HANDOUT & KNOWLEDGE BASE

Transatlantic Dialogue: The Future of Infrastructure
Key Findings and Recommendations from Three Project Years

E-Mobility and Charging Infrastructure · Smart Grid and Energy Networks · Water Infrastructure
Project Period: 2023–2025 | Germany and the USA

PROJECT YEAR 1
Visit to the VW Plant in Zwickau

PROJECT YEAR 2
Briefing at the Minnesota State Capitol

PROJECT YEAR 3
Delegation at Walchensee

Publisher
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1 Project Overview

The series was prompted by the $1.2 trillion U.S. infrastructure package adopted in November 2021, which links modernization, competitiveness, and climate action. Against this backdrop, AHK USA-Chicago (German American Chamber of Commerce of the Midwest) conducted the “Transatlantic Dialogue: The Future of Infrastructure” event series from 2023 to 2025, funded through the Transatlantic Program of the Federal Republic of Germany with resources from the European Recovery Program (ERP) of the Federal Ministry for Economic Affairs and Energy.

The work focused on three sectors with high priority in both countries: e-mobility and charging infrastructure, smart grid and energy networks, and water infrastructure. Each project year followed the same structure: two virtual kickoff conferences to provide expert context on both markets, followed by two exchange trips—a German delegation to the United States and a U.S. delegation to Germany—with site visits, roundtables, and public expert events. The series concluded with a virtual conference on December 9, 2025, whose three panels shape the structure of this document.

Target regions included Bavaria, Saxony, Baden-Württemberg, Berlin, and North Rhine-Westphalia in Germany, and Michigan, Ohio, Illinois, Wisconsin, Minnesota, and Colorado in the United States. The delegations were deliberately cross-sectoral, bringing together municipalities and public agencies, municipal utilities and wastewater operators, industry, engineering firms, start-ups, associations, and research institutions. This mix—not any single trip—is the basis for the findings documented here.

3	6	7	76	~100
Project years and sectors	Exchange trips DE ↔ USA	virtual conferences	Delegates from both countries	Partner organizations

1.1 The Three Project Years at a Glance

Project year	Focus	Exchange trip to Germany	Exchange trip to the USA
2023	E-Mobility and Charging Infrastructure Kickoff conferences on 08/08 and 08/29/2023	November 5–10, 2023 München, Zwickau, Dresden, Stuttgart 10 U.S. delegates	December 4–8, 2023 Detroit, Columbus, Normal, Joliet, Chicago 11 German delegates
2024	Smart Grid and Energy Infrastructure Kickoff conferences on 02/13 and 04/09/2024	March 17–22, 2024 Berlin, Region Stuttgart, Freiburg 10 U.S. delegates	June 9–14, 2024 Minneapolis, Denver 13 German delegates
2025	Water Infrastructure Kickoff conferences on 02/13 and 04/24/2025	June 22–27, 2025 Münster, Gelsenkirchen, Dortmund, Ulm, München 14 U.S. delegates	April 6–11, 2025 Milwaukee, Chicago 18 German delegates

1.2 Goal Achievement – What the Project Set Out to Do

The project proposal defined three core goals: bringing a representative cross-section of relevant stakeholders to the table, making best practices in both countries tangible on site, and deriving concrete German-American cooperation from them. These goals were achieved:

- **Cross-sector participant base:** policymakers, public agencies, municipal utilities, industry, start-ups, associations, and research came together in all three years; a participation fee helped ensure serious commitment.
- **Best practices on site:** Rather than presentations, the focus was on facilities, control centers, laboratories, and living labs—from grid control rooms to the Deep Tunnel system.
- **Concrete cooperation:** The trips led, among other outcomes, to a planned academic partnership between Hochschule Trier and the Center for Water Research at Northwestern University, an EcoG agreement for a place in

the American Center for Mobility interoperability lab, discussions between VEGA Grieshaber and Badger Meter, a professional exchange between Stadtentwässerungsbetriebe Köln and U.S. municipalities, and emerging cooperation between Fraunhofer IAO and U.S. research institutions.

- **Continuity:** Concrete discussions are underway with the American Public Works Association (APWA) on a follow-up project focused on resilient infrastructure.

Openly acknowledged: The target participant numbers for the exchange trips were not fully reached in the first two years because of scheduling conflicts and budget constraints. In the third year, the situation reversed—demand required a waiting list and an approved increase from 16 to 18 places. The smaller groups in the early years proved to be a professional advantage because they enabled deeper discussions.

2 Cross-Cutting Findings

The virtual final conference brought together the results of all three years in three thematic areas: urbanization and municipal perspectives, resilience and climate adaptation, and innovation and technology development. These three areas proved to be the strongest cross-cutting findings; they appeared independently across all three sectors. They therefore structure the main body of this document.

2.1 Urbanization: Implementation Is Decided at the Municipal Level

Key finding

Infrastructure is funded nationally but delivered locally. Across all three sectors, the bottleneck was rarely technology; it was planning procedures, permits, land availability, and the question of who actually benefits from an investment.

This pattern was especially clear in e-mobility: in Chicago, electric vehicles are registered in nearly every neighborhood, but public charging infrastructure is concentrated in only a few areas. Residents of multifamily buildings without private parking are particularly disadvantaged. The city is responding with a new framework that uses a public-private partnership to expand targeted curbside charging. In Germany, the same issue appears differently: the challenge is not availability, but fragmentation of the network—different providers, payment methods, and access protocols—which makes everyday use harder.

In energy infrastructure, control is also moving into local systems. Netze BW's NETZLabor in the village of Freiamt and the EUREF Campus in Berlin showed how load management, charging infrastructure, and microgrids can be tested at a small, real-world scale before being rolled out broadly. The U.S. delegation took this living-lab principle home: in Colorado, participants discussed implementing a comparable living lab for load management.

In the water sector, the main difference between the two countries is scale. German cities, constrained by limited space, work with decentralized, small-scale solutions: sponge-city concepts, depaving, underground retention, and storing water where it falls. The U.S. side thinks at large scale—the Deep Tunnel system and the McCook reservoirs impressed the German experts so strongly that several named "think big" as the most important lesson of the trip. Conversely, the U.S. delegates viewed Germany's integrated, long-term planning culture as a model.

Dimension	Germany	USA
Planning Logic	Integrated, long-term, high standards, small-scale solutions	Pragmatic, fast, large-scale, project-based
Responsibility	Federally organized, but coordination-intensive among the federal government, states, and municipalities	Highly fragmented; states and municipalities implement funding programs very differently
Limiting Factor	Land constraints, lengthy procedures, permits	Political and regulatory uncertainty; planning horizons that extend beyond election cycles
Social Aspect	Public service provision as a guiding principle; high trust in service quality	Equity as an explicit, measurable planning criterion

Recommendations for Finding 1

Living lab before rollout. Small, measurable pilot projects in real-world operation provide a more reliable basis for decisions than studies—and build acceptance.

Embed equity as a planning criterion. Who has access to charging, energy, and water infrastructure—and where—should be measured systematically rather than left to the chance of investment logic.

Choose scale deliberately. German stakeholders should assess where large-scale solutions may be possible; U.S. stakeholders should identify where small-scale, integrated approaches can have faster impact.

Audi Charging Hub Nürnberg – HPC charging points combined with a high-quality user experience

Metropolitan Water Reclamation District of Greater Chicago

2.2 Resilience: From "Capacity" to "Robustness"

Key finding

Climate adaptation has moved from a side issue to a planning benchmark in all three sectors. Existing design assumptions are becoming outdated faster than infrastructure can be renewed—and resilience can no longer be planned sector by sector.

This became clearest in the third project year. Downers Grove in the Chicago metropolitan area reported that heavy rainfall events once statistically considered 100-year—or even 300-year—events now occur much more often. On the German side, the floods in Saxony in 2004 and in the Ahr Valley and North Rhine-Westphalia in 2021 provide the corresponding frame of reference. Both sides concluded that infrastructure planning must include not only physical structures, but also emergency management, information flows, and public preparedness.

The range of responses was striking. On one side were major engineered solutions: the McCook retention reservoirs in Chicago, the rehabilitation of the Sylvenstein reservoir with a new cutoff wall and reinforced earth dam, and flood protection for waterworks at Gelsenwasser. On the other side were nature-based and participatory approaches: the Emscher restoration, which links ecological recovery with accessible gardens and education projects; the floating habitats of the Chicago Wild Mile; native plants; and public education campaigns in Downers Grove. Both countries reached the same conclusion: it is not either-or, but a combination.

Resilience was also a guiding theme in the other two sectors: in energy, grid stability with variable generation, long-duration storage, protection of critical infrastructure against cyberattacks, and the growing electricity demand of new data centers; in e-mobility, expanding the perspective from the vehicle to a system resource. The vehicle-to-grid capability of the Ford F-150 Lightning, whose battery can power a single-family home for several days in an emergency, drew particular interest.

Cross-sector insight

Water infrastructure needs electricity; power generation and cooling need water; mobility needs both. Resilience planning that stops at sector boundaries misses exactly the cascading effects that matter most in an emergency. Several project best-practice examples—energy self-sufficient wastewater treatment plants, phosphorus and heat recovery from wastewater, and the Walchensee power plant as a flexible grid stabilizer—work precisely because they cross these boundaries.

Recommendations for Finding 2

Review design assumptions. Statistical recurrence intervals for heavy rainfall and extreme weather should be validated regularly against current event data, not historical series alone.

Combine nature-based and large-scale engineered solutions. Retention, depaving, and restoration complement engineered protection structures, but do not replace them.

Plan resilience across sectors. Consider water, energy, and mobility infrastructure together and explicitly model cascading risks.

Treat communication as an infrastructure measure. Public education campaigns, educational offerings, and publicly accessible projects demonstrably increase acceptance and self-preparedness.

2.3 Innovation, Digitalization, and AI: The Leverage Lies in Existing Assets

Key finding

The greatest near-term value in all three sectors came not from new construction, but from sensors, data, and software applied to existing infrastructure. Prerequisites include reliable data standards, cybersecurity, and—most often underestimated—an available skilled workforce.

The examples from the three years follow a similar logic. In charging infrastructure, digital tools for fleet charging enable efficiency and cost optimization, while software that continuously checks charging-station status and reports faults to maintenance teams in real time increases network reliability without adding a single charger. In the power grid, intelligent grid management and AI-supported forecasts are prerequisites for integrating millions of distributed generators and consumers; digital-twin applications and an augmented-reality tool from Netze BW for training new employees add further value.

In the water sector, the density of such applications was especially high: Badger Meter manhole covers equipped with sensors and satellite communication for real-time visualization of wastewater systems; the H2Now Chicago project for continuous monitoring of river water quality; and, at Roche Diagnostics in Penzberg, the combination of living indicators (daphnia) with AI-supported analysis. In Milwaukee, AI was discussed explicitly as a response to workforce shortages—not as a replacement, but as a way to relieve stretched operations teams.

The barriers were equally consistent. Interoperability and data standardization were identified as central challenges for charging infrastructure as early as 2023 and reappeared in every subsequent year. Cybersecurity becomes more important with every additional connection. And the workforce shortage—described by IKT as the “Silver Tsunami”—threatens operational capability in both countries more than any technology gap.

Three prerequisites for digital value creation	What this means in practice
Data quality and standards	Without uniform interfaces, data exchange among operators, networks, and public agencies remains fragmented. Standardization must allow innovation without creating arbitrary variation.
Cybersecurity	Every additional connection to critical infrastructure expands the attack surface. Security belongs in the system architecture, not in later retrofits.
People and skills	Sensors create no value without people who can interpret the data and maintain the assets. AR/VR-supported training and community college models are proven responses.

Recommendations for Finding 3

Digitize existing assets before building new ones. Sensor retrofits and condition monitoring deliver impact faster than replacement investments—and create the data foundation for later prioritization.

Test interoperability early. Accessible testing and interoperability labs on both sides of the Atlantic significantly reduce development risk and market-entry costs.

Use AI specifically to address workforce shortages. Asset monitoring, forecasting, and maintenance planning are the use cases with the best balance of effort and operational relief.

Build in cybersecurity from the start. For critical infrastructure, it is part of the architecture, not a downstream compliance issue.

3 Sector Knowledge Base

The following three profiles summarize what was learned in each project year about the starting point, transferable best practices, and common pitfalls.

3.1 E-Mobility and Charging Infrastructure

	Germany	USA
Starting Point	Dense but fragmented charging network with many operators, technologies, payment methods, and access protocols. Roaming agreements are necessary but complex. Grid connection and simultaneous charging are becoming bottlenecks.	Expansion follows the funding logic of NEVI and the IRA, implemented differently by each state. Manufacturer-owned networks (including the Rivian Adventure Network with roughly 10,000 charging points), significant gaps in rural areas, and an inconsistent user experience.
Transferable Best Practices	HPC charging hubs with a high-quality user experience (Audi Charging Hub Nürnberg); municipal e-bus fleets including workshop and charging infrastructure (Dresdner Verkehrsbetriebe); second-life concepts for vehicle batteries.	Incentive programs as the most effective lever for charging-network acceptance; open testing and interoperability infrastructure (American Center for Mobility, Mcity, Detroit Smart Parking Lab, Argonne); close links between education and industry (Heartland Community College).
Typical Pitfalls	Retrofitting existing chargers to new standards is expensive and time-consuming; grid overload during simultaneous charging; consumer confusion caused by varied tariff structures.	Procurement of critical raw materials, regulatory hurdles, and IRA local-content requirements; range anxiety; affordability and access for lower-income households.

If You Take Only One Thing Away

Competition is increasingly decided not at the charging station, but through software, interoperability, and availability. A charging network whose faults are reported and fixed in real time is more valuable than a larger network whose status is unknown.

3.2 Smart Grid and Energy Networks

	Germany	USA
Starting Point	Integration of millions of distributed generators and new consumers (photovoltaics, heat pumps, e-mobility), especially in the distribution grid. Section 14a EnWG as a control instrument, high data-protection standards for smart metering, and a pronounced need for long-duration storage.	The U.S. grid is organized around RTOs/ISOs, utilities, and cooperatives. Implementation is market-driven and often fast, but permitting and grid interconnections remain slow. Industry and data centers are creating strong pressure for expansion.
Transferable Best Practices	Living labs in real-world operation (NETZLabor Freiamt); a microgrid campus with high energy self-sufficiency (EUREF Campus Berlin); AR-supported employee training in the control center; consumer education and transparency in load management.	Living-lab and pilot formats run by energy agencies; close collaboration between utility providers and research (NREL, Center for Microgrid Research); social equity as an explicit component of energy policy.
Typical Pitfalls	Lengthy coordination among the federal government, states, and grid operators; acceptance of interventions in consumption; data quality as a prerequisite for intelligent control.	The pace of regulation does not keep up with technological change; workforce shortages and attracting new talent to engineering professions; Cybersecurity for connected systems.

> **If You Take Only One Thing Away**
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> One U.S. delegate estimated that German energy infrastructure is three to five years more advanced—while the German side was impressed by the speed and pragmatism of U.S. implementation. The real value lies in the exchange: German system integration for American implementation speed.

3.3 Water Infrastructure

	Germany	USA
Starting Point	Very high treatment standards, in some cases exceeding EU requirements; broad avoidance of chlorination; in Munich, direct supply from protected source areas largely without additional treatment. A new EU Urban Wastewater Directive with strict nutrient limits. Limited land availability constrains stormwater retention.	Large-scale systems (Deep Tunnel system, McCook reservoirs, Stickney and Jones Island with roughly 455,000 m³ of daily throughput). Chlorination as the standard, aging pipe networks, lead and PFAS contamination, and fragmented responsibilities in planning and public agencies.
Transferable Best Practices	Fourth-stage treatment with activated carbon to remove PFAS and pharmaceutical residues (Klärwerk Steinhäule); phosphorus recovery and energy generation from wastewater; river restoration paired with community use (Emscher); sponge-city concepts; AI-supported live biomonitoring (Roche Penzberg); and a heavy-rainfall testing laboratory (IKT).	Cluster models as engines for markets and innovation (The Water Council, with more than 250 companies, and Current Water, with up to $160 million in NSF funding over ten years); testbeds and pilot programs (H2Now Chicago); Smart Cover sensors for real-time wastewater-system monitoring; and a willingness to think big about storage capacity.
Typical Pitfalls	The cost of PFAS removal and how to allocate it; land availability; public acceptance of rate increases; and workforce shortages (the “Silver Tsunami”).	Deferred investment in aging networks; fragmented governance that complicates regional planning; and funding cycles that take the place of long-term strategy.

> **If You Take Only One Thing Away**
>
> Germany leads in advanced treatment and resource recovery, while the United States leads in the scale of stormwater storage and the commercialization of innovation. Both approaches are transferable—from fourth-stage treatment to cluster and testbed models.

4 Recommendations

The following recommendations are derived from the insights gathered over the three project years and organized by target audience. They are intentionally written so they can be implemented without direct participation in the project.

For Companies with Transatlantic Market Ambitions

- **Build local presence before full product maturity.** A local network or representation on the ground was consistently identified as a decisive requirement for entering the U.S. market. Established technologies are easier to transfer than new developments, and a local reference project carries more weight than a product catalog.
- **Evaluate funding landscapes by state.** Incentive programs, local-content requirements, and tax issues vary significantly from state to state, so this analysis should come at the very beginning of market-entry planning.
- **Use testing and interoperability labs as an entry point.** Testing infrastructure is the most cost-effective way to verify technical compatibility and market acceptance, as demonstrated by a lab agreement in the American Center for Mobility’s interoperability lab.
- **Integrate cluster-based pilot and testbed programs.** Organizations such as The Water Council, Current Water, and Newlab offer structured pathways from pilot application to reference project.
- **Bring in certification and legal advice early.** Standards, approvals, and liability questions determine the speed of market entry; partners should be identified before the first delivery.
- **Use software and services as differentiators.** Across all three sectors, value creation is shifting from hardware to operations, data analysis, and availability guarantees.

For Municipalities, Utility Providers, and Public Agencies

- **Establish living labs.** A clearly defined, real-world test area generates reliable data and public acceptance at the same time. The NETZLabor model can be transferred to water and mobility infrastructure.
- **Digitally capture existing assets before investing.** Sensor-based condition monitoring enables risk-based renewal rather than age-based replacement.
- **Measure equitable access.** The spatial distribution of charging, energy, and water infrastructure should be systematically tracked and factored into investment decisions.
- **Update extreme-weather design assumptions.** Validate recurrence intervals regularly against actual events and adjust protection concepts accordingly.
- **Safeguard institutional knowledge before the retirement wave.** Document operational knowledge, build AR/VR-supported onboarding, and establish lasting partnerships with educational institutions.
- **Budget for public outreach.** Experience from Cologne, Downers Grove, and the Emscher Park shows that visible, accessible infrastructure increases acceptance and individual preparedness.

For Research and Education

- **Make exchange programs permanent.** The emerging partnership between Hochschule Trier and Northwestern University's Center for Water Research can serve as a blueprint for student and research exchanges.
- **Develop comparable datasets.** A systematic German-American comparison of operational and quality data is still missing and would be valuable for both sides.
- **Use research institutions as neutral intermediaries.** Fraunhofer, DLR, NREL, and Argonne repeatedly served as bridges between companies and public agencies during the project.

For Policymakers and Funding Programs

- **Fund cross-sector work rather than sector-specific silos.** The most effective examples—energy-self-sufficient wastewater treatment plants, vehicle-to-grid applications, and flexible hydropower—emerge at the interfaces of water, energy, and mobility.
- **Standardize while preserving room for innovation.** Regulation should require interoperability without locking in specific technology pathways.
- **Accelerate permitting and connection procedures.** In both countries, process duration was cited more often than capital as the limiting factor.
- **Make transatlantic peer-to-peer formats permanent.** Direct exchange among professionals in comparable roles proved to be the most effective transfer mechanism—more effective than conference presentations or studies.

> **The five most effective measures from the project's perspective**
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> 1. Living lab instead of study: set up a real, measurable pilot operation.
> 2. Equip existing infrastructure with sensors before replacing it.
> 3. Test interoperability in a lab before scaling.
> 4. Plan resilience across sectors and model cascading risks.
> 5. Treat workforce development as an infrastructure investment, not merely a staffing issue.

5 Knowledge and Resource Hub

5.1 Best-Practice Catalog

The following sites and projects were visited during the exchange trips and were rated by participants as especially transferable.

Practical example	Location / Operator	What is transferable
Klärwerk Steinhäule	Ulm / Zweckverband	Four-stage wastewater treatment using activated carbon to remove PFAS and pharmaceutical residues, combined with energy self-sufficiency.
Emscher-Renaturierung	Ruhrgebiet / Emschergenossenschaft	Ecological restoration of a river system combined with public use, accessibility, and educational programs.
Deep Tunnel System and McCook Reservoirs	Chicago / MWRD	Large-scale stormwater storage in response to heavy rainfall; a benchmark for sizing protective storage capacity.

Practical example	Location / Operator	What is transferable
Smart Cover Solutions	Milwaukee / Badger Meter	Sensors and satellite communications embedded in manhole covers for real-time monitoring of existing wastewater systems.
NETZLabor Freiamt	Baden-Württemberg / Netze BW	A living lab for load management and charging infrastructure on an operating local grid, including AR-supported employee training.
Audi Charging Hub	Nürnberg	High-power fast charging combined with an appealing user environment—charging infrastructure designed as a destination rather than a gas pump.
American Center for Mobility	Michigan	More than 500 acres of test facilities, including an EV interoperability laboratory accessible to international providers.
Vehicle-to-Grid with the Ford F-150 Lightning	Dearborn, Michigan / Ford	Vehicle batteries used as emergency power reserves and as a component of grid resilience.

5.2 Networks and Points of Contact

The following overview brings together organizations that emerged during the project as especially promising partners for collaboration, market access, and professional exchange.

Sector	Germany	USA
E-Mobility and Charging Infrastructure	NOW GmbH; AMZ Sachsen; IHK Chemnitz, Dresden, and Zwickau; Technische Universität München (Lehrstuhl Fahrzeugtechnik); Netze BW; SMA Solar Technology; ABB E-Mobility	MICHauto; Detroit Regional Partnership; Michigan Economic Development Corporation; American Center for Mobility; Mcity (University of Michigan); Argonne National Laboratory; Newlab; DriveOhio; JobsOhio; Autos Drive America
Smart Grid and Energy Networks	Bundesnetzagentur; Deutsche Energie-Agentur (dena); 50Hertz Transmission; Netze BW and EnBW; Smart Grids-Plattform Baden-Württemberg; Fraunhofer IAO; DLR Institut für Vernetzte Energiesysteme; BVES; EUREF AG	National Renewable Energy Laboratory (NREL); MISO; OATI; Colorado Energy Office; Clean Energy Economy MN; CORE Electric Cooperative; Tri-State Generation and Transmission; Center for Microgrid Research (University of St. Thomas); RASEI (CU Boulder)
Water Infrastructure	DWA; German Association of Water Sector Organizations; IKT – Institute for Underground Infrastructure; Emschergenossenschaft; Gelsenwasser AG; WILO SE; Landeswasserversorgung Baden-Württemberg; Green Economy Network NRW; IHK Nord Westfalen; Bayern Innovativ	The Water Council (Milwaukee); Current Water (Chicago); Milwaukee Metropolitan Sewerage District; Metropolitan Water Reclamation District of Greater Chicago; Center for Water Research (Northwestern University); Badger Meter; American Public Works Association (APWA)
Cross-sector	Association of Municipal Enterprises (VKU); BDEW; German Institute of Urban Affairs (Difu); German Association of Cities; German Association of Towns and Municipalities; Alliance of Public Water Management (AöW)	American Public Works Association (APWA); state economic development organizations (including WEDC, MEDC); GACC Midwest chapter network in Minnesota, Colorado, and Michigan

5.3 Additional Publications from the Project

- **Article “From Main to Milwaukee” by Prof. Thomas Kreiter (Hochschule Trier) in the journal Wasser und Abfall, issue 7–8/2025.**
- **Podcast “Germany on Tap” —** B&W Insights (Baxter & Woodman), October 2025: impressions from the trip to Germany and their applicability to the U.S. water sector.
- **Podcast “What Germany Can Teach the U.S. About Water and Wastewater Management” —** Level Design Podcast, October 2025, with additional episodes featuring project participants.
- **Midwest Report of AHK USA-Chicago –** annual publication with coverage of all three project years.

- **Annual reports for the 2023, 2024, and 2025 project years –** detailed documentation of conferences, trips, and results, available through AHK USA-Chicago.

6 Industry Navigator

The following overview summarizes key contacts, sector-specific considerations, and entry points for all three sectors and can be used as a stand-alone working resource.

E-MOBILITY & CHARGING INFRASTRUCTURE Project Year 1 · 2023	SMART GRID & ENERGY NETWORKS Project Year 2 · 2024	WATER INFRASTRUCTURE Project Year 3 · 2025
KEY THEME **Building out and ensuring interoperability of public and commercial charging networks**	**KEY THEME** **Integrating distributed generation, flexibility, and grid resilience**	**KEY THEME** **Water quality, wastewater treatment, flood protection, and climate adaptation**
KEY CONTACTS – GERMANY • NOW GmbH (National Organisation for Hydrogen and Fuel Cell Technology) • AMZ Sachsen · IHK Chemnitz / Dresden • TU Munich, Chair of Automotive Engineering • Netze BW · SMA Solar · ABB E-Mobility	**KEY CONTACTS – GERMANY** • Bundesnetzagentur · dena • 50Hertz · Netze BW · EnBW • Smart Grids Platform Baden-Württemberg • Fraunhofer IAO · DLR Institute of Networked Energy Systems • BVES · EUREF Campus Berlin	**KEY CONTACTS – GERMANY** • DWA · DBVW · Alliance of Public Water Management (AöW) • IKT – Institute for Underground Infrastructure • Emschergenossenschaft · Gelsenwasser AG • WILO SE · Landeswasserversorgung BW • Green Economy Network NRW · IHK Nord Westfalen
KEY CONTACTS – USA • MICHauto · Detroit Regional Partnership • American Center for Mobility (ACM) • Mcity, University of Michigan • Argonne National Laboratory · Newlab • DriveOhio · JobsOhio · Autos Drive America	**KEY CONTACTS – USA** • NREL (National Renewable Energy Laboratory) • MISO · OATI • Colorado Energy Office · Clean Energy Economy MN • CORE Electric Cooperative · Tri-State G&T • Center for Microgrid Research, Univ. of St. Thomas	**KEY CONTACTS – USA** • The Water Council, Milwaukee (250+ companies) • Current Water, Chicago • MMSD · MWRD Greater Chicago • Center for Water Research, Northwestern University • American Public Works Association (APWA)
SECTOR SPECIFICS – GERMANY Dense but fragmented network: many operators, roaming and payment models, grid connection as the bottleneck.	**SECTOR SPECIFICS – GERMANY** Distribution-grid focus, Section 14a EnWG, living labs, high data-protection standards for smart metering.	**SECTOR SPECIFICS – GERMANY** Standards partly exceeding EU levels, largely chlorine-free treatment, fourth treatment stage, limited land availability.
SECTOR SPECIFICS – USA Funding logic via NEVI/IRA varies by state, manufacturer-owned networks, large rural gaps, "range anxiety."	**SECTOR SPECIFICS – USA** RTO/ISO and cooperative structure, market-driven fast implementation, permitting and interconnection backlogs.	**SECTOR SPECIFICS – USA** Large-scale systems (Deep Tunnel), chlorination, aging pipe networks, PFAS and lead, fragmented governance.
ENTRY POINT FOR COOPERATION Use interoperability and testing labs (ACM, Mcity, Argonne) as a cost-effective market entry point.	**ENTRY POINT FOR COOPERATION** Living-lab / pilot formats as a shared testbed for load management and storage.	**ENTRY POINT FOR COOPERATION** Cluster pilot and testbed programs (Water Council, Current) for technology trials.

Cross-cutting themes across all three sectors: workforce development · data quality and interoperability · cybersecurity · federal-state-local coordination · public acceptance

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Industry Navigator — Key Contacts, Sector-Specific Considerations, and Entry Points by Sector. Source: AHK USA-Chicago analysis.

7 Outlook

The project demonstrated that structured, multiyear exchanges among professionals in comparable roles produce more durable results than one-time formats. The meetings led to academic partnerships and concrete business opportunities that will continue beyond the end of the project.

A clear priority has emerged for the next phase: resilient infrastructure. Infrastructure systems in both countries face growing pressure from extreme weather, geopolitical risks, cyberattacks, supply-chain disruptions, and demographic change. The American Public Works Association (APWA), which participated in the third project year's trip to Germany, has expressed interest in a joint follow-up project and is prepared to contribute financially. On the German side, the Association of Municipal Enterprises (VKU), BDEW, the German Institute of Urban Affairs (Difu), the German Association of Cities, the German Association of Towns and Municipalities, and the Alliance of Public Water Management (AöW) have indicated their general support.

Contact

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For questions about the findings in this handout, contacts from the network, or future delegation formats, please contact the Government Projects and Trade Missions team.

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