



RESEARCH GROUP

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Canadian Companies and Investors Supporting

Next Generation Arizona Infrastructure

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CANADA'S SUPPORT OF ARIZONA'S INFRASTRUCTURE

STRONGER PARTNERS. SHARED PROSPERITY. A BETTER FUTURE.

<p>WATER</p> <p>Investing in water solutions for a secure and sustainable future.</p>	<p>POWER</p> <p>Supporting clean energy and reliable power for Arizona's growth.</p>	<p>COMMUNICATIONS</p> <p>Investing in broadband and advanced networks to connect communities.</p>	<p>AVIATION</p> <p>Supporting airports and aviation to keep people, goods, and businesses moving.</p>	<p>FINANCIAL INVESTMENTS & ACQUISITION SUPPORT</p> <p>Providing capital, expertise, and partnership to build, expand, and modernize infrastructure.</p>
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Arizona's infrastructure outlook from 2026 forward over the next 25 years is defined by a dual mandate: solving urgent short-term constraints while building long-term systems capable of sustaining rapid population growth, climate stress, the rapid expansion of AI data centers, and the massive semiconductor manufacturing industry now establishing itself in the state. The central challenge is alignment across institutions, capital markets, utilities, universities, and research systems—not just funding or project development engineering design capacity.

In the near term (2026–2030), Arizona must stabilize core water pressures tied to ongoing Upper Basin and Lower Basin negotiations within the Colorado River system. The Upper Basin states face supply and snowpack variability constraints, while Lower Basin states face immediate consumption and shortage pressures. These negotiations directly affect reservoir stability at Lake Mead and Lake Powell, creating uncertainty for cities,

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agriculture, semiconductor manufacturing, and long-term growth. Near-term responses include expanded water reuse and recycling, aquifer recharge, conservation enforcement, and incremental system upgrades.

A key driver of near-term water resilience is the Arizona Water Infrastructure Finance Authority (WIFA), which is advancing large-scale funding mechanisms for water augmentation, conservation, and system modernization projects across the state. WIFA is increasingly positioned as a financing bridge between federal support, municipal utilities, and private capital to accelerate desalination studies, groundwater protection, advanced recycling systems, and long-distance conveyance planning. These projects are critical to stabilizing supply while long-term Colorado River negotiations remain unresolved.

Energy demand is rising sharply due to population growth, extreme heat, semiconductor manufacturing, and the rapid expansion of AI data centers. These forces now function as a single high-load industrial demand cluster. Arizona's energy system is being managed through coordinated action by Arizona Public Service (APS), Salt River Project (SRP), and Tucson Electric Power (TEP), which are expanding capital expenditures for generation capacity, renewable integration, transmission upgrades, and grid modernization to support rapid industrial electrification.

Alongside utility expansion, Arizona is deploying behind-the-meter energy systems for semiconductor fabs, AI data centers, and advanced manufacturing campuses. These systems integrate on-site generation, battery storage, and dedicated substations to reduce pressure on APS, SRP, and TEP while ensuring continuous high-reliability power. This hybrid model is becoming essential as load growth increasingly outpaces traditional grid expansion timelines.

Large-scale transmission expansion remains a structural requirement. Pattern Energy is a North American renewable energy developer backed by institutional investors, including the Canada Pension Plan Investment Board through a broader infrastructure consortium. It is developing the SunZia Wind and Transmission Project, which delivers large-scale wind energy from New Mexico into Arizona and functions as a backbone system for regional energy security and industrial growth.

Canadian capital plays an expanding role in Arizona infrastructure across water, energy, and finance. Utilities such as EPCOR Utilities and Liberty Utilities are investing in water and wastewater system expansion. Arizona Water and Global Water Resources manage key municipal water systems in rapidly growing regions. TC Energy supports broader transmission and pipeline networks influencing regional energy stability. Financial institutions such as Royal Bank of Canada provide long-term infrastructure financing that enables multi-decade capital deployment.

A central coordinating platform in this ecosystem is the Canada Arizona Business Council (CABC), which connects Canadian institutional capital, utilities, and engineering firms with Arizona infrastructure priorities. The CABC functions as a cross-border alignment mechanism, helping synchronize planning, permitting, and financing across jurisdictions to accelerate large-scale infrastructure delivery.

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The CABC also facilitates engagement with Canadian institutional investors, including the Canada Pension Plan Investment Board and the Ontario Teachers' Pension Plan, directing long-term capital toward Arizona's water systems, energy infrastructure, semiconductor supply chains, and AI-driven industrial expansion.

Universities remain foundational to long-term resilience and innovation. Institutions such as Arizona State University and the University of Arizona provide research, workforce development, and applied innovation in water systems, energy technologies, AI, and semiconductor engineering. Over the next 25 years, they will function as anchor institutions linking innovation directly to infrastructure capacity.

A defining requirement for success is system-wide coordination. Universities generate talent and innovation, capital markets provide financing, utilities execute infrastructure, government ensures permitting stability, and industry—especially AI, semiconductor, logistics, and data center operators—creates sustained demand. Without alignment, infrastructure lags growth; with alignment, it becomes self-reinforcing and scalable.

Over the long term, water infrastructure will shift from expansion to optimization. Given continued stress on the Colorado River system, stability will depend on recycling, reuse, efficiency improvements, and regional coordination rather than new large-scale supply development. WIFA-backed projects will be central to this transition, financing advanced water reuse, conservation technology, and potential augmentation pathways that reduce long-term dependency on declining river allocations.

Energy infrastructure will evolve into a hybrid system combining large renewable transmission, distributed generation, storage, and firm low-carbon resources. Projects like SunZia will form the backbone of bulk supply, while APS, SRP, and TEP will increasingly operate integrated portfolios of renewable, gas, storage, and demand-response resources. The grid will function as a flexible, networked system rather than a centralized structure.

Arizona's aviation system is a critical economic backbone supporting tourism, aerospace, logistics, and advanced manufacturing exports. Phoenix Sky Harbor International Airport serves as a major national hub, while Phoenix-Mesa Gateway Airport and Tucson International Airport support cargo growth, aerospace activity, and regional connectivity. Aviation infrastructure is increasingly linked to semiconductor logistics, global supply chains, and high-value freight movement, requiring ongoing investment in terminals, runways, and cargo capacity.

Communications infrastructure is now a core dependency of Arizona's industrial economy. Expansion of fiber networks, hyperscale data center interconnection, and next-generation 5G and emerging 6G systems is essential to support AI workloads, semiconductor design, autonomous systems, and smart infrastructure. Communications systems are increasingly integrated with energy and industrial planning because data centers require both high-bandwidth connectivity and highly reliable, redundant power systems.

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Arizona is shifting from siloed infrastructure planning to fully integrated systems-based development. Water, energy, aviation, and communications are now interdependent, particularly due to AI data centers and semiconductor fabrication plants. A constraint in one system directly impacts the others, requiring coordinated planning across utilities (APS, SRP, TEP), water financing bodies such as WIFA, telecom networks, transportation systems, and capital investors.

Arizona's long-term success depends on maintaining alignment between short-term stabilization and long-term redesign. The combination of university-driven innovation, Canadian institutional capital coordinated in part through the Canada Arizona Business Council, utility expansion (APS, SRP, TEP), WIFA-backed water investment, and semiconductor and AI industrial growth creates a structural opportunity not just to keep pace with demand, but to redesign how water, energy, aviation, and digital infrastructure function together in a rapidly restructuring North American economy.

Arizona's ability to translate rapid growth into long-term economic stability will ultimately depend on disciplined, system-wide alignment—where infrastructure is planned, financed, and operated as an integrated platform rather than a collection of independent assets. Within that system, private water utilities, including EPCOR Utilities and others, play an important supporting role as long-term operators and partners to growing communities, helping deliver reliable water and wastewater services that enable development while promoting responsible resource use. By aligning investment with local and state priorities and advancing reuse, conservation, and system efficiency, these providers contribute to bridging near-term water challenges with longer-term sustainability goals. As Arizona navigates ongoing Colorado River uncertainty and unprecedented industrial expansion, success will depend not only on capital and technology, but on continued coordination among public utilities, private providers, policymakers, capital partners, and communities to ensure water, energy, and growth remain in balance over the next 25 years.