



TRANSFORMATIONS:

**BUILDING TOMORROW'S
INFRASTRUCTURE TODAY**



A PORTFOLIO OF TRANSFORMATIVE INFRASTRUCTURE PROJECTS

At **Turtle**, we're proud to be behind the scenes of some of the most ambitious infrastructure projects across power, water, transportation, manufacturing, commercial, and institutional sectors. These stories aren't about specs or schematics: they're about people, resilience, and the systems that power how we live, work, and move.

This lookbook is a curated portfolio of transformation in action.

Inside, you'll find real-world stories from the field where challenges turned into solutions and visions into reality. Each project is organized around one of three themes:

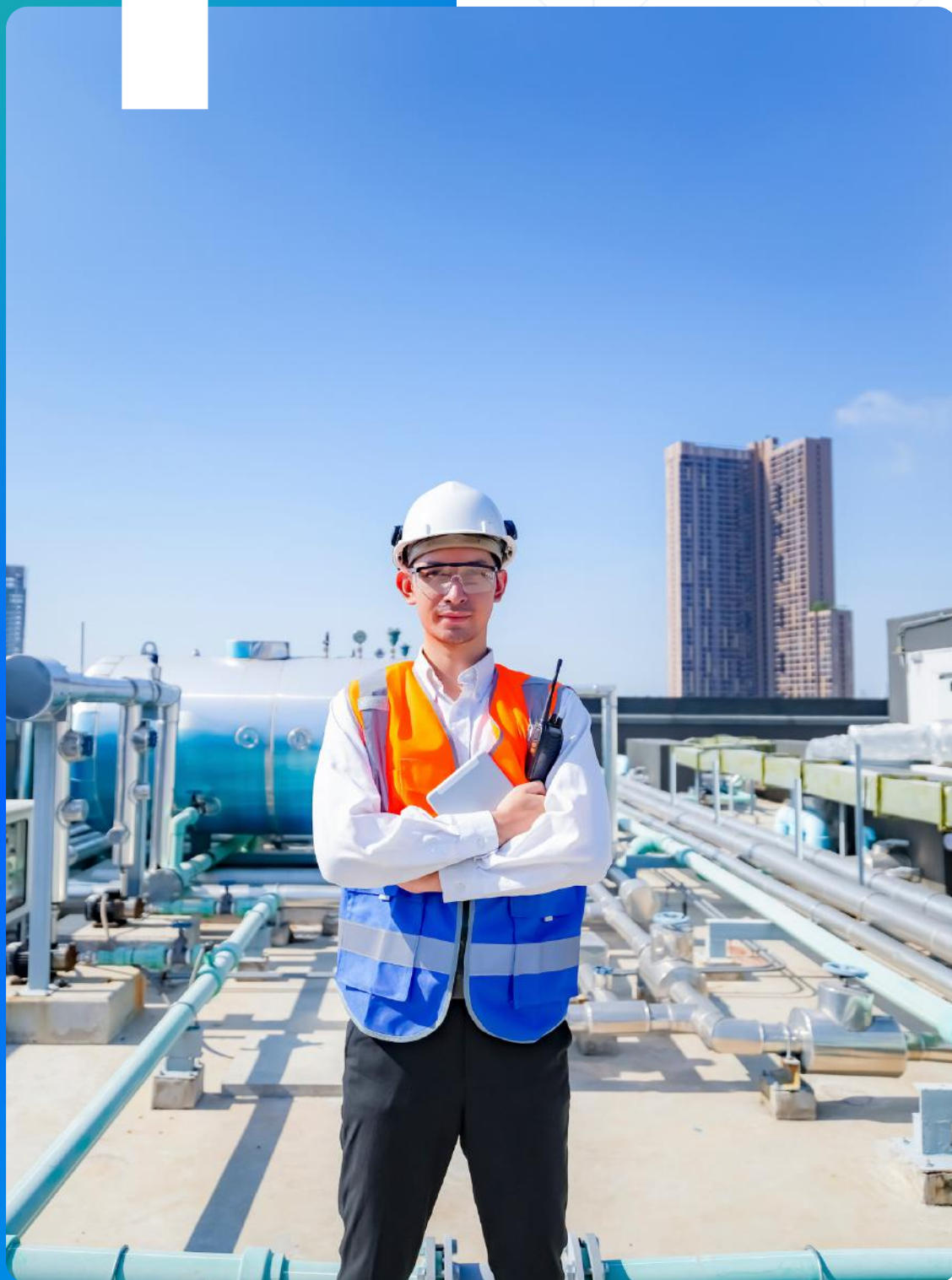
- **Powering the Future:** from energy independence to predictive infrastructure
- **Building Smart Infrastructure:** from seamless transit systems to cyber-secure utilities
- **Advancing Sustainability:** from fleet electrification to LED retrofits in legacy spaces

Whether you're an engineer, contractor, developer, or decision-maker, we invite you to explore how Turtle partners with organizations to deliver what's next safely, seamlessly, and sustainably.

Because transformation doesn't start with technology.
It starts with trust.



01



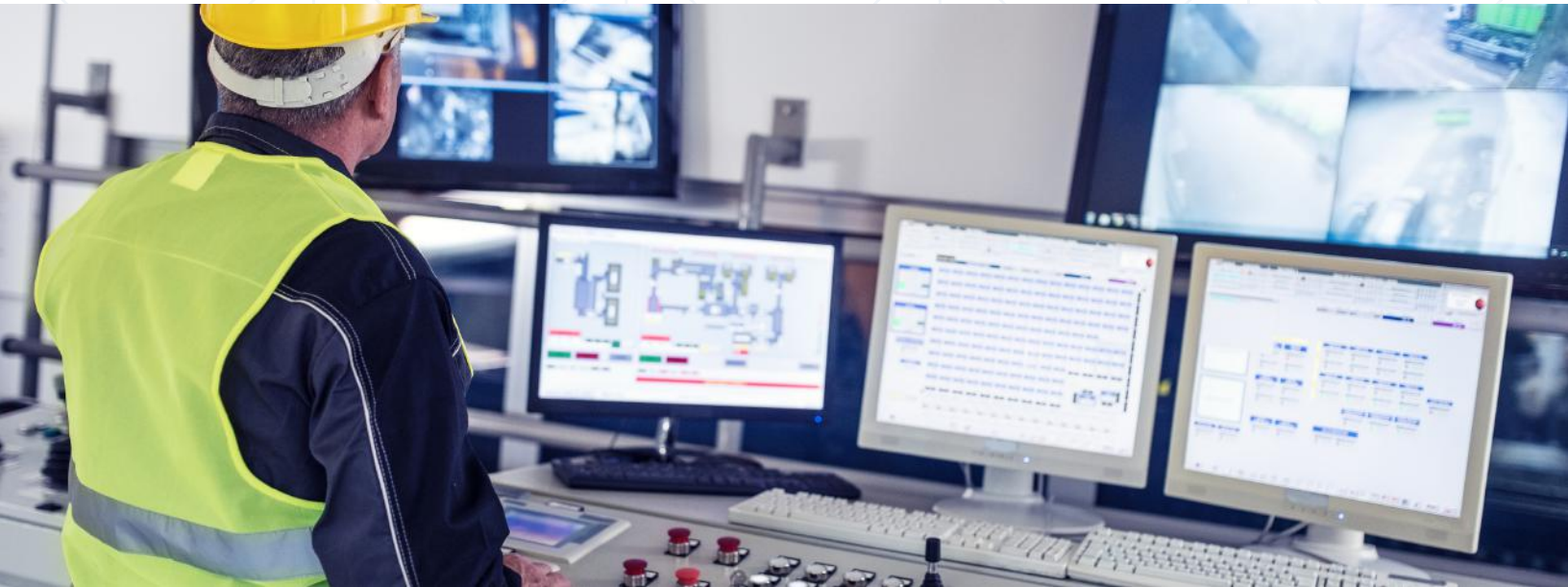
**POWERING
THE FUTURE**





MODERNIZING ENERGY RESILIENCE

Power & Utility



Securing New York City's energy lifeline

When millions of New Yorkers turn up their thermostats during winter's grip, they're unknowingly depending on a critical LNG facility that must perform flawlessly under pressure, while maintaining uninterrupted service.

Working alongside Rockwell Automation, we implemented advanced control systems and cybersecurity-hardened networks that transformed an essential but outdated facility into a responsive, intelligent energy asset. The modernized systems now provide operators with unprecedented visibility, allowing them to anticipate demand surges and respond seamlessly to save resources and labor hours, while delivering better customer service.

This transformation represents how urban energy infrastructure can meet the demands of a city that never sleeps.



When millions of New Yorkers turn up their thermostats, our systems ensure the power keeps flowing, invisible infrastructure with very visible impact.





DIGITAL TWIN INNOVATION

Power & Utility



We transformed invisible patterns into visible intelligence, allowing operators to see problems weeks before they would impact service.



From blind maintenance to predictive intelligence

In the face of aging infrastructure and reactive maintenance cycles, a leading Northeast utility found itself constantly one step behind equipment failures. The traditional approach of scheduled inspections couldn't keep pace with increasingly unpredictable power demands.

Turtle engineered a breakthrough solution: digital twins for critical high-voltage assets that mirror their physical counterparts in real time. Now, transformers, generators, and breakers communicate their condition directly to operators, revealing previously invisible patterns and preventing disruptions before they cascade across the grid.

What once required physical inspection now unfolds on vibrant, easy-to-use monitoring dashboards, where potential issues are flagged weeks before they would become noticeable to the human eye.





EMISSIONS INTELLIGENCE

Power & Utility



Transforming compliance into environmental leadership

Across twelve energy facilities spanning three states, operators struggled with outdated emissions monitoring systems that created compliance risks and reliability concerns. Manual readings and aging equipment left too much room for error in an increasingly regulated environment.

Our team implemented Rockwell Automation's ControlLogix programmable controllers to create a continuous emissions monitoring ecosystem. This transformation converted a regulatory burden into a strategic advantage, allowing operators to optimize performance while ensuring environmental standards are maintained around the clock.

What once represented a constant source of concern has become a showcase of environmental stewardship, demonstrating how responsible energy production can coexist with stringent emissions control.



Compliance is the minimum standard. Our systems transformed regulatory requirements into operational advantages.





MICROGRID MASTERY

Commercial Construction



In a city of 8 million, we created a neighborhood that can power itself—redefining what's possible in urban energy independence.



Urban energy independence revolution

Creating a massive urban development project from scratch presented unprecedented energy challenges. The visionary developers envisioned not just buildings but a self-sufficient community capable of operating independently from the traditional power grid.



Working closely with the Hudson Yards team, we developed an innovative switchgear solution that became the nervous system for Hudson Yards' groundbreaking microgrid, enabling intelligent energy management and seamless transitions between the national grid and local generation. This invisible infrastructure allows the neighborhood to respond instantly to power disruptions, price fluctuations, and demand changes.

Today, residents and businesses experience a new kind of energy security, one where lights stay on and systems continue running even when surrounding areas go dark.



LANDFILL GAS MICROGRID

Power & Utility



Waste-to-energy journey for water utility independence

A major Northeast water/wastewater utility found itself vulnerable to grid outages and rising energy costs that threatened its ability to provide uninterrupted service to nearly 800,000 customers.

Turtle supported the utility's bold vision of energy independence through a landfill gas-powered microgrid that transforms waste into reliable power. Our switchgear expertise and project management skills helped convert an environmental liability into a valuable energy asset that operates independent of the traditional grid.

“Yesterday's waste becomes today's power in a virtuous cycle of energy recovery and self-sufficiency.”

Today, the facility harnesses energy that would otherwise be lost, creating a virtuous cycle where waste powers the very systems that process it.

02



BUILDING SMART INFRASTRUCTURE





AIRPORT TERMINAL TRANSFORMATION

Transportation



Engineering excellence at 30,000 feet

A major East Coast airport terminal faced the monumental challenge of maintaining continuous operations while completely revitalizing its aging infrastructure. Power interruptions weren't just inconvenient, they threatened safety, security, and the travel experiences of millions.

Turtle provided comprehensive power distribution solutions that worked around the clock, supporting both normal and emergency power needs throughout the five-year revitalization. Our team managed complex logistics and expedited critical components, all while choreographing installations around the terminal's non-stop activity.

Today, passengers experience a seamlessly powered modern terminal, unaware of the invisible infrastructure transformation that makes their journey possible.



Millions of travelers experience our work every day without ever knowing we're there—that's the hallmark of infrastructure excellence.





WATER UTILITY EXCELLENCE

Water & Wastewater

For thirteen years and counting, we've ensured that when 800,000 customers turn on the tap, water flows without question.

Thirteen years of infrastructure resilience

For a major East Coast water provider, aging equipment and reactive maintenance approaches created a constant struggle to maintain service reliability across seven sprawling facilities. Equipment failures threatened service continuity for nearly 800,000 customers who depend on water without interruption.

For over 13 years, our team has provided the expertise and support that transformed this challenge into a showcase of infrastructure reliability. From predictive maintenance programs to OEM repair services, we've created a comprehensive support ecosystem that anticipates issues before they affect service.

This ongoing partnership has evolved beyond simple maintenance to become a true collaboration that ensures peak equipment performance across the entire utility network.





FINANCIAL SECTOR DATA SECURITY

Data Centers



Banking on uninterrupted digital operations

In the high-stakes world of financial data centers, even microseconds of downtime translate to millions in losses. A major financial institution faced increasing demand for processing power while working within the constraints of limited urban space and zero tolerance for interruptions.

Our 38kV switchgear solutions and comprehensive power management systems streamlined the design-build process for mission-critical data centers. By accelerating project timelines and ensuring reliable power distribution, we helped transform digital vulnerability into unshakable reliability.

The resulting infrastructure now supports the invisible but essential financial transactions that power the global economy, all while remaining adaptable to rapidly evolving technology demands.



In an industry where milliseconds matter and failure isn't an option, we delivered power systems that never blink.





WEST COAST PORT TERMINAL EXCELLENCE

Transportation



Sustaining the flow of global commerce

A major West Coast container terminal faced the ongoing challenge of maintaining uninterrupted operations while managing the complexity of sourcing specialized parts and coordinating multiple vendors across its expansive facility. Any downtime meant costly delays in the global supply chain that depends on seamless terminal operations.

For over a decade, Turtle has provided comprehensive support through local stocking of hard-to-find parts, expert consulting, and solutions spanning replacement components, sustainability improvements, infrastructure upgrades, and cybersecurity enhancements. Our approach transformed vendor management from a logistical burden into a streamlined process with a single point of responsibility.

The terminal now operates with newfound efficiency and reliability, processing thousands of containers daily with minimal disruptions. This invisible infrastructure excellence enables the visible flow of goods that consumers and businesses depend on, demonstrating how behind-the-scenes expertise keeps global commerce moving smoothly.

“Global trade relies on terminals that never sleep. Our behind-the-scenes excellence ensures the world's goods keep moving without missing a beat.”



TRANSIT INFRASTRUCTURE TRANSFORMATION

Government



Modernizing public transportation for millions of commuters

A major Northeast commuter rail authority faced the monumental task of upgrading aging transit infrastructure across multiple stations while maintaining uninterrupted service for millions of daily commuters. The challenge required seamless integration of public address, visual information, security, and connectivity systems without disrupting the critical transportation network that connects communities to economic centers.

As the design-build partner, Turtle led a comprehensive infrastructure overhaul spanning 16+ stations, managing nearly 2,000 project drawings, custom firmware development, and real-time coordination among multiple contractors. Our approach transformed a complex multi-site challenge into a cohesive modernization program that enhanced safety, security, and passenger experience simultaneously.

Today, commuters experience a transformed transit system with clear communication, enhanced security, and reliable connectivity, all delivered through invisible infrastructure improvements that keep millions of people moving efficiently through the region's transportation network.

“We transformed 16+ transit stations into a connected network of modern infrastructure, proving that large-scale government projects can be delivered seamlessly without disrupting the millions who depend on public transportation.”



CYBERSECURITY SHIELD

Water & Wastewater



The most effective security works like an invisible guardian,
always vigilant, never intrusive.



Protecting essential water infrastructure

As cyber threats to critical infrastructure intensified, a Northeast water/wastewater provider found itself increasingly vulnerable. Their aging operational technology created security gaps that put essential services at risk in an era of sophisticated digital threats.



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Turtle delivered tailored cybersecurity solutions that addressed the unique challenges of industrial control systems in water treatment environments. By bridging the gap between IT security requirements and operational realities, we transformed vulnerable systems into resilient networks that maintain both security and functionality.

The result is a robust defense that operates invisibly behind the scenes, ensuring that water continues to flow and treatment systems function without interruption, even in an increasingly hostile digital environment.

03



ADVANCING SUSTAINABILITY





CHARGEPOINT FLEET ELECTRIFICATION

Power & Utility



Reimagining mobility across multiple states

A major utility provider faced the daunting task of transitioning hundreds of vehicles across multiple states from fossil fuels to electricity, a transformation that required not just new vehicles but entirely new infrastructure and operational approaches.

Partnering with ChargePoint, we orchestrated a comprehensive fleet electrification program that addressed everything from charging infrastructure to logistics management. Our custom relay strategy streamlined equipment deliveries and coordinated installations across diverse locations, transforming a logistical challenge into a seamless transition.

Today, the electric fleet represents not just a reduction in emissions but a visible demonstration of the utility's commitment to the clean energy future it helps power for others.



Transforming a fleet isn't just about changing vehicles, it's about reimagining what mobility means for an entire organization.





EV INFRASTRUCTURE DEPLOYMENT

Power & Utility



We didn't just install charging stations; we built the foundation for a fundamentally different approach to transportation.



Building the backbone of electric mobility

As a major East Coast utility committed to transitioning its fleet to electric vehicles, it faced the complex challenge of deploying charging infrastructure across numerous facilities with varying requirements and constraints.

Working with ChargePoint, we simplified the journey by streamlining product selection, delivery logistics, and implementation procedures. Our scalable approach transformed a potentially fragmented rollout into a cohesive strategy that supported decentralized purchasing while maintaining quality standards.

The resulting charging network now stands ready to support the utility's growing electric fleet, providing a foundation for continued expansion as vehicle technology evolves.





RETAIL LIGHTING EVOLUTION

Commercial Construction



Illuminating a more sustainable shopping experience

Across dozens of locations for a major national retailer, outdated lighting systems created excessive energy consumption while delivering suboptimal shopping environments. The company sought a solution that would enhance both sustainability metrics and customer experience simultaneously.

In collaboration with Philips Lighting, we engineered an LED lighting transformation that reduced energy consumption while improving visual merchandising impact. The modernized lighting systems create more appealing retail environments while significantly reducing carbon footprint and maintenance requirements.

Shoppers now experience merchandise in its true colors under more flattering light, unaware that the same systems enhancing their shopping journey are also advancing the retailer's sustainability goals.



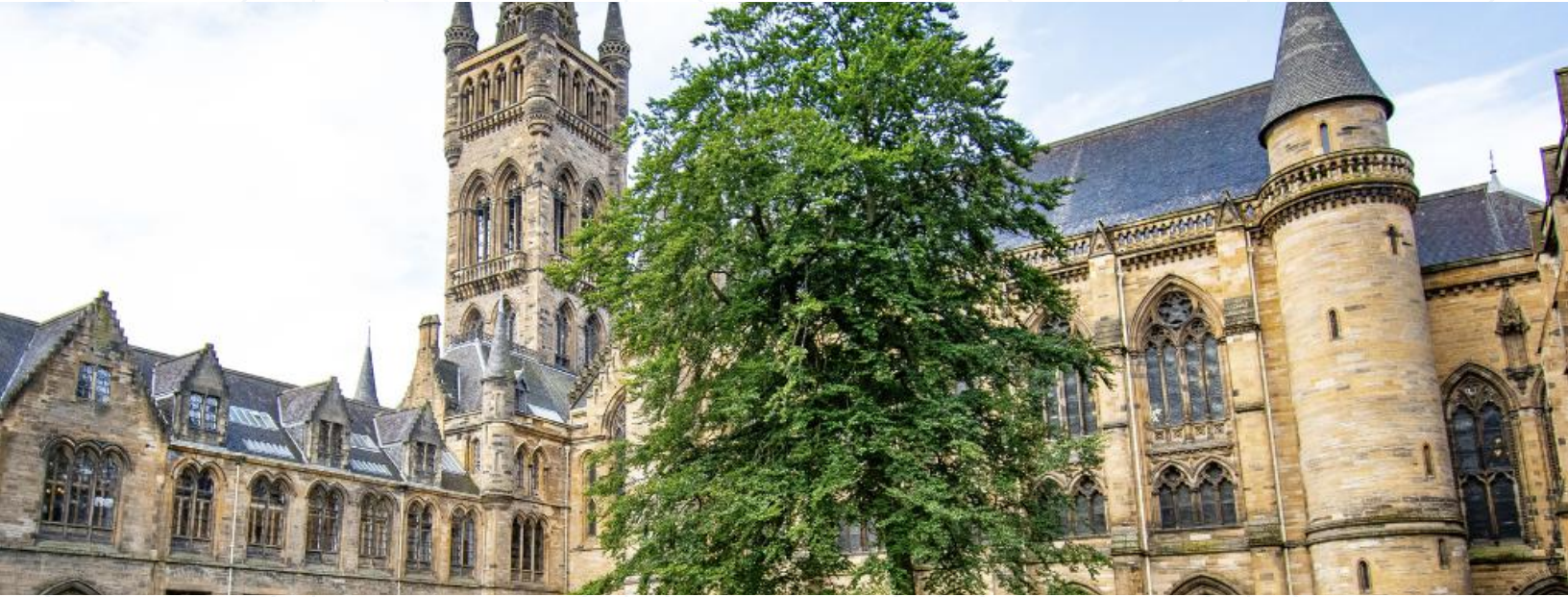
Better light creates better experiences for customers while consuming less energy, proving sustainability and business success go hand in hand.





IVY LEAGUE SUSTAINABILITY

Education



Preserving history while advancing efficiency

A Northeast Ivy League university's century-old building represented both a historic treasure and an energy challenge. The university needed to modernize the electrical infrastructure while preserving the architectural integrity that makes the building an iconic landmark.

Our team provided customized LED lighting solutions and critical switchgear that transformed energy consumption while enhancing the building's historic features. Through expert project management and carefully timed material delivery, we helped blend 21st-century efficiency with 20th-century architectural grandeur.

“We proved that centuries-old architecture and cutting-edge efficiency aren't mutually exclusive.”

Today, students and faculty experience the building's historic atmosphere enhanced by intelligent lighting that consumes a fraction of the energy, demonstrating how preservation and sustainability can work in harmony.



NEXT-GEN EV MANUFACTURING

Manufacturing

When supply chains faltered worldwide, our expertise kept the future of electric vehicle manufacturing on schedule, turning procurement challenges into opportunities for innovation.

Powering the electric vehicle revolution

The ambitious timeline for a cutting-edge electric vehicle manufacturing plant faced a critical threat: global supply chain disruptions threatened to delay construction of this sustainability-focused facility. With specialized components and materials in short supply worldwide, the project's momentum hung in the balance.



Turtle stepped in with innovative procurement strategies and logistical expertise, ensuring on-demand delivery of essential materials like cable tray and medium- and low-voltage cables. Our team's ability to navigate supply chain challenges and implement creative sourcing solutions kept construction moving forward despite the obstacles.

Today, this manufacturing facility stands as a cornerstone of America's electric vehicle production capacity, transforming how vehicles are built while reducing the environmental impact of both the manufacturing process and the end products. Our behind-the-scenes role helped accelerate the transition to sustainable transportation through infrastructure that enables innovation.



ASSISTED LIVING MODERNIZATION

Hospitals & Healthcare



Creating safer, more efficient environments for vulnerable populations

An assisted living facility serving vulnerable populations faced aging electrical infrastructure that created both safety concerns and operational inefficiencies. The facility needed comprehensive modernization while maintaining uninterrupted service for residents who depend on reliable power for medical equipment and daily care.

Turtle provided a unified solution for lighting and switchgear systems, streamlining procurement and simplifying project management throughout the modernization process. By leveraging our vendor network and expertise, we delivered energy-efficient infrastructure improvements that enhanced both safety and operational efficiency.

The modernized facility now provides residents with improved lighting quality and enhanced safety systems while reducing operational costs. This transformation demonstrates how infrastructure improvements can directly impact the quality of care and quality of life for those who need it most.

The project spotlights in this lookbook represent more than infrastructure upgrades. They're proof of what happens when bold thinking meets grounded expertise and partnership grows beyond the project.

From multi-phase modernization efforts to emergency-ready power systems and sustainability initiatives, Turtle's role is to make the complex manageable and the ambitious achievable.

As infrastructure challenges grow in urgency and scale, our mission stays the same: support our partners in building smarter, cleaner, and more resilient systems project by project, from the ground up.

Whether you're navigating your own infrastructure transformation or simply planning ahead, we hope these stories spark new ideas for what's possible.



TURTLE



LET'S TALK ABOUT WHAT'S NEXT.

If you're working on a similar project, or planning for one in the future, our team is here to support your goals with experience, creativity, and a commitment to collaboration.

Reach out to learn how we can power your transformation or keep us in mind as a partner for your next project.

TO CONTACT US, PLEASE VISIT:

[TURTLE.COM/CONTACT-US](https://turtle.com/contact-us)

