U.S. Water & Wastewater Treatment Infrastructure CAPEX Forecasts, 2025–2035

Released April 2025

Section 1 – Drivers & Trends

Section 2 – Market Forecasts

Related Data Dashboard

Summary

BACKGROUND

The U.S. municipal water and wastewater sector stands at a pivotal moment as utilities navigate a generational investment cycle. This cycle is shaped by changing compliance requirements, demographic shifts, and aging infrastructure. Against this backdrop, market participants face a complex landscape of challenges, including volatile input costs, delays in federal funding, and intensifying regulatory expectations—all while striving to maintain critical service delivery.

This 2025–2035 forecast for capital expenditures (CAPEX) focuses on the core infrastructure components of U.S. water and wastewater systems: treatment, pumping, lift stations, and storage assets. The analysis is based on a decade of market intelligence, utility capital budgets, policy tracking, and cost data from all 50 states.

Bluefield's methodology considers key factors shaping utility investments, such as delays in infrastructure funding, cost volatility stemming from tariffs and labor shortages, evolving regulations regarding per- and polyfluoroalkyl substances (PFAS) and resilience, changing demographics, and utilities' ability to deliver capital programs effectively.

Where are investments likely to flow?
What is driving market changes?
Which stakeholders are positioned to capitalize on opportunities in the coming decade?

report SCOPE

Backed by a transparent research methodology, this Insight Report provides **qualitative** and **quantitative analysis** to help companies understand the water & wastewater treatment infrastructure **market opportunities** in the U.S. over the next decade.

report HIGHLIGHTS

- Drivers and trends shaping investment and spending decisions
- Analysis by utility size, asset class, and capital planning trends
- Budget segments with highest planned capital investment
- Top opportunities by state: Largest markets, fastest-growing markets, highest spend per capita
- Market sizing and forecasts for the period 2025–2035 by:
  - Segment: Water vs. Wastewater
  - Project type
  - Key category: Equipment vs. Associated Services
  - Category: Engineering/Design, Construction, Equipment, Other
  - Asset type

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About

BUYER PROFILE

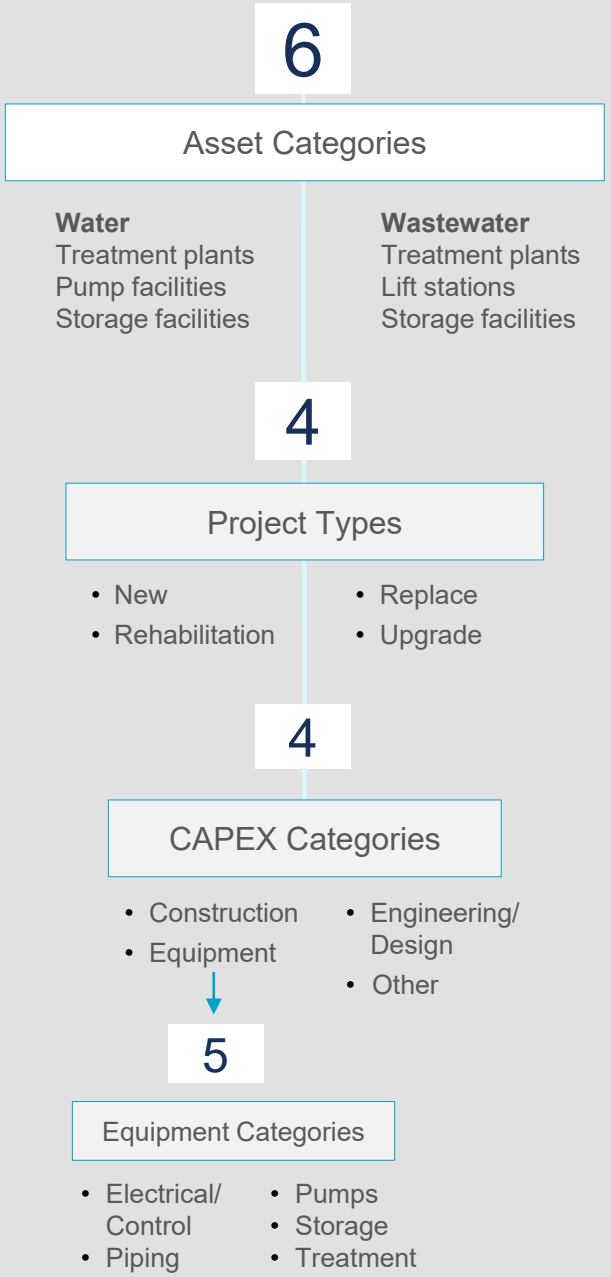
Who should buy this report?

- Engineering, procurement & construction (EPC) firms
- Water and wastewater utilities
- Financial and investment firms
- Hardware, equipment, and infrastructure providers
- Technology and solutions companies

Defining the Infrastructure Project Types

Bluefield's forecast for 2025–2035 includes enhanced project classifications that clarify capital allocation trends, highlighting a significant market shift toward investing in existing infrastructure and offering a clearer perspective on long-term growth opportunities.

Bluefield's market model evaluates the market size and growth of each state across six asset categories, four project types, four CAPEX categories, and five equipment categories.



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Insights

SAMPLE TAKEAWAYS

Total CAPEX of US$515 B driven by modernization needs.

From 2025 to 2035, U.S. municipal water and wastewater treatment infrastructure CAPEX is projected to reach US$515.4 billion—from US$37.2 billion to US$57.3 billion annually. This represents a compound annual growth rate (CAGR) of 4.4%, influenced by aging assets, regulatory compliance, and rising service demands. However, inflation and broader economic uncertainties temper this growth.

- **Upgrades & rehabilitation to capture 80% of total spend.** Nearly US$406.4 billion will be directed toward upgrades (US$259.0 billion) and rehabilitation (US$147.4 billion), while only US$19.7 billion will be allocated for new builds. Utilities are focusing on extending the lifecycle of existing assets, controlling costs, and reducing risks amid tightening budgets and long-term operations and maintenance (O&M) responsibilities.
- **Drinking water segment outpaces wastewater.** Drinking water utilities are forecast to invest US$214.0 billion (42.00% of total spend), growing at a CAGR of 4.72%. The need to address aging assets, ensure regulatory compliance, expand storage, and enhance climate resilience has increased the demand for treatment and system improvements.

- **Wastewater leads in absolute spend.** Wastewater infrastructure will account for US$301.4 billion (58.00% of total spend) and grow at a CAGR of 4.18%. Factors such as expanding centralized sewer systems, adopting advanced treatment technologies, and mitigating combined sewer overflows (CSO) are driving this growth.
- **Equipment spend is projected to reach US$228 billion, driven by treatment & controls.** Treatment systems and electrical/control technologies will comprise 60% of equipment CAPEX, reflecting the push for automation, energy efficiency, and remote monitoring to mitigate labor and reliability risks.
- **Mid-sized utilities represent the core opportunity.** Systems serving 25,000 to 100,000 people will drive US$143.2 billion in spend, outpacing the largest utilities (>1 million served) at just 8% of total CAPEX. These mid-tier utilities present strong targets for modular and scalable infrastructure solutions.

- **Potential delays in federal funding threaten pace of rollout.** Only US$6.3 billion (14%) of the US$43.6 billion in Infrastructure Investment and Jobs Act (IIJA) funds had reached project deployment by early 2025. This, in combination with federal freezes, executive orders, and newly announced tariffs, could derail the pace of project deliveries.

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Key Questions Addressed

- What is the U.S. addressable market?
- What key factors are influencing investments and spending decisions?
- What is the status of IIJA funding?
- Where are the regional and state pockets of opportunity?
- What are the fastest growing markets for treatment, storage, and pump infrastructure investment?
- How does the capital expenditures for drinking water and wastewater compare over the next ten years?
- What are the demographic shifts impacting water infrastructure?

Research Scope and Methodology

Bluefield's methodology for forecasting CAPEX accounts for historical trends, increases in installed assets, and specific project data to validate critical assumptions.

	Description	
Scope of Analysis	• Analysis of key drivers and opportunities for capital expenditure forecasts (2025–2035) across the U.S. water and wastewater treatment facility segment.	
Key Inputs	**Asset Base**	• Current, installed base of water and wastewater treatment plants, pump facilities, lift stations, and storage facilities. • Existing assets were segmented by region, state, and utility size • Growth in drinking water assets was calculated using five-year CAGRs (2019–2024) for each asset type, utility size, and state. • Wastewater asset growth rates were calculated as 82.3% of each state's corresponding drinking water growth rates for each utility size. Projections were constrained to a maximum 10.0% annual increase or a 2.0% decrease in total assets.
	Costs	• Price growth rates for the six asset types are based on four years of capital budgets • All values expressed in 2024 US$ unless otherwise noted
	Project Types	• New growth of asset base to serve new customers • Rehabilitation and replacement rates of existing assets • Upgrades to existing assets
	CAPEX Category and Equipment Forecast Outputs	• Expenditures for each asset type are categorized by CAPEX (Engineering / Design, Construction, Equipment, and Other) and equipment categories (Treatment, Piping, Pumps, Storage, and Electrical / Control)
Data Sources	• Utility capital budgets, Environmental Protection Agency Safe Drinking Water Assets, U.S. Census Bureau, U.S. Bureau of Labor Statistics, Federal Reserve Bank of Saint Louis	

Market Challenges and Opportunities

Water & wastewater utilities in the U.S. face a variety of long-term pressures that drive investment and spending decisions, compounding more immediate macroeconomic concerns.

Challenges

Aging Infrastructure
Aging utility assets are increasingly costly to operate and maintain, fueling OPEX and CAPEX growth

Water Contaminants
Contaminants of emerging concern (e.g., PFAS) and lead are top water-quality risks for utilities and ratepayers

Labor Shortages
High retirement rates, recruitment & retention, and workforce realignment are reshaping labor markets in water

Financial Pressures
Supply chain constraints coupled with record material prices have driven increases in key input costs across the sector

Climate & Environmental Risks
Weather events are growing in frequency and severity (e.g., drought, flooding), driving reactive and proactive responses

Fragmentation
Nearly 70,000 water & wastewater systems and utilities exist across the sector, each with varying investment needs

Opportunities

Infrastructure Funding
State and federal funding, such as IIJA and SRF, will play key in propelling utility capital investments

Regulatory Compliance
Harmful contaminants (e.g., PFAS), cybersecurity concerns, and water conservation goals shape decisions

Technology Adoption
Evolving technology landscape helps create data-driven solutions for key utility pain points, from labor to leakage

Utility Sector Synergies
Energy efficiency, reuse, biogas, and biosolids provide increased opportunities for innovation and efficiency

ESG & Optimization Goals
Net-zero targets and revenue optimization drive investment and spending across the sector

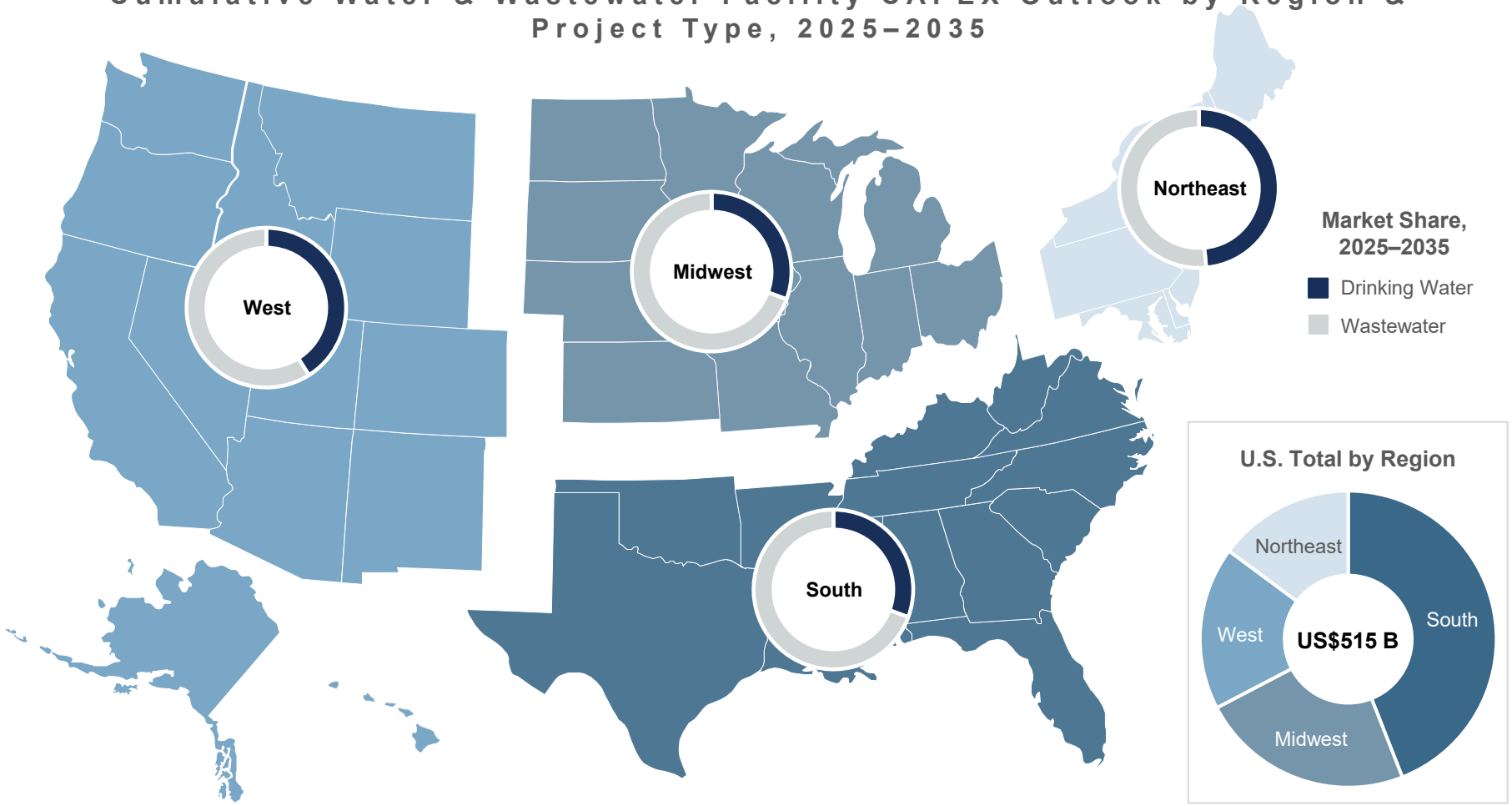
Market Entry / M&A
New players continue to emerge across water sector verticals, driving market growth and maturation

Source: Bluefield Research

Regional Hot Spots: Vertical Infrastructure Forecast by Region

The South is expected to see the largest share of cumulative facility infrastructure investments through 2035.

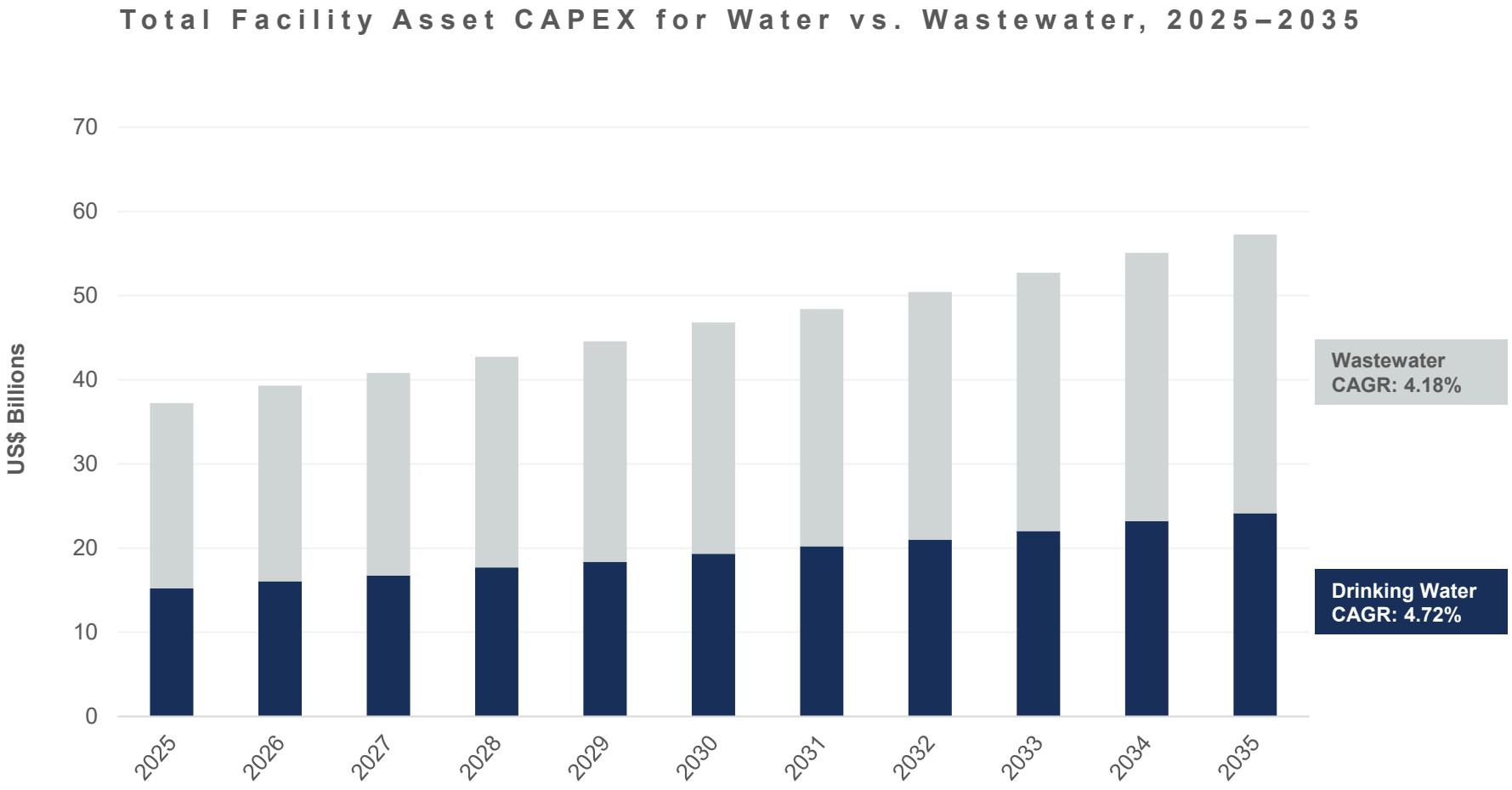
Cumulative Water & Wastewater Facility CAPEX Outlook by Region & Project Type, 2025–2035



Source: Bluefield Research

Forecast by Key Category: Equipment vs. Associated Services

Equipment and construction costs account for a large majority of total CAPEX, with most of the equipment spend allocated to treatment and electrical/control.

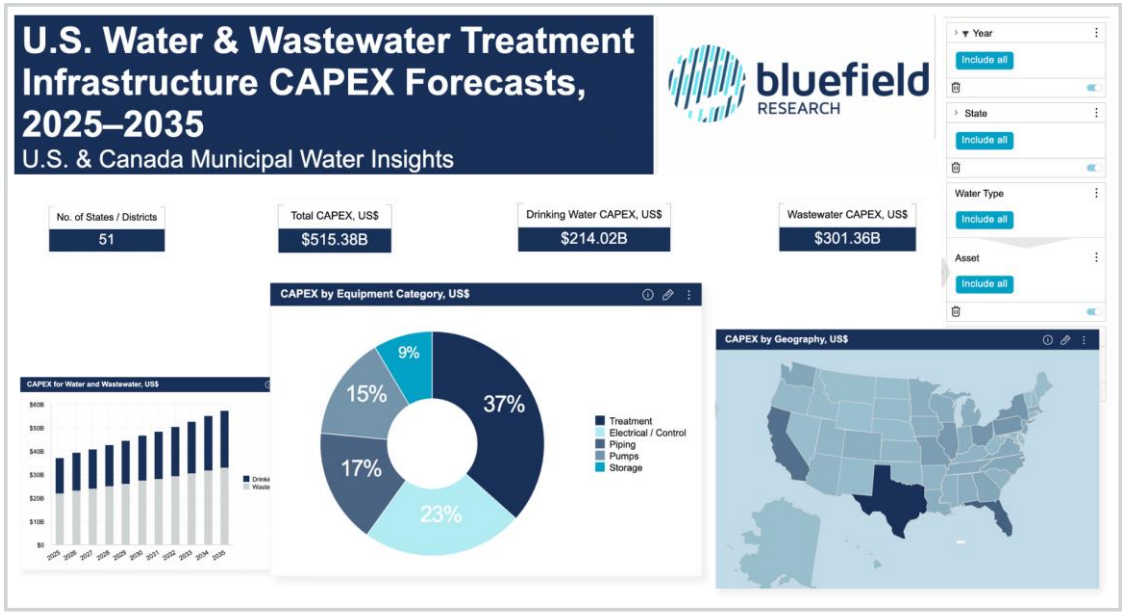


Source: Bluefield Research

Data Navigator

Data underpins Bluefield's breadth of insight reports and analysis. This report is accompanied by a data dashboard that is available in Bluefield's flexible and interactive Data Navigator platform.

SAMPLE DATA DASHBOARD



Dashboard Widgets US$:

- Map of Total Expenditure by State
- State and Regional Breakouts
- Expenditure Forecast by Project Type
- Expenditure Forecast by CAPEX Category
- Expenditure Forecast by Equipment Type

Learn more

Talk to us about our data or book a demo.

Book 30-min demo

See the power of Data Navigator

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Global companies across the value chain are developing strategies to capitalize on greenfield opportunities in water − new build, new business models, and private investment. Bluefield Research supports a growing roster of companies across key technology segments and industry verticals addressing risks and opportunities in the new water landscape.

Companies are turning to Bluefield for in-depth, actionable intelligence into the water sector and the sector's impacts on key industries. The insights draw on primary research from the water, energy, power, mining, agriculture, financial sectors and their respective supply chains.

Bluefield works with key decision makers at utilities, project development companies, independent water and power providers, EPC companies, technology suppliers, manufacturers, and investment firms, giving them tools to define and execute strategies.

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