was a temporary emergency response instrument for COVID-19-related economic, financial and public health pressures and is not counted as part of AIIB's regular financing. Data are as of Dec. 31, 2025.

2.2 What Is Technology-enabled Infrastructure?

AllB's thematic priority on technology-enabled infrastructure (TEI) promotes both (i) investments in technologies for infrastructure, and (ii) the application of technology to infrastructure.

TEI includes *projects where the application of technology delivers better value, quality, productivity, efficiency, resilience, sustainability, inclusion, transparency, or better governance along the full project lifecycle*. Acknowledging that countries and sectors are at different stages of applying technology, the TEI thematic priority focuses on technologies that are relatively recent in the country and subsector context. Therefore, projects applying only technologies that are already widely applied in a specific subsector context within a country (e.g., basic SCADA systems for energy or water systems, basic project planning software) are not considered in line with the TEI thematic priority. See [Appendix A](#) for examples that illustrate alignment with the TEI thematic priority.

For AllB, technology refers to the practical application of scientific knowledge, engineering solutions, and digital systems to enhance infrastructure. It spans three complementary domains:

- **Scientific innovations** provide the foundations for future infrastructure. They draw from breakthroughs in fields such as chemistry, biology and energy systems that expand what is physically possible. Examples include hydrogen as a clean energy carrier, water-absorbent asphalt that reduces flooding risk, and luminescent paints that improve road safety. These innovations offer quantifiable benefits and open new pathways for sustainable infrastructure.
- **Engineering solutions** focus on how infrastructure is physically built and maintained. They harness technical design and mechanical advances to improve efficiency, safety and durability. Examples include robotics and drones that increase precision and reduce risk on construction sites, modular and prefabricated methods that shorten delivery time and cut waste, and large-scale 3D and 4D printing that allows for cost-effective, customized structures.

Autonomous cleaning robots maintain panel efficiency in dust-prone environments, lowering operations costs and increasing renewable energy yield.



- **Digital technologies** rely on data and computation. They translate physical processes into information that can be captured, analyzed and acted upon. Sensors embedded in infrastructure (Internet of Things) collect information from the assets, while software for analytics, modeling and management processes that information to guide decisions. These tools help plan and design projects more accurately, operate and maintain assets more efficiently and coordinate among different actors with greater transparency.

2.3 How Digital Infrastructure Relates to Technology-enabled Infrastructure

AIIB's TEI thematic priority should not be confused with our Digital Infrastructure (DI) Sector Strategy. Our TEI thematic priority is cross-sectoral, applying to all the infrastructure that the Bank funds and delivers. It promotes the use of technology to add value across AIIB's portfolio, whether in energy, transport, water, urban, social or digital infrastructure. By contrast,

DI is one of AIIB's defined sectors. The DI Sector Strategy guides investment in infrastructure that enables the transfer, processing, storage and use of data. This includes hard assets such as telecom towers, fiber-optic networks, 5G base stations and data centers, as well as soft elements like software platforms, terminals and devices that collect and exchange information. The two are complementary. DI builds the backbone of digital connectivity, while TEI promotes the application and supply of digital and non-digital technologies to improve infrastructure performance across sectors. There is, however, an important area of intersection between DI and TEI, particularly in relation to soft digital infrastructure.

Digital platforms, software systems, data architectures, sensors and analytics solutions may fall under the DI Sector Strategy when financed as stand-alone or enabling digital infrastructure, while it may also constitute TEI when applied within infrastructure sector projects to enhance performance, efficiency, resilience, or service delivery.



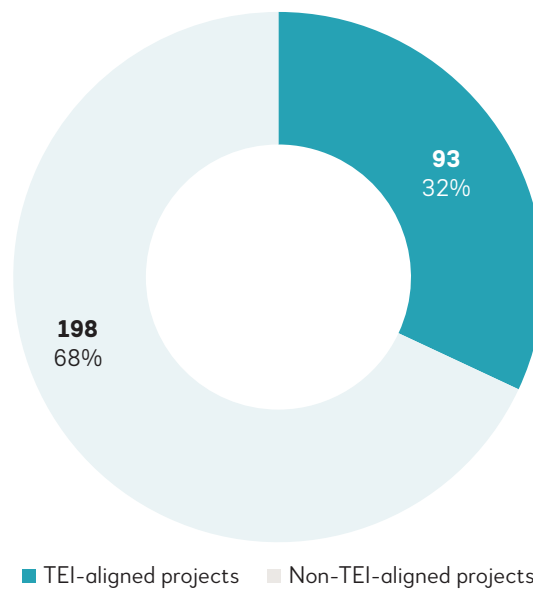
2.4 AIIB's Investments in Technology-enabled Infrastructure

Over AIIB's first decade of operations, technology-enabled infrastructure has become an increasingly visible part of the Bank's portfolio. From 2016 to 2025, 93 approved projects aligned with the TEI thematic priority, representing 32% of all approvals covered in this report. The figures below

show the growth of AIIB's TEI portfolio, its spread across sovereign-backed and nonsovereign-backed financing, its sector and Member coverage, and the balance between applying technology to infrastructure and investing in technologies for infrastructure.

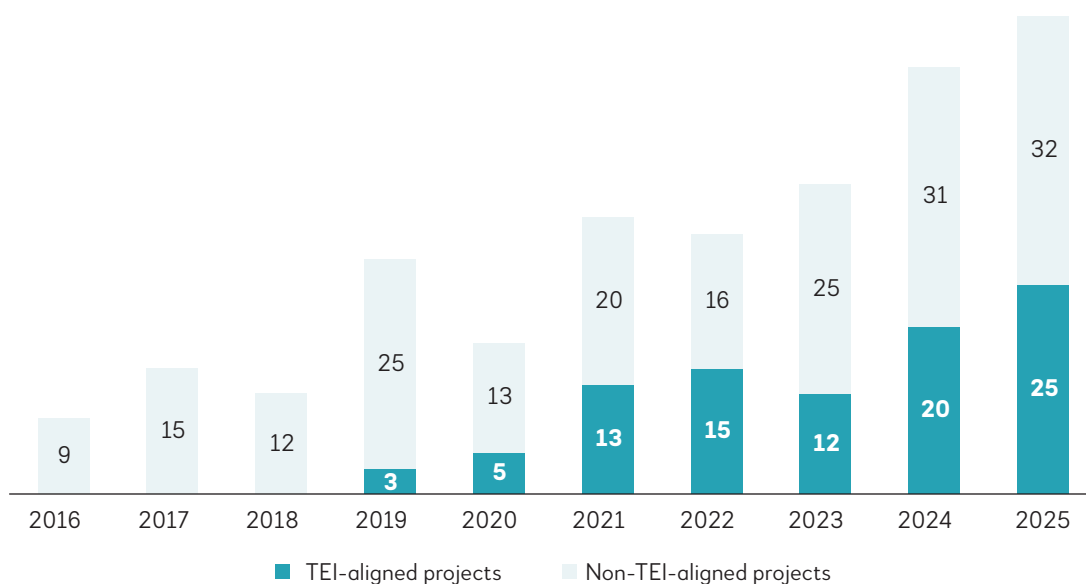
■ Portfolio Coverage

Number of projects, 2016 – 2025



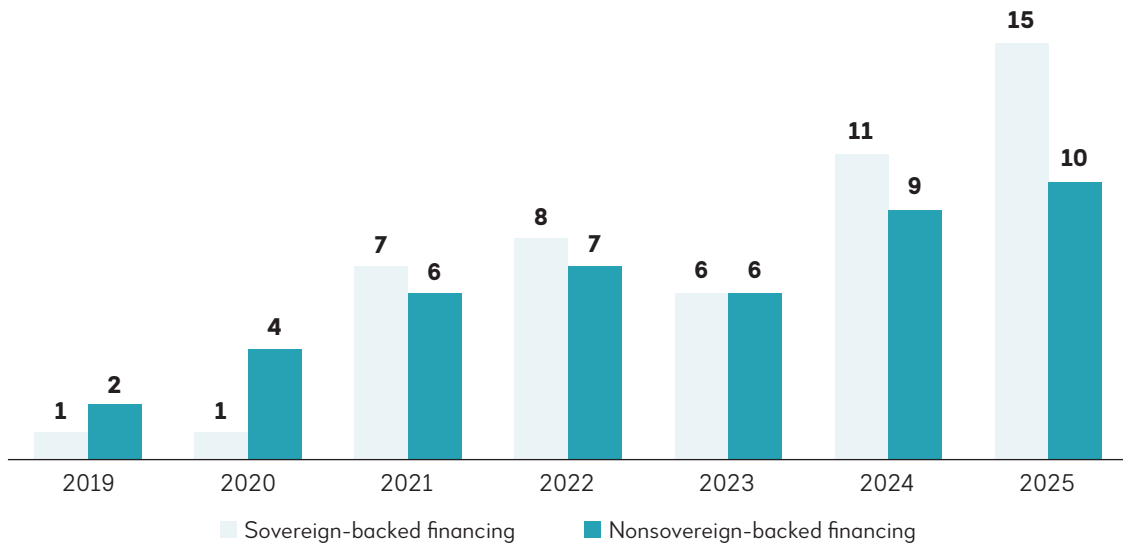
■ Growth Over Time

Number of projects, 2016 – 2025



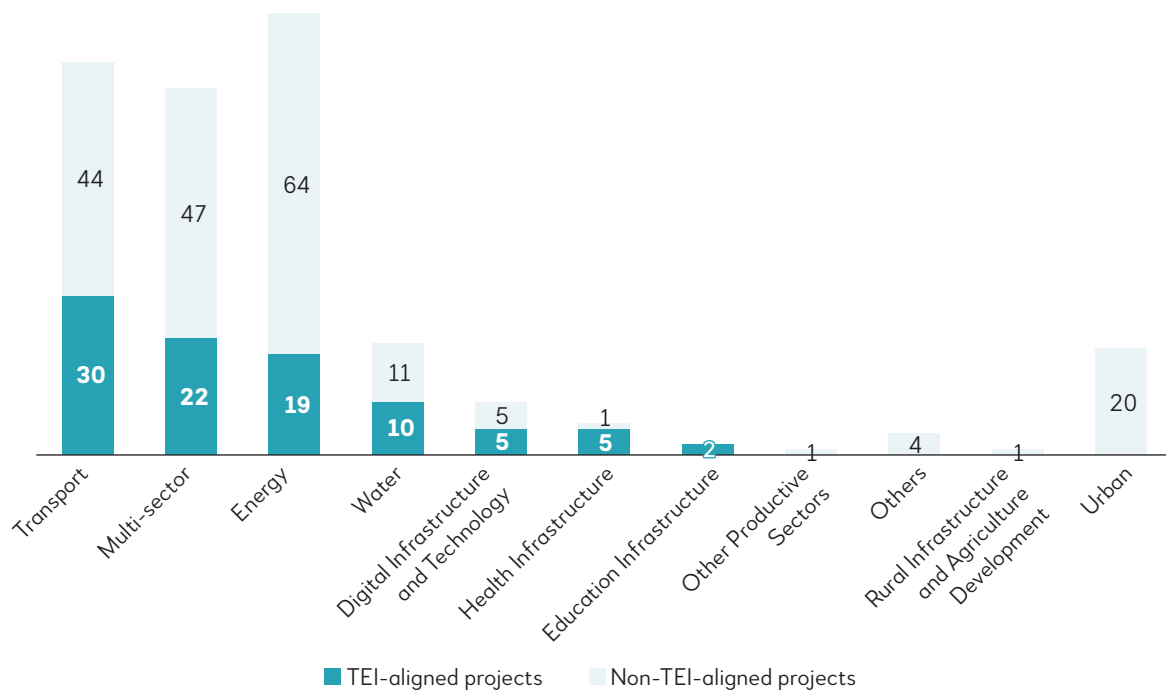
■ Sovereign and Nonsovereign Mix³³

Number of projects aligned with TEI, 2016 – 2025



■ Sector Distribution

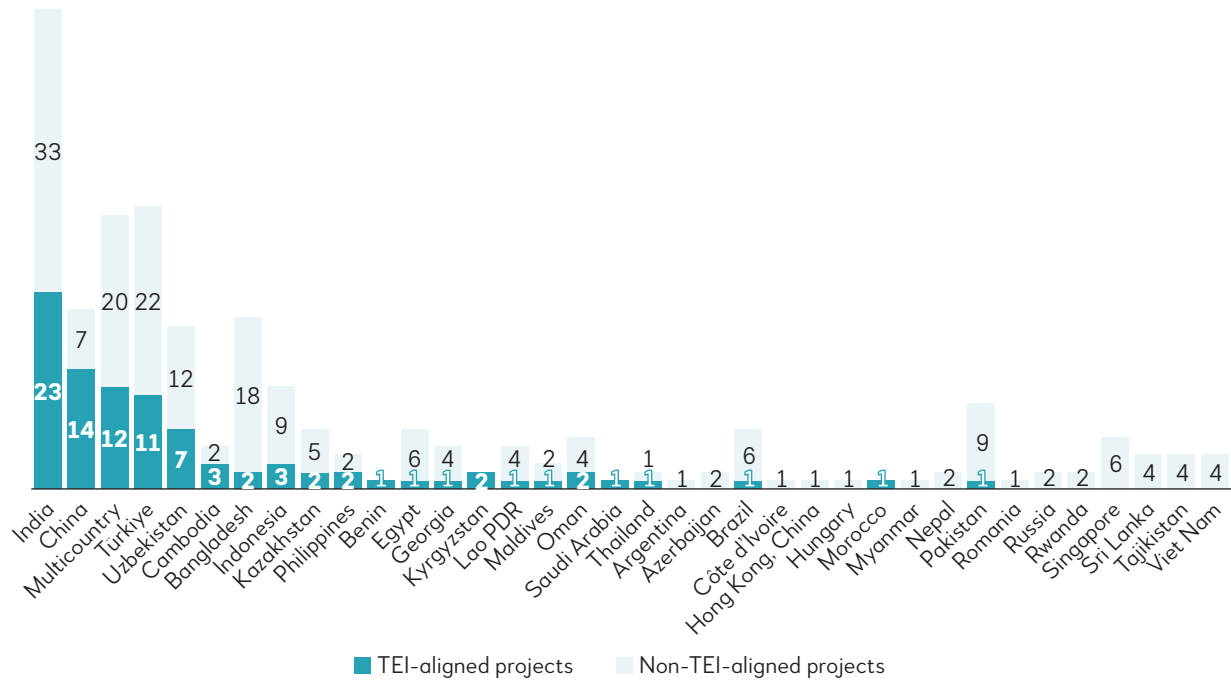
Number of projects, 2016 – 2025



³³ The terms “sovereign-backed financing” and “nonsovereign-backed financing” are defined in the [AIIB Operational Policy on Financing](#).

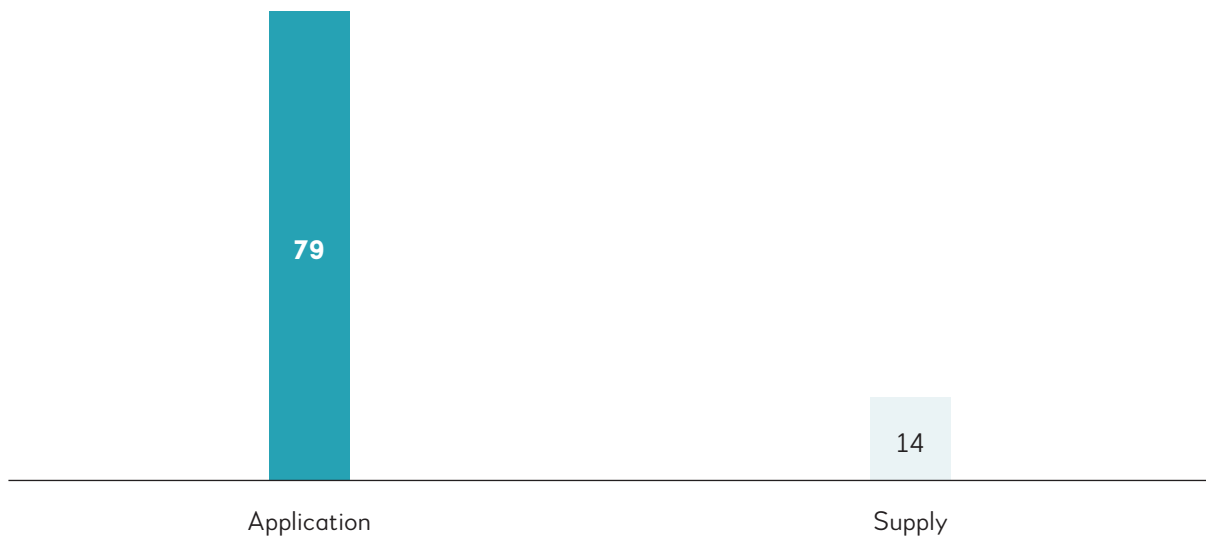
Member Coverage

Number of projects, 2016 – 2025



Application and Supply of Technology³⁴

Number of projects, 2016 – 2025



³⁴ “Application” refers to projects involving the application of technology to infrastructure. “Supply” refers to projects involving investments in technologies for infrastructure.



Earth observation data can help assess flood impacts and support disaster response planning, as shown on this image captured by Copernicus Sentinel-2 on Nov. 29, 2025, over northern Sumatra, Indonesia, following severe monsoon flooding.

Credit: Contains modified Copernicus Sentinel data (2025), processed by the European Space Agency.



Real-time water level monitoring provides communities and emergency services with the advance warning needed to reduce flood-related losses.

3

FROM PILOTS TO BANKABLE PROJECTS: HOW AIIB ADDS VALUE

Advanced cooling technologies and server optimization reduce the energy intensity of data centers, supporting the growth of digital infrastructure on a lower-carbon footprint.



3.1 Financing InfraTech

InfraTech can help make infrastructure safer, cleaner and more efficient. Infrastructure plays a central role in reducing emissions and increasing resilience, so scaling up promising technologies is urgent. The IEA estimates that while most CO₂ emission reductions by 2030 will be achieved with existing technology, by 2050 around 35% will need to come from technologies that are currently only prototypes, in demonstration, or not yet invented. This underscores the urgency of accelerating InfraTech from idea to mainstream deployment.

To show how technology matures and where AIIB adds value, we broadly distinguish between three development stages: **Innovation**, **Commercialization** and **Maturity**. The Bank matches instruments to the needs of each stage so promising solutions can be proven, purchased and scaled up to deliver development outcomes.

1. Innovation (idea to proof of concept)

The challenge here is to prove that an idea can work in practice. Teams must test concepts, build prototypes and deliver minimum viable products in controlled pilots. Success depends on demonstrating technical feasibility, understanding potential weaknesses and building an early business case to attract first customers.

2. Commercialization (market entry and early growth)

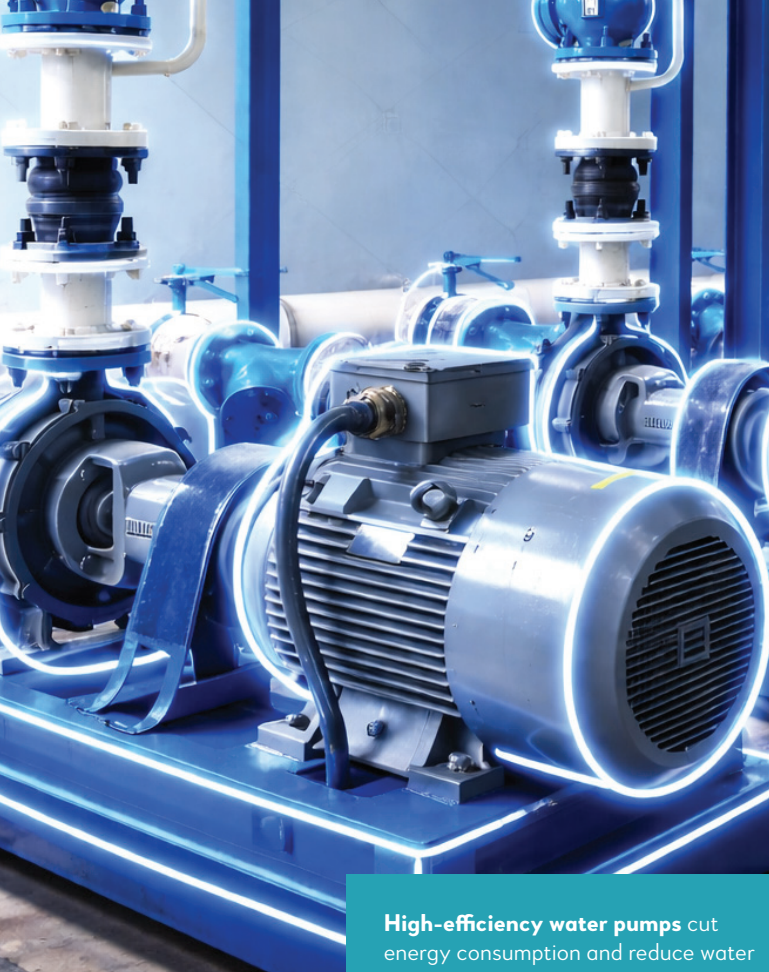
The next challenge is to turn prototypes into repeatable, reliable offerings. Firms must secure anchor clients, professionalize operations, and establish supply chains or manufacturing. They also need to raise finance for scale-up and give infrastructure decision makers confidence that new solutions are ready for deployment and provide long-term value for money. At this stage, accelerating cost reductions is critical so that emerging technologies become affordable and attractive for widespread adoption.

3. Maturity (scale and mainstreaming)

At maturity, the challenge is scaling up technologies into broader markets while ensuring long-term sustainability. Proven solutions operate at scale with stable revenues, strong operations and standardized procurement. Providers must enter new markets, transfer technologies to developing economies, and maintain stable and robust operations meeting high quality standards.



AIIB uses finance, investments, knowledge and convening to support InfraTech from experimentation to large-scale deployment.



High-efficiency water pumps cut energy consumption and reduce water losses, improving the financial and operational sustainability of utilities.

3.2 Bridging the Gap between Innovation and Market Readiness

AIIB uses finance, investments, knowledge and convening to support InfraTech from experimentation to large-scale deployment. Instruments are selected to de-risk technologies, create demand and mobilize additional capital. Through this approach, AIIB supports a range of stakeholders – from Members seeking to modernize infrastructure systems, to fund managers and technology companies driving innovation, to project developers and operators implementing solutions on the ground.

Innovation and Commercialization – from Pilots to Bankable Projects

AIIB helps bridge the gap between innovation and market readiness with the following approaches:

- **Investing through venture and growth-stage funds.** AIIB's Venture Capital Investment Program for Green and

Technology-enabled Infrastructure (the "VC Program") supports venture capital funds that drive the development of innovative technologies and new business models central to sustainable and technology-enabled infrastructure. Through this program, the Bank supports early-stage companies developing solutions that can transform infrastructure performance across its Members. For fund managers, AIIB helps crowd in additional capital; for technology companies, it provides pathways to commercialization and growth. Some funds AIIB has partnered with, such as Legend Capital Healthcare Technology Fund, span both venture and growth stages, investing in medtech and digital health companies that improve the capacity, efficiency and resilience of health systems. Others focus on helping to commercialize and grow impactful technologies, such as the Lightsmith Climate Resilience Fund, which invests in climate resilience technologies that help infrastructure and businesses adapt to climate risks. These funds connect early-stage innovation to pilot and commercial applications.

- **Financing technology adoption in projects.** AIIB incorporates new technologies into its sovereign and nonsovereign operations, financing early deployment at scale. For example, the Liaoning Green Smart Public Transportation Demonstration Project introduced several novel technologies to advance public bus transport, such as smart driver assistance and safety features, as well as advanced operations management systems that improve scheduling, dispatch, and energy and asset management. These systems integrate data from vehicles, depots and passengers into a unified digital platform, allowing real-time monitoring and adaptive decision-making that was previously unavailable in provincial cities. Smart analytics also help optimize routes and charging cycles for electric buses, reducing downtime and energy use. Projects like these demonstrate reliability and cost-effectiveness, delivering benefits across stakeholders: for Members, this financing strengthens service delivery; for project developers and implementing agencies it reduces risk and demonstrates operational feasibility; and for technology companies it provides reference projects that validate performance at scale.

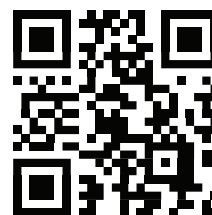
InfraTech Portal

To address the ongoing challenges of low awareness, limited proof of value and insufficient dialogue between technology and infrastructure stakeholders, AIIB developed the [InfraTech Portal](#). This public, free-to-use platform functions both as a knowledge-sharing platform – containing a wide set of InfraTech solutions and case studies – and as a matchmaking platform that helps connect infrastructure owners, operators and developers with InfraTech solution providers. It stimulates InfraTech adoption and development by making information accessible and encouraging interaction among providers, investors and users.

Covering all major infrastructure sectors with climate as a cross-cutting theme, the portal features three core functions:

1. **Solutions:** searchable descriptions of InfraTech applications across sectors and use cases.
2. **Case studies:** evidence of successful adoption and impact, demonstrating value in practice.
3. **Solution providers:** contact details to enable direct engagement and partnerships.

The portal is open for user-provided content. Technology providers can upload their solutions, share case studies and list contact details, allowing project developers, investors and policy makers to access them directly. By lowering information barriers, improving visibility of proven impact and enabling dialogue between stakeholders, the portal helps decision makers make more informed design and procurement choices. It also offers providers a platform to showcase innovation. In this way, the portal contributes to scaling up InfraTech across AIIB Members and beyond.



Visit the
[InfraTech Portal](#)



- **Facilitating knowledge and connection.** Through knowledge products such as reports (e.g., [Financing Clean Hydrogen in Asia and Beyond](#)) and the [InfraTech Portal](#) (see below), AIIB shares early lessons, connects innovators with infrastructure clients and documents implementation pathways that help replicate success. This knowledge loop informs both technology providers and decision makers, improving the quality of project design and adoption. Members and project developers gain knowledge about tested solutions and successful case studies, while technology firms get more exposure to the right audience, and fund managers get insight into potential investment opportunities.

Maturity – Scale, Transfer and Institutional Adoption

AIIB helps Members roll out proven technologies at system level, facilitate technology transfer and embed new ways of working in institutions with the following approaches:

- **Financing broader adoption of technology.** We use larger sovereign and corporate facilities to take proven solutions from single sites to networks. For example, the Henan Flood Emergency Rehabilitation and Recovery Project finances integrated systems – road and bridge restoration, stormwater and sewage pipelines, pumping stations, dike

works and control systems – so that flood risk management and emergency response become part of routine municipal operations. This enables Members and project developers to institutionalize technology solutions within infrastructure programs.

- **Investing to accelerate expansion and technology transfer.** We back established providers to expand and localize production. In India, AIIB's USD50 million equity investment in Mahindra Electric Automobile Limited, co-investing alongside British International Investment plc and Temasek, supports capital expenditure for the manufacture of EVs and assembly of battery packs. This speeds market development of electric SUVs in India, while strengthening domestic manufacturing and skills, and deepening the EV ecosystem. For technology companies, such investments accelerate scaling and regional market entry; for Members, they strengthen industrial capabilities and green job creation.

- **Enabling institutionalization and skills.** When financing new technologies in infrastructure projects, we typically add capacity-building components which help ensure that organizations have the capabilities in place to run and maintain the technology properly and embed it in daily practice. For example, the Manipur Urban Road, Drainage and Asset Management Improvement Project introduces a cloud-based road asset management system (RAMS) to inventory assets and track conditions, and optimize maintenance planning, with training and change management so the RAMS is well integrated into operations. The project also applies modern civil engineering technologies such as interlocking concrete block pavement for low-traffic streets and uses satellite data and AI to estimate road surface quality to keep network data current at low costs. For implementing agencies and contractors, this improves infrastructure quality, operational capacity and sustainability.

Digital technologies embedded in electricity substations enhance grid reliability, enable faster fault detection and support the integration of renewable energy.



- **Sharing lessons learned.** AIIB captures operational experience, procurement approaches, and safeguards from mature deployments, and shares them through seminars and reports on successful technology implementation, as well as case studies on the InfraTech Portal to inform replication across Members. These exchanges help Members, technology companies and infrastructure developers apply tested models in new contexts.

AIIB supports InfraTech across the development journey. The Bank invests across stages – from early venture capital and private equity commitments to project loans and larger corporate finance – mobilizing capital and commercial buy-in. It pairs investment with structured knowledge sharing, including the InfraTech Portal, to highlight best practices and success stories. Finally, AIIB uses its convening power to bring together governments, investors,

and technology providers to align incentives and scale up proven solutions. These combined levers help move innovations from concept to routine infrastructure practice. By aligning instruments to where a technology sits in its development journey, AIIB helps Members adopt InfraTech faster to make infrastructure more sustainable, resilient and affordable.



The Bank invests across stages—from early venture capital and private equity commitments to project loans and larger corporate finance—mobilizing capital and commercial buy-in.

G20 Blueprint for Scaling Up InfraTech Financing and Development

AIIB, in collaboration with the Global Infrastructure Hub (GI Hub), developed the [G20 Blueprint for Scaling Up InfraTech Financing and Development](#),³⁵ and the Stocktake of Approaches for Scaling Up InfraTech. These initiatives supported the [G20 InfraTech agenda](#),³⁶ launched during the Saudi Arabian Presidency in 2020 with the endorsement of the G20 InfraTech Agenda by finance ministers and central bank governors. The agenda defines InfraTech as the integration of digital and non-digital technologies with physical infrastructure to deliver efficient, connected and resilient assets.

The Infrastructure Working Group asked AIIB and GI Hub to prepare the blueprint, which offers a menu of evidence-based, voluntary and non-binding actions for governments and the private sector. It highlights six elements of the InfraTech agenda: strategies and roadmaps; enabling regulatory frameworks; financing and funding approaches; governance, institutions and capabilities; standards and data; and partnerships and business models. The blueprint and stocktake provide countries with reference material and examples to design policies, unlock financing and accelerate the deployment of InfraTech in ways that can be replicated globally.

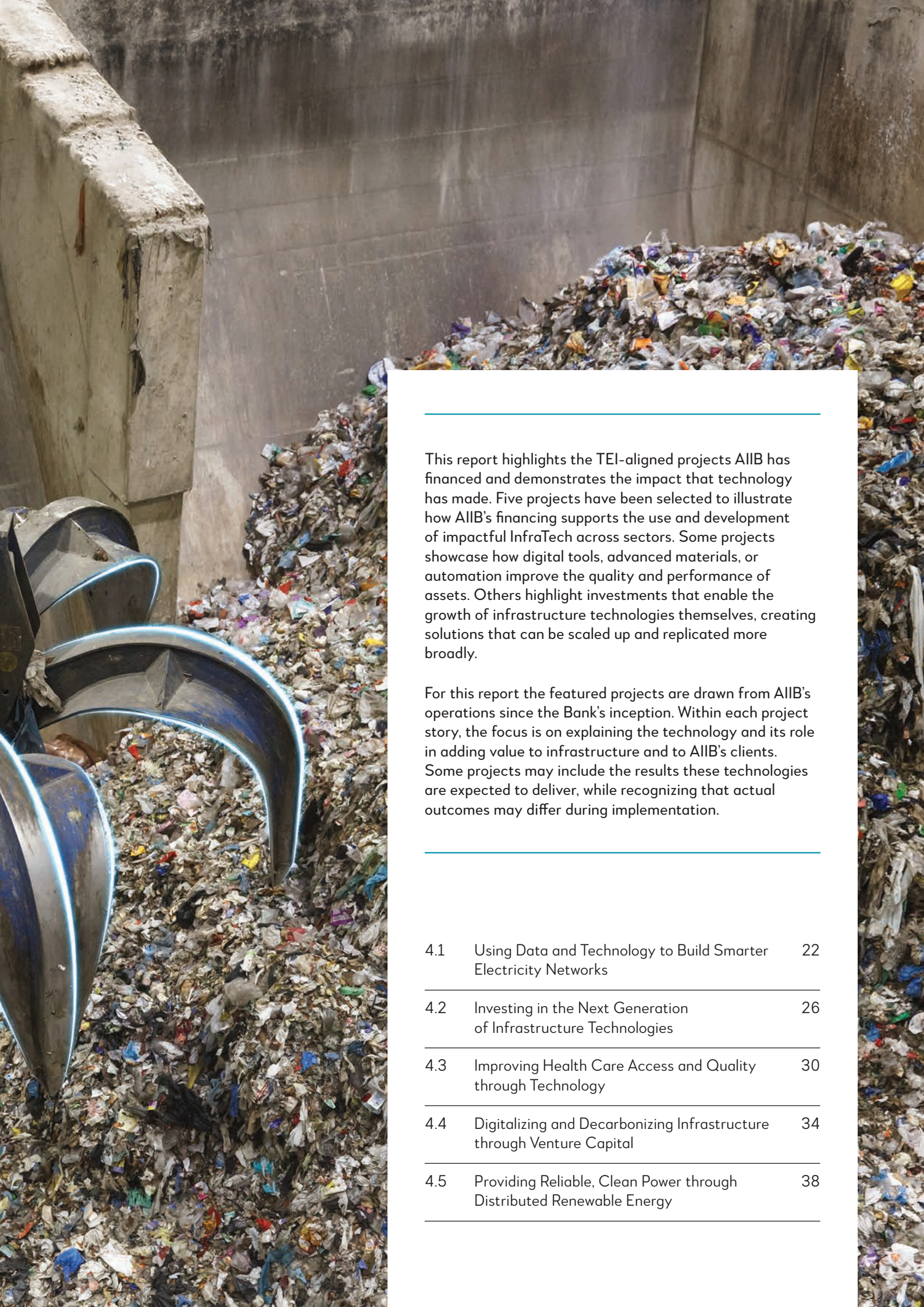
³⁵ Global Infrastructure Hub and AIIB. 2022. G20 Blueprint for Scaling Up InfraTech Financing and Development. AIIB. https://www.aiib.org/en/about-aiib/who-we-are/infrastructure-for-tomorrow/technology-enabled-infrastructure/_pdf/AIIB-GI-Hub-g20-blueprint-for-scaling-up-infratech-financing-and-development.pdf

³⁶ G20 Infrastructure Working Group. 2020. G20 Riyadh InfraTech Agenda. <https://cdn.gihub.org/umbraco/media/3008/g20-riyadh-infratech-agenda.pdf>

4

CASE STUDIES

Technology can improve waste management by enabling more efficient sorting, recycling and energy recovery, helping cities reduce landfill use and manage waste more sustainably.



This report highlights the TEI-aligned projects AIIB has financed and demonstrates the impact that technology has made. Five projects have been selected to illustrate how AIIB's financing supports the use and development of impactful InfraTech across sectors. Some projects showcase how digital tools, advanced materials, or automation improve the quality and performance of assets. Others highlight investments that enable the growth of infrastructure technologies themselves, creating solutions that can be scaled up and replicated more broadly.

For this report the featured projects are drawn from AIIB's operations since the Bank's inception. Within each project story, the focus is on explaining the technology and its role in adding value to infrastructure and to AIIB's clients. Some projects may include the results these technologies are expected to deliver, while recognizing that actual outcomes may differ during implementation.

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4.1 Using Data and Technology to Build Smarter Electricity Networks

Türkiye’s electricity distribution system is central to its economic resilience and growth. Recent shocks have underscored the need for a smarter, tougher grid. In February 2023, two earthquakes disrupted the Toroslar distribution region, dropping power flows within hours, knocking out substations and affecting tens of thousands of transformers. Recovery has been substantial, yet the work of rebuilding while improving service quality continues, including support for temporary facilities and new social housing as communities resettle. These events brought into sharp focus sector priorities that pre-dated the earthquakes: strengthening reliability, reducing theft and loss, and improving customer service across sprawling networks that span dense cities and rural lines that are costly to patrol. “What the earthquakes made very clear is that rehabilitating conventional networks alone is not enough,” said Francisco Fortuny, Senior Investment Officer and Project Team Leader. “When networks span dense cities and remote rural areas, operators need systems that tell them where the problem is and what to fix first. Digital tools help shift from routine patrols to targeted, data-driven responses.”

AiIB is supporting this transformation with a local-currency sustainability-linked loan equivalent to USD100 million, as part of a USD325 million package with the International Finance Corporation (IFC) and the Netherlands

Energisa Enerji Sustainability Linked Corporate Loan for Network Modernization, Expansion and Reconstruction	
Project name	Energisa Enerji Sustainability Linked Corporate Loan for Network Modernization, Expansion and Reconstruction
Project number	000812
Member	Republic of Türkiye
Approval date	Apr. 29, 2025
Sector	Energy
Financing type	Nonsovereign
AiIB’s commitment	USD100 million
Total project cost	USD325 million

Development Finance Company (FMO). Proceeds finance modernization and expansion across three distribution regions – AYEDAŞ (Istanbul Anatolian side), Başkent (Ankara and northern provinces), and Toroslar (southern provinces) – and the ongoing reconstruction program in Toroslar following the earthquakes. The financing is structured as a sustainability-linked loan in Turkish lira. Its remuneration is linked to clearly defined sustainable performance targets and key performance indicators (KPIs) that promote outcomes beyond the physical investments, notably the control of electricity theft and loss and gender balance in management. In parallel, the Green for Growth Fund is providing a USD15 million loan for e-mobility, under separate pro-rata arrangements.

The program's expected results reflect sector priorities. The results monitoring framework sets a target to reduce the weighted average theft-and-loss ratio across the three regions from a baseline of 7.86% in 2023 to 7.3% in 2027, with a longer-term trajectory to 6.85% by 2030. The framework also tracks reliability, reconstructed assets and the share of women in management positions, which is expected to rise from 25.7% to 29.7% by 2027. These targets complement network indicators such as line length, transformer capacity and system average interruption duration index, monitored with the Energy Market Regulatory Authority as data owner. These results support the shift toward data-driven operations and transparent reporting within Türkiye's regulated distribution environment.

Technology Spotlight

Technology is the backbone of this shift. At the control room level, Enerjisa operates an integrated outage management system, SCADA and distribution management system – bringing real-time situational awareness to operators. The outage management system receives customer notices from the customer relationship management system and is integrated with geographic information system mapping and smart meters, so that call center reports, network topology, and remote meter readings point to the likely fault location and the customers affected. The number of smart meters increased from 102,498 in 2023 to 116,303 in 2024, widening the footprint for remote readings and outage diagnostics across the service regions. In parallel, SCADA coverage expanded from 1,299,239 sensors to 1,422,150 over the same period, enhancing remote control and continuity monitoring capabilities. The distribution management system optimizes load flows and voltage levels, and the combined platform supports faster switching, improved fault isolation, and systematic data collection for analyzing interruptions and losses.

Customer-facing integration is advancing as well. Interactive voice response systems are being integrated with medium-voltage observability tools so that call center staff can see live outage and load information while speaking with customers. “When call center staff can see live network conditions while speaking with customers, conversations change. It becomes easier to give accurate information and to dispatch crews



Digital tools help electricity network operators strengthen field operations by capturing asset data, supporting inspections and turning field observations into actionable insights for more reliable service.

with a clearer picture of what is happening on the ground,” explained Fortuny. This is expected to improve the quality and accuracy of outage notifications by up to 50%. Over time, Enerjisa plans to build on this further to enable automatic customer identification during outages. By linking SCADA and sensor data, the network topology could be matched with call center reports, allowing operators to spot outages even before customers report them. This helps operators locate faults faster and restore power more quickly. These upgrades complement network automation and redundancy measures highlighted as part of the project's climate risk assessment, which has also built the case for taller poles in areas prone to strong winds and heavy snowfall and strengthening vegetation management along lines. The measures improve resilience to extreme weather while enhancing daily operations.

Enerjisa is expanding its data analytics capabilities to make network operations smarter and more proactive. This includes using data from sensors, smart meters and field reports to predict where losses are likely to occur, optimize energy use across the grid and plan maintenance before faults happen. In practice, the systems bring together customer calls, sensor readings and remote meter data into a single operational picture. In the case of outages, this allows crews to be dispatched with clear instructions and operators to reroute power to keep the largest possible share of customers supplied while repairs are underway. It also enables more accurate and timely maintenance and repair

inspections. As the data set grows, analytics also help pinpoint theft-and-loss hotspots and refine reliability reporting within the tariff framework, linking daily operations with longer-term performance improvements.

The expected impacts of this investment program cut across reliability, efficiency and inclusion. On reliability, the integrated control room platform and the linkage with interactive voice response are designed to reduce interruption duration and frequency and to accelerate restoration after events, particularly in earthquake-affected localities of the Toroslar region. On efficiency, expanded SCADA and distribution management system coverage, coupled with advanced meter reading systems, supports optimized switching, more precise voltage regulation, and sharper identification of technical and commercial losses. On inclusion, the sustainability-linked loan structure commits the company to measurable progress in women's representation in management, with year-by-year milestones embedded in the results monitoring framework.

The operation contributes to our climate finance goals with an estimated total climate finance share of approximately 73%: about 58% mitigation and 15% adaptation. Mitigation stems mainly from network investments and operating system upgrades that reduce losses and integrate

renewable energy, while adaptation reflects measures such as undergrounding, taller poles, vegetation management and automation that reduce vulnerability to multiple hazards. The transaction also advances financial innovation in the Turkish market: it is presented as the first sustainability-linked loan in local currency to a regulated utility, creating a precedent for linking tariff-period investments with measurable performance targets under domestic-currency terms.

The project pairs capital for core network renewal and earthquake reconstruction with technology components that improve how the network is run day to day. The integrated outage management system, SCADA and distribution management system suite, broader advanced meter reading systems coverage, and the interactive voice response linkage are practical tools that shorten response times, strengthen the accuracy of customer communications, and create the conditions for steady reductions in theft and loss. Backed by a sustainability-linked loan that rewards results, these measures support safer, more reliable, and more efficient electricity distribution for households and businesses across AYEDAŞ, Başkent and Toroslar, while helping the operator and the sector move toward a modern, data-driven model of service.

Virtual reality simulations help maintenance teams practice complex tasks in a safe digital environment, supporting faster learning, more consistent procedures and improved readiness for field operations.



Technology-enabled grid modernization brings together physical upgrades, digital systems, field data, and improved operational practices to reduce outages, improve asset performance and strengthen power supply reliability.

Up to

50 %

improvement in
outage notification
accuracy

From **7.86 %**
to **6.85 %**

theft-and-loss ratio
reduction target by 2030

From **25.7 %**
to **29.7 %**

women in
management by 2027



4.2 Investing in the Next Generation of Infrastructure Technologies

Technological innovation is reshaping how infrastructure is built, financed and managed. AIIB's VC Program invests in early-stage companies developing transformative technologies and new business models that can make infrastructure more efficient, resilient and sustainable. "Infrastructure innovation does not start at scale. It starts with small teams testing ideas at pilot stage that can later be scaled up to reshape how infrastructure is planned, built and operated," said Kishlaya Misra, Senior Investment Officer and Project Team Leader. "Through the VC Program, AIIB can engage much earlier in that lifecycle, backing technologies through focused venture capital funds that have clear infrastructure relevance and helping them grow into bankable, scalable solutions that will shape the infrastructure systems of the future." Launched in December 2022 with a commitment of USD130 million, including USD30 million for co-investments, the program backs specialist fund managers who bring technology-driven solutions to market across AIIB Members and attract additional private investment into the sector.

The VC Program prioritizes practical applications that can both strengthen existing systems and transform traditional infrastructure by applying cutting-edge technologies. By the end of 2025, the VC Program had invested into four venture capital funds. The following three featured investments have already backed companies with technologies that show significant potential to improve infrastructure and deliver impact in line with AIIB's mission.

AIIB Venture Capital Investment Program for Green and Technology-enabled Infrastructure ("VC Program")	
Project name	
Project number	000623
Member	Multicountry
Approval date	Dec. 22, 2022
Sector	Multisector
Financing type	Nonsovereign
AIIB's commitment	USD130 million
Total project cost	USD130 million

MSA Emerging Technology Markets Fund I, L.P. (Middle East, North Africa, Türkiye and Pakistan)

MSA's strategy targets technology that modernizes logistics and adjacent enterprise services in the Middle East, North Africa, Türkiye and Pakistan. The fund's goal is to reduce friction in fast growing supply chains by shortening delivery times, improving reliability and lowering emissions per delivery through better planning and consolidation. Examples of the fund's investments include the following:

- **Flextock** is a technology-enabled warehousing and fulfillment company for online brands. It stores goods in its network of warehouses and ships orders quickly. Its software shows

real-time stock levels, guides pick and pack, and books couriers, which reduces errors and speeds delivery. Dashboards provide real-time visibility across sales channels and KPIs, helping brands scale with fewer stock-outs and lower costs. By modernizing warehousing and logistics, Flextock improves supply chain efficiency in Egypt and across the Middle East, supporting the region's rapid growth.

Endiya Partners Fund III (India)

Endiya backs deep-tech companies at the seed and early stages, companies that can strengthen India's infrastructure. The fund concentrates on intellectual-property-heavy solutions across enterprise software, healthcare technology and intelligent industry – areas that improve governance, safety and productivity in regulated systems. Examples of the fund's investments include the following:

- **AltiusHub** provides pharmaceutical serialization and compliance solutions, helping companies prove where each pack of medicine has been. The platform assigns each pack a scannable identity and records its movement through factories and warehouses, and then prepares the regulatory reports different countries require. This improves safety by deterring counterfeits and shortens recall and reporting cycles, with the company reporting reductions in compliance costs and supply chain risks of 25% to 30%.³⁷
- **Perceptyne** builds AI-native industrial robots for delicate assembly work. The system has two coordinated robotic arms and can be tele-operated at first while it learns tasks using cameras and software. This helps manufacturers accelerate use of manufacturing automation, while reducing the need for humans to undertake mundane and potentially dangerous dexterous tasks and keeping quality consistent.
- **Maieutic Semiconductors** develops a generative AI assistant that supports engineers in designing analog integrated circuits – the components that manage power, signal and communications in electronic systems. The platform helps designers explore different circuit designs and check performance early in the process. By automating complex calculations, the tool significantly accelerates design time, strengthening India's growing semiconductor design ecosystem, with the company estimating that its tool could reduce portions of the analog design cycle by 50% to 66%.³⁸
- **Matters.AI** provides insider-risk and data-security tools that help companies protect sensitive data. It maps where data live, watches how users interact with them, and flags unusual behavior across cloud environments. By providing automated alerts and prioritized responses, teams can detect and contain data security risks faster.

50-66 %

estimated **reduction** in
portion of the analog
design cycle

Maieutic AI

25-30 %

reduction in
supply chain risks
through serialization

AltiusHub

³⁷ Endiya Partners. 2025. Securing Pharma Supply Chains – Why We Invested in AltiusHub.

<https://www.endiya.com/blog/securing-pharma-supply-chains---why-we-invested-in-altiushub>

³⁸ Business Standard. 2025. Bengaluru startup taps AI to speed up analog chip development.

https://www.business-standard.com/technology/tech-news/bengaluru-startup-maieutic-ai-chip-designautomation-125102100283_1.html

Golden Gate Ventures Fund 4 (Southeast Asia)


Golden Gate invests in technology companies that advance digital infrastructure, energy infrastructure and sustainable cities across Southeast Asia. The fund's portfolio spans financial technology, education technology, workplace productivity and energy data services, enabling service providers, utilities and municipalities to operate with greater efficiency and transparency. Its portfolio includes these examples:

- **Mainstory** operates early-learning centers. Its center software logs a child's day and shares updates with families, improving transparency and home-school communication. The data help teachers spot needs earlier and tailor activities, while reducing paperwork. The KinderGPT hiring assistant screens applicants, runs basic assessments and schedules interviews, so centers can staff classrooms faster and onboard new teachers more smoothly.

Integrated warehouse management software

provides real-time inventory visibility and automated fulfillment, reducing errors and lowering costs across e-commerce supply chains.





Industrial robotics show how automation can strengthen infrastructure value chains by improving precision, efficiency and quality control in production processes.

- **Aquila** provides real-time, verified ESG data to banks, borrowers and verifiers for sustainable finance. It deploys connected IoT sensors on client assets – such as buildings, energy systems and vehicle fleets – and streams the data into a cloud platform that automates the measurement, reporting and verification of environmental performance. By replacing manual self-reporting with continuous, auditable data, the platform lowers monitoring costs and strengthens confidence in the ESG performance underpinning green loans and sustainability-linked instruments.

Shaping the Future of Infrastructure

Although each fund operates in different markets, the development logic is similar. “What matters for us is not technology for its own sake, but whether it solves real-world infrastructure problems and brings value to all concerned stakeholders in the value chain. Many of the companies backed

through the VC Program are reducing manual processes, improving reliability, and making systems safer and more efficient. These are incremental changes at the company level that can translate into large gains once adopted across infrastructure networks,” said Misra. The Bank’s role is to crowd in private capital to these solutions early in their lifecycle and to help them scale up in places where they can deliver the greatest public benefit.

Through the fund investments made under the VC Program, AIIIB contributes to bringing practical innovation to daily infrastructure problems. As these funds deploy capital and their companies grow, they create a pipeline of technologies that advance the transition to greener, technology-enabled infrastructure across AIIIB Members.



4.3 Improving Health Care Access and Quality through Technology

Indonesia faces a persistent gap in access to quality health services, especially in remote areas. Progress on life expectancy and infant mortality has been steady. But noncommunicable diseases are rising and many facilities remain under-equipped, with a shortage of trained staff to operate modern equipment. Maternal mortality is high compared with regional peers, pointing to late diagnosis and limited access to modern tools in district hospitals and primary care. The COVID-19 pandemic exposed these weaknesses: early detection proved difficult, surge capacity was limited, and care was disrupted in remote areas. The government’s Health Transformation Agenda answers these challenges with a nationwide program to equip facilities, standardize care and strengthen referrals across an archipelago of 273 million people.

Within this agenda, the Ministry of Health is leading a national program from 2024 to 2028 that upgrades primary care, modernizes hospitals and improves the public health laboratory network. The national needs analysis covered 514 districts and cities, nearly 10,000 community health centers (puskesmas), 532 hospitals, 419 pharmacies, 411 doctors’ practices and 403 independent laboratories. The total cost is EUR3,731 million, with AIIB committing EUR936 million alongside the World Bank (lead

Project name	Modernization of the Health System
Project number	000787
Member	Indonesia
Approval date	Dec. 14, 2023
Sector	Health Infrastructure
Financing type	Sovereign
AIIB’s commitment	EUR936 million
Total project cost	EUR3,731 million

co-financier), the Islamic Development Bank (parallel co-financier) and the Asian Development Bank. This is the largest health project among multilateral development banks to date. AIIB’s financing supports the procurement and deployment of standardized, energy-efficient medical equipment across primary health care facilities and the hospital referral network. “This project represents a true model of multilateral collaboration,” said Lander Bosch, Economist – Health at the World Bank. “By joining forces, our institutions have been able to deliver a single, coherent investment program of unprecedented scale in the health sector. It shows what can be achieved when partners combine financing with shared technical expertise and a common purpose to strengthen public health systems.”

By aggregating purchases nationwide, the government can negotiate better prices and make sure every region receives equipment of the same quality. Vendors are responsible not only for delivery, but also for training health workers and maintaining the equipment, turning procurement into a long-term service relationship rather than a one-time transaction. This approach keeps costs down, improves reliability, and ensures that staff in both major cities and remote districts can depend on tools that work when they are needed most. AIBB has supported this process by sharing market and procurement analysis on manufacturers, specifications and pricing, helping the ministry design fair tenders and secure dependable after-sales service.

514

districts and cities covered, including nearly 10,000 community health care centers

532

hospitals covered

419

pharmacies covered



New diagnostic tools are strengthening frontline health workers' ability to assess patients earlier and connect them with the right level of care.

“The project is a transformative initiative that will significantly impact millions of Indonesians by addressing long-standing health care disparities,” said Deni Fauzi, Senior Investment Officer at AIBB. “For the first time, advanced medical equipment, such as Doppler monitors, telemedicine-enabled devices and catheterization labs, will be made available in underserved and remote areas. This ensures life-saving interventions for communities that have previously struggled to access basic health care.”

Technology Spotlight

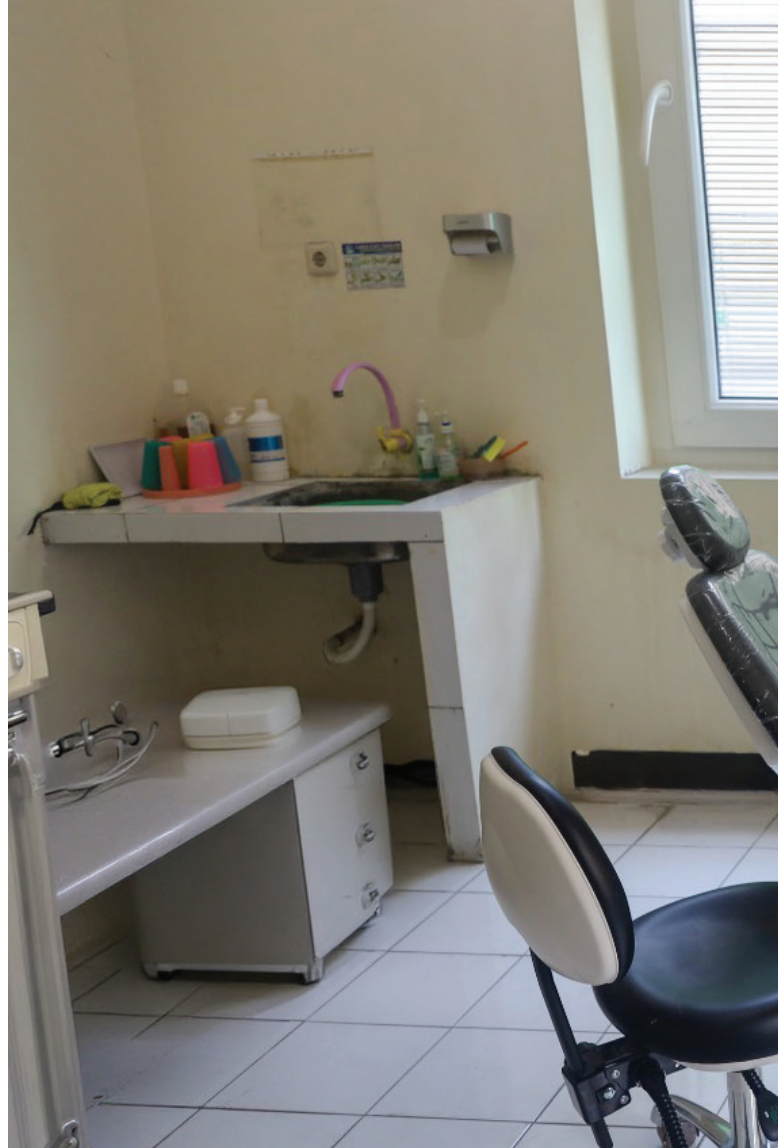
Across Indonesia's 514 districts and cities, hospitals and clinics are being equipped with modern medical technology on a scale the country has never seen. The goal is not simply to buy new equipment, but to close the long-standing gap between what health workers can do and what patients need.

In many districts, primary care centers lacked even basic diagnostic tools, forcing patients to travel long distances for simple tests. The project changes that. Newly supplied imaging and monitoring equipment allow midwives and nurses to detect risks earlier and treat more cases on site. A midwife in eastern Indonesia can now perform an ultrasound, share the image securely with a hospital specialist and receive confirmation on whether referral is needed. These simple exchanges can mean the difference between a safe delivery and a life-threatening emergency. During floods or outbreaks, when transport routes are cut off, the ability to consult remotely ensures that women and newborns are not left without care.

At the hospital level, heart disease and stroke remain Indonesia's leading causes of death, yet many provincial facilities still lack the tools for timely intervention. The program doubles the number of catheterization laboratories and equips them with modern imaging systems that help cardiologists judge when surgery is truly needed and how best to perform it. This prevents unnecessary procedures and improves recovery rates. New surgical and intensive-care monitoring tools, from digital imaging to precision-guided drills and patient monitors, make operations safer and shorten recovery times. For doctors who have long relied on outdated or improvised setups, the change is transformative: diagnosis is faster, data are clearer and treatment decisions are better informed.

Technology financed in the project also helps address one of Indonesia's most pressing health challenges: maternal health. Indonesia's maternal mortality ratio stands at 173 deaths per 100,000 live births – more than double the regional average of 69. The main causes, including pre-eclampsia and hemorrhage, are often preventable through early detection during routine antenatal care. Yet many health facilities, especially in remote areas, still lack the equipment to perform basic screenings for conditions such as anemia, hypertension and gestational diabetes. The project tackles these gaps head-on by providing diagnostic and screening equipment for high-risk pregnancies – from digital blood-pressure monitors and hemoglobin analyzers to ultrasound machines capable of identifying complications early. Together, these tools make routine antenatal visits more meaningful and reduce the chance that treatable conditions become life-threatening.

Other technologies address chronic conditions that quietly burden families. Kidney disease, for example, keeps thousands of patients dependent on dialysis machines that clean their blood several times a week, often in faraway hospitals. With the introduction of automated dialysis machines in more health facilities across regions, patients will be able to access dialysis services closer to home, requiring shorter trips and reducing travel costs. This improvement not only enhances convenience for stable patients but also frees hospital capacity for more serious cases. Energy-efficient specifications – required for every equipment lot – further cut operating costs and reduce the strain on regional power systems, where supply is often uneven.



Advanced imaging equipment is strengthening diagnostic capacity in Indonesia's health facilities, helping clinicians detect conditions earlier and make better-informed treatment decisions.





New dental equipment is helping Indonesia's primary care facilities provide more essential oral health services closer to communities.

Behind this enormous roll-out is a digital backbone designed to keep it running smoothly. The Ministry of Health's enhanced centralized information system, ASPAK, supports every step of the procurement and maintenance cycle. Each facility reports the operational status of its equipment in real time, so the ministry can see which machines are functional and which require service. If a device stays offline longer than the contractually allowed period, the system triggers alerts and adjusts vendor payments accordingly. ASPAK also tracks whether staff have received the required vendor-led training – critical to ensuring that new technologies are used effectively and safely. In a system where handwritten logs once went missing and maintenance requests could take months, this data-driven oversight ensures that investments keep delivering results. With ASPAK in place, the ministry can monitor performance across a 5,000-kilometer archipelago and plan maintenance and future procurements based on real-time data rather than estimates.

Taken together, these interventions are reshaping how Indonesia's health system works. Primary care centers can now diagnose and stabilize patients before referral. Hospitals can treat complex cases with modern tools rather than send them abroad. Preventive care is gaining attention, as early screening and chronic disease management become part of daily practice. And through ASPAK, the ministry can see the system as a whole – where equipment is working, where it is not, and how to close the gaps.

Technology alone will not solve every health challenge, but it is giving Indonesia's doctors, nurses and midwives the means to deliver the kind of care they have long aspired to provide. By linking modern equipment, training and digital oversight, Indonesia is building a system that is not only larger, but stronger, more reliable and closer to the people it serves.



4.4 Digitalizing and Decarbonizing Infrastructure through Venture Capital

Sustainable development depends on infrastructure that is cleaner, smarter and easier to operate. Power systems must integrate more distributed generation and electric mobility. Cities need to enhance public services while managing costs and safety, and manufacturers must adapt to shorter product cycles and more flexible supply chains. Technology-enabled solutions make existing assets perform better and new investments more viable. Data improve visibility of operations and emerging faults, automation boosts productivity and safety in demanding environments, and advanced materials extend asset life or enable applications that were previously impractical. Many of these innovations come from young companies that require specialist capital and hands-on support to move from pilots to proven, scalable products. “In infrastructure, the gap is rarely the technology alone. It is the pathway from prototype to repeatable deployment, including certifications, integration with existing systems and a credible operating track record,” added Wesley Byeongwan Kim, AIIB Senior Investment Officer and Project Team Leader. “That is where specialist venture capital, paired with hands-on support, can make a real difference.”

AIIB participates as a limited partner in NIO Capital’s Eve ONE Fund II. The fund’s total committed capital is USD380 million and it

Project name	NIO Capital Eve ONE Fund II
Project number	000548
Member	China
Approval date	Jan. 20, 2022
Sector	Multisector
Financing type	Nonsovereign
AIIB’s commitment	USD50 million
Total project cost	Target upper limit at approval: USD400 million Actual total commitment: USD380 million

has made 22 investments. Its strategy targets early- and growth-stage companies that drive digitalization and decarbonization of infrastructure sectors. The fund focuses on companies in China, overseas companies developing business in China, and Chinese companies participating in global markets and supply chains. AIIB has committed USD50 million, which includes a USD10 million co-investment sleeve to follow selected opportunities.

The fund has invested in companies whose technologies deliver practical, system-level changes that improve how infrastructure is planned, built and operated across energy, transport, urban, manufacturing and digital infrastructure sectors, including the following:

Energy

- **AlphaESS** powers distributed energy storage by pairing modular batteries with an energy management system that plans when to charge and discharge. Customers benefit from higher solar self-consumption and keeping essential loads running during outages, while aggregated fleets can shave peaks and support renewable integration. The result is steadier site operations and a more flexible distribution system.
- **Ambilight** provides electrochromic smart glass – glazing that tints on command to reduce heat and glare. In vehicles and buildings this makes cabins and rooms more comfortable and can lower heating, ventilation and air-conditioning loads, thereby reducing energy demand. Lighter components in vehicles also help manufacturers manage weight and energy use.
- **Nanopore** provides composite current collectors for lithium-ion batteries, which improve a key layer inside batteries so cells run cooler, last longer and weigh less without losing electrical performance. It does this by replacing the usual metal foil that carries current with a thin polymer-metal laminate that maintains conductivity while reducing weight and improving thermal stability. This makes battery cells safer and last longer, improving the reliability of EVs and stationary energy storage.

Transport and Urban Services

- **YKC** provides software that connects many brands of EV chargers into one platform, enabling EV charge point operators to remotely operate and manage their charging hardware, while getting easy access to charging orders from different platforms. YKC's solution also enables aggregated power procurement, supply chain finance and carbon credit trading among charge point operators. Smart scheduling of energy procurement and charging helps shift load to lower cost periods, improving uptime for drivers and making sites cheaper to run. By the end of 2025, YKC had connected more than 700,000 chargers – around 15% of all chargers in China – and estimated that its network helped avoid 22 million metric tons of CO₂ emissions through EV charging compared with fossil-fuel vehicles.
- **Newrizon** develops smart electric light-duty trucks whose battery packs can be swapped in minutes. The trucks are equipped with sensors and a software platform that allows for remote monitoring of the truck's condition. This enables commercial fleet operators to maximize their trucks' time on the road. Early adopters of this technology include fleet operators in the Middle East.

YKC's unified EV charging management platform connects charge point operators across hardware brands, enabling smart load scheduling and lower-cost energy procurement.



- **YCZX (Yunchuang Zhixing)** develops autonomous street-sweeping pure EVs, coordinated by a digital platform that plans routes, monitors vehicles and enables off-peak shifts. This enables cities to extend coverage and consistency while reducing worker exposure to traffic and pollution, while providing urban sanitation managers with clearer, data-driven oversight of fleets.

- **Standard Robots** develops autonomous mobile robots that move materials safely through busy factories and coordinate in large fleets to keep production lines supplied around the clock. This reduces forklift accidents, keeps workflows steady and raises overall equipment efficiency, leading to safer workplaces and more predictable output. The company's robots are already in use with major clients in digital infrastructure, and photovoltaic, lithium battery and pharmaceutical manufacturing.

Manufacturing

- **WeNext** enables on-demand 3D printing and advanced parts manufacturing by organizing and scheduling third-party manufacturing production capacity through their AI-enabled platform. This reduces information asymmetry in the traditional manufacturing industry and enhances supply chain efficiency, providing customers with on-demand access to parts production. Design files are uploaded, automatically checked for feasibility and sent to qualified partners for manufacturing. This speeds up prototyping and spare-part replacement, helping keep equipment in service, reducing the need for large inventories, and giving contractors and operators more certainty on project delivery.

Digital

- **Jaguar Microsystems** develops programmable network cards that take over data transfer and security tasks from central processors in data centers. By freeing up processing power, these cards reduce delays and improve security, allowing cloud and AI services to run more efficiently and deliver higher performance per unit of energy.

700,000+

EV chargers connected (YKC)
~15% of China's total



22 million

metric tons CO₂
avoided (YKC)



YCZX's cleaning robots use sensors, AI and navigation systems to help cities maintain cleaner streets and public spaces more consistently and efficiently.





Ambilight's electrochromic smart glass windows dynamically regulate light and heat transmission, improving indoor comfort and supporting more energy-efficient building operations.

Given the fund's strong financial performance and a pipeline of highly relevant, impactful companies, AIB recently committed an additional USD10 million to NIO Capital's Eve ONE Fund III through the VC Program. The third fund has a target of USD300 million in total commitments and follows the same investment thesis as Eve ONE Fund II. "The follow-on commitment to Eve ONE Fund III is about continuity of approach. It allows AIB to stay engaged with a manager focused on infrastructure-relevant digitalization and decarbonization, and to keep exposure to new companies that fit the same investment thesis as the market evolves," explained Kim.

Across these companies, the benefits align with development priorities. Infrastructure access improves when charging networks are reliable, sanitation coverage is expanded, and spare parts arrive on time. Resilience improves when buildings and depots can store energy and when operations can continue safely with automation. Emissions fall when solar is installed on roofs that previously could not host it, when charging is scheduled against clean energy supply, and when data center operations deliver more compute per unit of energy.

For AIB, the value extends beyond the markets in which the fund's companies currently operate. The technologies and operating models demonstrated here can inform future investments and dialogue across Members. NIO Capital's impactful investments and know-how, combined with AIB's ecosystem, create channels to identify and scale solutions in other Member contexts. As the funds' portfolio companies grow, the pipeline of practical, high-impact tools will help AIB and its clients build infrastructure that is more reliable, efficient and low-carbon across its regions.



4.5 Providing Reliable, Clean Power through Distributed Renewable Energy

The state of Maharashtra is the largest contributor to India's GDP and a key driver of national agricultural output. Yet the energy that powers its irrigation systems has long been a source of strain. Farmers depend on subsidized electricity to pump groundwater, but agricultural feeders – dedicated distribution lines that deliver power to rural irrigation networks – often receive electricity only at night, when demand from other consumers is low. Thermal sources, mainly coal, have historically accounted for a large share of Maharashtra's power mix, and night-time agricultural supply is met almost entirely from these plants. Daytime capacity, in contrast, is reserved for commercial and industrial users who pay higher tariffs.

This pattern leaves farmers with unreliable and inconvenient supply windows, while the state utility, Maharashtra State Electricity Distribution Company Limited (MSEDCL), struggles to recover costs from low-paying agricultural consumers. The resulting financial losses limit its ability to maintain and modernize the grid, affecting the service for households and businesses alike. "If the distribution company is forced to operate with persistent losses, everyone pays the price through slower upgrades and weaker service," explained Pratyush Mishra, AIB Senior Investment Officer and Project Team Leader. "That is why this program is designed to improve agricultural supply and improve the utility's finances at the same time. You do not get a modern grid if the core economics do not work."

Maharashtra Climate Resilient Distributed Renewable Energy Access Program	
Project name	
Project number	000880
Member	India
Approval date	Sept. 25, 2025
Sector	Energy
Financing type	Sovereign
AIB's commitment	USD1,100 million
Total project cost	USD1,835 million

Climate change adds to the pressure. Rainfall has become less predictable, extreme temperatures more frequent, and irrigation more essential. To sustain agricultural productivity, Maharashtra needs energy systems that are both cleaner and more dependable.

The Government of Maharashtra has therefore launched a two-track program: to promote off-grid solar-powered water pumps that give farmers reliable daytime power, and to upgrade the distribution grid so it can accommodate the solarization of agricultural feeders. These complementary measures are designed to reduce reliance on fossil fuels, ease the subsidy burden on other consumers and improve the sector's financial sustainability. "Solar pumps alone do not solve the whole problem, and grid upgrades alone do not solve it either. The strength of Maharashtra's

approach is that it treats this as a system change. It combines reliable daytime irrigation for farmers with the network investments needed to manage feeder solarization safely and at scale,” said Mishra.

AiIB is supporting this effort through a USD1.1-billion sovereign-backed results-based program, within a total project cost of USD1.8 billion. The program is aligned with India’s climate commitments and AiIB’s climate finance mandate, with 100% of AiIB’s financing classified as climate finance. Expected climate co-benefits, including reduced greenhouse gas emissions and lower reliance on fossil fuels, highlight that

technology-enabled infrastructure can play a critical role in advancing climate mitigation and resilience objectives, underscoring its importance in addressing global climate challenges.

Disbursements are tied to clearly defined results – such as the number of solar pumps installed, power distribution substations upgraded and operational reliability verified – ensuring that financing flows only when measurable outcomes are achieved. The program is implemented by MSEDCL, which is responsible for rolling out solar pumps, upgrading substations, and building the capacity to operate and maintain the infrastructure effectively.



500,000

solar pumps installed by 2030

320,000

metric tons CO₂ avoided annually

80

substations upgraded

45

new substations built



Maharashtra sets new Guinness World Record with 45,911 solar pump installations in one month.

For farmers, the most visible change will be reliable daytime irrigation through off-grid solar pumps. The pumps eliminate dependence on night-time thermal power and diesel generators, making irrigation cleaner, quieter and safer. Over 500,000 solar pumps are expected to be installed by 2030, cutting annual greenhouse gas emissions by an estimated 320,000 metric tons of carbon dioxide equivalent. The program also tracks access for women farmers, with a target that at least 10% of beneficiaries are women, recognizing their important role in agricultural production and the safety benefits of daytime irrigation. For the utility, the shift reduces the cost of serving agriculture and eases the fiscal pressure of subsidies. For the state, it marks a major step toward a more resilient and sustainable rural economy.

Technology Spotlight

Behind the scenes, the program relies on digital tools that make a large-scale roll-out both trackable and accountable. In addition to site inspections and vendor reports, each solar pump is geo-tagged to verify its installation location, while data from a remote monitoring system feed into a centralized management information system that consolidates installation and performance records. When the independent verification agent checks progress against the disbursement targets, it draws directly on the management information system to confirm that installations are in place and functioning as intended. “The digital technology layer is doing important work here,” said Mishra.

“Geo-tagging and remote monitoring reduce the gaps you normally see between reported progress and what is happening in the field. It also gives the government and the utility a single source of truth to manage contractors, enforce standards and keep performance visible.”

The same monitoring tools also help improve day-to-day operations. By tracking energy generation and voltage and fault events across thousands of sites, the system allows operators to identify issues early, plan maintenance efficiently and ensure pumps remain available during critical irrigation periods. System-wide visibility enforces warranties and safety standards, while farmers experience fewer disruptions and more predictable water access.

The program also improves groundwater management – an often overlooked but vital part of agricultural resilience. The Groundwater Surveys and Development Agency is deploying IoT-based meters and digital piezometers that record groundwater extraction and aquifer levels in real time. The data feed into a decision support system that aggregates readings from across the state and presents them through a dashboard and monthly reports. This enables the government to identify areas of stress, adjust water allocations and enforce safeguards where overuse threatens long-term sustainability. Notably, by institutionalizing coordination between the planning, water and electricity departments through regular and structured dialogue, AIIIB is assisting in bringing important state institutions under one roof. This comprehensive, data-driven strategy assures that irrigation energy reforms align with Maharashtra's sustainable water use and long-term agricultural resilience.

These technologies are not side pilots but integral to the program's design. They make the results-based structure work by generating credible, machine-readable evidence of progress. They also shift operations from reactive to proactive – anticipating problems rather than responding to them – and basing decisions on data instead of estimates. Each solar pump, sensor and dashboard contributes to a larger digital fabric that strengthens governance, accountability and resilience.

The benefits reach across levels. Farmers gain reliable daytime irrigation that stabilizes yields and reduces reliance on diesel. The distribution company lowers financial losses and prepares for a future where daytime solar power becomes the norm. State agencies gain the means to plan sustainable groundwater use. And AIIIB, through this results-based program, supports a model that links renewable energy expansion with data-enabled governance, showing how digital systems can multiply the impact of physical investments.

By 2030, when the targeted 500,000 pumps are in place and 80 upgraded and 45 new substations across the state are supporting feeder-level solarization, Maharashtra's agriculture could look markedly different: fields irrigated by sunlight rather than fossil fuels, aquifers monitored in real time and utilities on a stronger financial footing. The project demonstrates how technology-enabled infrastructure can bridge the gap between clean-energy goals and everyday needs – powering irrigation when it matters most and strengthening the resilience of both farmers and the systems that serve them.

A. EXAMPLES OF PROJECTS THAT ALIGN WITH TECHNOLOGY-ENABLED INFRASTRUCTURE

The following examples demonstrate the practical application of the criteria set forth in this publication in assessing whether a project or its technology qualifies as technology-enabled infrastructure (TEI). Common to these examples is the intentional integration of technologies that enhance infrastructure performance, efficiency, resilience, sustainability or service outcomes beyond what is achievable through conventional approaches.

Projects that rely primarily on established technologies that are already widely deployed and standard in the market do not qualify as TEI. Similarly, digital infrastructure projects, such as broadband network expansion or telecommunications upgrades, do not automatically qualify as TEI unless they incorporate innovative technologies or applications that go beyond standard network deployment and demonstrably enable enhanced infrastructure capabilities.

Examples of Technology-enabled Infrastructure:

- ✓ **Advanced Solar Panel Technology.** A solar power plant that employs advanced solar technologies such as bifacial panels, single-axis tracking systems and robotic panel cleaning would be aligned with TEI. The use of these technologies in a context where conventional fixed-tilt, monofacial panels remain the norm would significantly enhance the plant's capacity factor and operational efficiency.
- ✓ **Climate Technology Fund.** An equity fund investing in companies that develop infrastructure technologies that support climate mitigation, adaptation and resilience would be aligned with TEI. Eligible investments may include firms offering AI-driven climate risk analytics for physical assets, remote sensing platforms for infrastructure monitoring, or carbon capture and storage solutions.
- ✓ **Road Rehabilitation and Maintenance using Satellite Data and AI.** A road rehabilitation and maintenance project that leverages advanced technologies such as satellite imagery and AI, into its road asset management system to better assess pavement condition and identify climate-related risks such as flooding or landslides. This approach would be particularly innovative in contexts where road maintenance planning has traditionally relied on manual visual inspections. The adoption of these technologies would improve maintenance prioritization, extend the lifespan of road assets, and strengthen the resilience of the road network, aligning well with TEI objectives.
- ✓ **Health Services with Integrated Health Technologies.** The construction or upgrading of a hospital would qualify as TEI if it incorporates advanced technologies beyond standard hospital construction and is clearly designed to improve facility performance and patient outcomes. Such technologies may include integrated hospital information systems connecting patient records, diagnostics and pharmacy functions; IoT-enabled equipment for real-time patient monitoring; and building management systems that optimize energy use and indoor air quality.

B. AIIB TECHNOLOGY-ENABLED INFRASTRUCTURE PROJECTS, 2016–2025

Energy

#	About the Project	Member	Approval Year	Financing Type
1	SUSI Asia Energy Transition Fund To support energy transition in developing Asia.	Multicountry	2019	Nonsovereign
2	Oman Ibri II 500MW Solar PV IPP To meet increasing domestic demand and reduce carbon dioxide (CO ₂) emissions and dependency on hydrocarbon resources.	Oman	2020	Nonsovereign
3	Southern Chattogram and Kaliakoir Transmission Infrastructure Development Project To improve the reliability and capacity of power transmission network in Southern Chattogram and Kaliakoir region of Bangladesh.	Bangladesh	2024	Sovereign
4	Assam Distribution System Enhancement To improve the reliability and the security of power supply by strengthening the electricity distribution network.	India	2022	Sovereign
5	Maldives Solar Power Development and Energy Storage Solution To increase generation capacity from renewable energy sources and to facilitate their integration of renewable energy through battery energy storage solutions. It will also reduce the dependence on fossil fuels.	Maldives	2021	Sovereign
6	West Bengal Electricity Distribution Grid Modernization Project To improve the operational efficiency and reliability of electricity supply in selected areas of West Bengal.	India	2022	Sovereign
7	Osmangazi Electricity Distribution Network Modernization and Expansion Project To support the upgrade, modernization and expansion of the medium- and low-voltage electricity distribution network of the Osmangazi region.	Türkiye	2021	Nonsovereign
8	ACWA Power Sirdarya 1,500MW CCGT Power Project To increase the availability of high-efficiency gas power generation capacity in Uzbekistan.	Uzbekistan	2021	Nonsovereign
9	Chongho Bridge Green Facility To increase penetration of rooftop solar power generation in rural China and to support rural revitalization.	China	2023	Nonsovereign
10	Masdar 897MW Solar PV Portfolio (Samarkand, Jizzakh and Sherabad Solar PV Plants) To support Uzbekistan's energy transition through the expansion of solar photovoltaic (PV) installed capacity.	Uzbekistan	2023	Nonsovereign
11	Uludag Electricity Distribution Network Upgrade and Modernization Project To support the upgrade, modernization and expansion of the medium- and low-voltage electricity distribution network of the Uludag region.	Türkiye	2024	Nonsovereign

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Table continued

#	About the Project	Member	Approval Year	Financing Type
12	GULF Renewable Power Project To promote clean energy generation in Thailand through the development of a portfolio of solar photovoltaic (PV) power plants and the installation of battery energy storage systems (BESS).	Thailand	2024	Nonsovereign
13	Enerjisa Enerji Sustainability Linked Corporate Loan for Network Modernization, Expansion and Reconstruction To upgrade and expand Türkiye's regional electricity distribution capacity while reconstructing its earthquake-affected infrastructure, controlling its electricity losses, and promoting gender balance in the sector.	Türkiye	2025	Nonsovereign
14	Assam Intra State Transmission System Enhancement Project Phase II To improve the reliability, capacity and security of the power transmission network in the state of Assam.	India	2025	Sovereign
15	CEEC Uzbekistan BESS Green Loan To enhance Uzbekistan's grid stability and reliability essential for achieving its renewable energy transition by supporting CEEC's expansion of energy storage capacity in the region.	Uzbekistan	2025	Nonsovereign
16	Maharashtra Climate Resilient Distributed Renewable Energy Access Program To promote distributed renewable energy in Maharashtra by providing farmers with reliable daytime power through off-grid solar water pumps and to enhance the climate resilience of the existing electricity distribution network through investments that support preparation for grid solarization.	India	2025	Sovereign
17	Nukus II 200MW Wind and BESS Project To increase the renewable energy generation through the construction of a 200MW wind power plant and 100MW/100MWh Battery Energy Storage System in Uzbekistan.	Uzbekistan	2025	Nonsovereign
18	ReNew Peak Power Project To achieve reliable peak power supply using renewable energy sources through the development of a hybrid solar-wind power project and integrating with a battery energy storage system.	India	2025	Nonsovereign
19	Bash 2 - 300MW Wind Power Plant To support the expansion of renewable energy in Uzbekistan through the addition of 300MW of wind power capacity to the national grid.	Uzbekistan	2025	Nonsovereign

Transport

#	About the Project	Member	Approval Year	Financing Type
20	Chennai Metro Corridor 4 Project To provide increased capacity and efficiency of east-west connectivity by expanding the Chennai metro system.	India	2021	Sovereign
21	Mumbai Urban Transport Project 3A - Station Improvement To provide passengers with improved quality of service at selected stations of Mumbai Suburban Rail network in an inclusive, safe and environmentally sustainable manner.	India	2023	Sovereign
22	Guangxi Chongzuo Border Connectivity Improvement Project To improve the cross border connectivity around Shuolong port and expand economic and trade activities between China and Viet Nam.	China	2021	Sovereign
23	Mumbai Metro Line 5 To increase transport capacity and provide a green, fast and accessible metro system for passengers.	India	2024	Sovereign
24	Chennai Metro Balance Corridor 5 Project To increase transport capacity and improve northwest-south connectivity in the Chennai Metropolitan Area by expanding the Chennai metro system.	India	2023	Sovereign
25	Haryana Orbital Rail Corridor Part A Project To contribute to improving rail connectivity in the National Capital Region and decongesting the rail corridor in Delhi.	India	2022	Sovereign
26	China Zhengzhou International Logistics Hub Expansion To facilitate cross-border trade transported by the containerized CR Express trains between Zhengzhou China and Europe, and to support the commercialization of a rail logistics service provider.	China	2022	Sovereign
27	Liaoning Green Smart Public Transport Demonstration Project To improve the quality and efficiency of public transport service and urban environment by replacing conventional fossil-fueled buses with battery electric buses and applying digital technology to public transport management systems in five small and medium-sized cities of Liaoning Province.	China	2021	Sovereign
28	Assam Secondary Road Network Improvement Project To improve the connectivity, safety and climate resilience of the secondary road network in project districts of Assam and enhance the institutional capacity of the state's Public Works Roads Department.	India	2022	Sovereign
29	North Marmara Highway Nakkaş-Başakşehir BOT Road Project To improve Istanbul's east-west connectivity, travel efficiency and road safety by expanding the North Marmara Highway corridor.	Türkiye	2024	Nonsovereign
30	GreenCell Electric Bus Financing Project The Project Objective is to promote scalable and replicable financing for the demonstration, deployment and transfer of low-carbon e-bus vehicles with potential long-term greenhouse gas emissions savings.	India	2022	Nonsovereign
31	GLP China Logistics Fund III Finance the development of sustainable and integrated logistics systems in China to enhance connectivity, improve efficiency and support sustainable growth.	China	2022	Nonsovereign

continued on next page

Table continued

#	About the Project	Member	Approval Year	Financing Type
32	National Road 13 South Extension Improvement and Maintenance Project To enhance connectivity by improving the road condition, safety and climate resilience of critical sections of the National Road 13.	Lao PDR	2024	Sovereign
33	Eastern Türkiye Middle Corridor Railway Development Project To improve the rail connectivity of eastern Türkiye along the Divriği-Kars-Georgia border railway section of the Trans-Caspian Middle Corridor.	Türkiye	2024	Sovereign
34	Yunnan Kunming Changshui Airport Expansion and Green Development Project To support the green development of an international hub airport in the southwest of China and improve air connectivity to Southeast and South Asia regions.	China	2023	Sovereign
35	Manipur Urban Road, Drainage and Asset Management Improvement Project To improve the connectivity, safety, and resilience of the urban and sub-urban road and drainage networks in Greater Imphal, and to enhance the technical capacity and budgetary sustainability of Manipur's Public Works Department.	India	2024	Sovereign
36	Bataan-Cavite Interlink Bridge Project and Tranche 1 To contribute to efficiency improvements of road travel in Bataan, Cavite and the National Capital Region.	Philippines	2024	Sovereign
37	Facility for Accelerating Studies for Infrastructure To develop a robust transportation infrastructure investment program aligned with the Philippines' sustainable development goals.	Philippines	2024	Sovereign
38	Hubei Global Air Cargo Logistics Project To facilitate cross-border trade by increasing air freight processing capacity and efficiency and to develop high-value air cargo business by streamlining customs procedures in Hubei, China.	China	2024	Sovereign
39	MEAL E-Mobility (an investment through Bil India EV LLP) To promote adoption and acceleration of e-mobility by developing a market for four-wheeler passenger EVs in India.	India	2024	Nonsovereign
40	Karakalpakstan and Khorezm Local Roads Network Reconstruction Project To enhance climate resilient and inclusive road transport connectivity to markets and services in the Republic of Karakalpakstan and the Khorezm Region of Uzbekistan.	Uzbekistan	2025	Sovereign
41	Electric Bus Financing Project To support a shift to electric mobility, to reduce carbon emissions and improve air quality in selected states of India.	India	2024	Nonsovereign
42	Tbilisi Metro Modernization Project To enhance the efficiency, reliability, safety and sustainability of the Tbilisi Metro system through the procurement of new rolling stock.	Georgia	2024	Sovereign
43	Transport Resilience and Connectivity Enhancement Project (Jezkazgan-Karagandy section of Trans-Caspian International Transport Route (Middle Corridor)) To strengthen the resilience of transport systems in Kazakhstan through improving climate-adapted road connectivity along the Jezkazgan-Karagandy section of the Middle Corridor.	Kazakhstan	2024	Sovereign

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#	About the Project	Member	Approval Year	Financing Type
44	Grand Nokoué Sustainable Urban Mobility Project To enhance urban mobility, transport safety, and access to inclusive and sustainable transport services along selected corridors in Grand Nokoué.	Benin	2025	Sovereign
45	India – Electric Mobility Financing Project To support a shift to electric mobility, to reduce carbon emissions and improve air quality in Maharashtra.	India	2025	Nonsovereign
46	TCDD Railway Maintenance Modernization Project To enhance efficiency, safety, reliability and sustainability of rail infrastructure maintenance across Türkiye.	Türkiye	2025	Sovereign
47	Ping An Leasing E-Mobility Financing Project – Loan To accelerate the decarbonization of China’s road transport sector by supporting the faster adoption of EVs and enhancing the associated infrastructure.	China	2025	Nonsovereign
48	Ping An Leasing E-Mobility Financing Project – Bond To accelerate the decarbonization of China’s road transport sector by supporting the faster adoption of EVs and enhancing the associated infrastructure.	China	2025	Nonsovereign
49	Antalya-Alanya Motorway To improve connectivity and road safety between Antalya and Alanya provinces through the construction of an alternative motorway to the current state highway.	Türkiye	2025	Nonsovereign

Water

#	About the Project	Member	Approval Year	Financing Type
50	West Bengal Major Irrigation and Flood Management To optimize the conjunctive use of surface and ground water for agriculture and reduce flooding in the Project area.	India	2019	Sovereign
51	Saudi Water Authority (SWA) Desalination Rebuild and Upgrades To improve energy efficiency and to reduce greenhouse gas emissions through rebuilding of 'end of life' desalination plants with new technology for increasing water production capacity.	Saudi Arabia	2025	Nonsovereign
52	Bukhara Region Water Supply and Sewerage Project - Phase II To provide access to safe, reliable and affordable water and sanitation services in the Bukhara region.	Uzbekistan	2022	Sovereign
53	Rural water, Sanitation and Hygiene for Human Capital Development Project To improve access to "safely-managed" water supply and sanitation in selected areas of rural Bangladesh, and to strengthen sector institutional capacity for water and sanitation.	Bangladesh	2020	Sovereign
54	Second Dam Rehabilitation and Improvement Project To increase the safety of selected dams in participating states and to strengthen dam safety management in India.	India	2022	Sovereign
55	Climate Adaptive Irrigation and Sustainable Agriculture for Resilience Project (CAISAR) To support the Government of Cambodia to increase irrigation service efficiency, strengthen climate adaptive capacity against extreme weather, and improve productivity of smallholder farmers and vulnerable rural communities in four provinces.	Cambodia	2025	Sovereign
56	The Resilient Kerala Program To enhance Kerala's resilience against the impacts of climate change and natural disasters, including disease outbreaks and pandemics.	India	2021	Sovereign
57	Henan Flood Emergency Rehabilitation and Recovery Project To support the post-disaster rehabilitation and recovery in the municipalities of Zhengzhou, Xinxiang and Jiaozuo of Henan Province, and to strengthen the capacity of the three municipalities in integrated flood disaster risk management and flood emergency response.	China	2021	Sovereign
58	Integrated Water Resources Management To improve dry season irrigation water availability and to cope with wet season flooding in Pursat and Sangker River Basins through an integrated water resource management approach.	Cambodia	2024	Sovereign
59	Water Supply and Sanitation Universal Access Program - 1 Project The Project Development Objective is to increase access to water supply and sanitation services and improve the service delivery capacity in selected areas of Kyrgyzstan.	Kyrgyzstan	2025	Sovereign

Digital Infrastructure

#	About the Project	Member	Approval Year	Financing Type
60	Indonesia Multifunctional Satellite PPP Project To improve connectivity to public service points in the least developed, frontier and outermost regions of Indonesia.	Indonesia	2020	Nonsovereign
61	Lightsmith Climate Resilience Partners To invest globally in products and services that focus on “climate resilience” and help address the effects of climate change.	Multicountry	2020	Nonsovereign
62	Legend Capital Healthcare Technology Fund To participate in healthcare technology investments, with a focus on digital hospitals in China.	China	2020	Nonsovereign
63	Sinovation Disrupt Fund To foster the adoption of artificial intelligence (AI) at investee companies across sectors in China and develop AI-use cases for the infrastructure sector.	China	2021	Nonsovereign
64	Broadband Company Tranche 2 To support the extension of Oman Broadband Company’s existing financing.	Oman	2021	Nonsovereign

Health Infrastructure

#	About the Project	Member	Approval Year	Financing Type
65	Quadria Capital Fund III To foster quality health infrastructure in South and Southeast Asia.	Multicountry	2023	Nonsovereign
66	Cross-border Livestock Health and Value-chain Infrastructure Improvement Project To strengthen health safety and promote cross-border livestock trading among countries in the Greater Mekong Subregion. The project will strengthen human health security and promote cross-border livestock and livestock product trade in Cambodia, Lao PDR, Viet Nam, Thailand and China.	Cambodia	2023	Sovereign
67	Kokshetau PPP Hospital Project To enhance access to quality medical care infrastructure and services in Kokshetau in Kazakhstan.	Kazakhstan	2024	Nonsovereign
68	Modernization of the Health System To strengthen Indonesia's primary healthcare, referral system and laboratory system through a sufficient distribution of medical equipment across the country.	Indonesia	2023	Sovereign
69	RSAB Harapan Kita Building Construction Project and Area Arrangement of 3 Berlian Hospitals Project To improve the accessibility and quality of healthcare services at three national referral hospitals in Jakarta, with a specific focus on maternal and child health, cardiovascular diseases and cancer care.	Indonesia	2025	Sovereign

Multi-sector

#	About the Project	Member	Approval Year	Financing Type
70	Tata Cleantech Sustainable Infrastructure Facility To increase the supply of sustainable infrastructure projects in India by USD100 million.	India	2019	Nonsovereign
71	ISQ Growth Markets Infrastructure Fund To mobilize private capital for sustainable infrastructure development and enhance cross-border connectivity in growth countries in Asia (60%) and Latin America (40%).	Multicountry	2021	Nonsovereign
72	Rakiza Fund I To promote the development of new infrastructure and improve the efficiency of existing infrastructure assets in Oman and Saudi Arabia.	Multicountry	2022	Nonsovereign
73	STIC Asia Infrastructure Innovation Fund To foster technology-enabled infrastructure innovation in developing Asian economies through mobilizing private capital.	Multicountry	2021	Nonsovereign
74	TSKB Sustainable Energy and Infrastructure On-lending Facility, Phase 2 To contribute to Türkiye's climate mitigation and adaptation goals in line with the Paris Climate Agreement.	Türkiye	2022	Sovereign
75	NIO Capital Eve One Fund II To facilitate the use of technology and support digitalization and decarbonization of transport, energy, logistics and associated sectors.	China	2022	Nonsovereign
76	Everbright Infrastructure Investment Fund II To enable investments in green infrastructure in emerging Asia, and to pioneer the innovative sustainability-linked incentive scheme to promote climate finance, gender diversity and ESG governance in the private equity fund industry.	Multicountry	2022	Nonsovereign
77	Catalyst MENA Climate Fund II ("CMCF2") The project aims to promote renewable energy in AIIB Members by supporting/developing projects and platforms related to climate mitigation (grid connected RE generation, distributed RE generation, energy efficiency, RE-driven alternative fuels, projects that enable greater RE penetration, such as energy storage, grid reinforcement) and climate adaptation (water treatment/desalination).	Multicountry	2023	Nonsovereign
78	AIIB Venture Capital ("VC") Investment Program for Green and Technology-Enabled Infrastructure (the "VC Program") To promote innovation and its adoption for green and technology-enabled infrastructure across AIIB Members by providing scarce capital to early-stage companies through small-scale venture capital funds.	Multicountry	2022	Nonsovereign
79	LOK Capital Fund 4 To contribute to green and technology-enabled infrastructure development and related end-use services mainly in the Indian market.	India	2023	Nonsovereign
80	Southeast Asia Women's Economic Empowerment Fund To improve gender equality and diversity and contribute to sustainable development in sectors that particularly affect women and girls in Southeast Asia.	Multicountry	2022	Nonsovereign
81	Egypt Sustainable Transport and Digital Infrastructure Guarantee To support Egypt's development of sustainable infrastructure in the areas of green transport and digital infrastructure by mobilizing private capital through a partial debt guarantee.	Egypt	2023	Sovereign

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#	About the Project	Member	Approval Year	Financing Type
82	Seraya SEA Energy Transition and DI Fund To support energy transition and develop green digital infrastructure in Southeast Asia.	Multicountry	2023	Nonsovereign
83	Actis Asia Climate Transition Fund To promote the reduction of greenhouse-gas emissions as a path to net zero by investing in renewable energy infrastructure, energy solutions and sustainable transportation in Asia, with a leaning towards emerging Asia.	Multicountry	2024	Nonsovereign
84	NIIF PMF II To mobilize private capital to support India's environmental, social and economic priorities.	India	2024	Nonsovereign
85	Morocco Climate Operation - Support to the Nationally Determined Contribution Program To support the implementation of Morocco's Nationally Determined Contribution by scaling actions that deliver dual benefits for climate mitigation and resilience of targeted vulnerable ecosystems, while strengthening Morocco's institutional coordination capacities.	Morocco	2025	Sovereign
86	TSKB Sustainable Energy and Infrastructure Facility, Phase 3 To contribute to Türkiye's climate mitigation and adaptation goals in line with the Paris Climate Agreement by financing private sector investments in renewable energy, energy efficiency, climate adaptation, climate-related industries, digital infrastructure and strengthening private capital mobilization.	Türkiye	2025	Sovereign
87	TKYB Climate and Digital Transition On-Lending Facility To contribute to Türkiye's climate mitigation and adaptation goals in line with the Paris Climate Agreement by financing private sector investments in renewable energy, energy efficiency, climate adaptation, digital infrastructure and strengthening private capital mobilization.	Türkiye	2025	Sovereign
88	Vakifbank Climate Transition and Reconstruction Facility To support Türkiye's resilient recovery and climate transition through financing for green and inclusive post-earthquake housing, educational and healthcare facilities, as well as climate-aligned small and medium enterprise investments, delivered via a sovereign-backed facility implemented by VakifBank.	Türkiye	2025	Sovereign
89	Developing a Sustainable Finance Market for Micro -, Small -, or Medium Enterprises (MSMEs) To support the green and sustainable transition and climate resilience of MSMEs by mobilizing private capital for sustainable investments and strengthening financial intermediaries to facilitate their low-carbon transition.	Kyrgyzstan	2025	Sovereign
90	Pakistan Sustainable and Climate Resilient Infrastructure Guarantee To support Pakistan's development of sustainable and climate resilient infrastructures in the sectors of water, health and energy by mobilizing private capital through a partial debt guarantee.	Pakistan	2025	Sovereign
91	Recovery and Trade-Facilitation Project in Guaíba, Rio Grande do Sul To restore and upgrade trade-enabling infrastructure affected by the floods in the municipality of Guaíba, Rio Grande do Sul, to improve connectivity and enhance climate and flood resilience.	Brazil	2025	Sovereign

Education Infrastructure

#	About the Project	Member	Approval Year	Financing Type
92	<p>Gujarat Education Infrastructure and Technology Modernization Program</p> <p>To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting accelerated learning by strengthening decentralized management for improved education outcomes in Gujarat.</p>	India	2021	Sovereign
93	<p>Yantai Higher Vocational School Project</p> <p>To supply job-ready professionals by increasing the capacity of employment-oriented education infrastructure.</p>	China	2024	Nonsovereign



Technology is changing how infrastructure is planned, built, operated and maintained. When applied effectively, it can improve service reliability, strengthen resilience, raise efficiency and help infrastructure systems deliver better outcomes.

This report presents AIIB's first dedicated review of technology-enabled infrastructure. It explains how AIIB defines and applies this thematic priority, analyzes the Bank's portfolio and highlights selected project examples that show how technology can improve infrastructure performance and create lasting development impact.



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