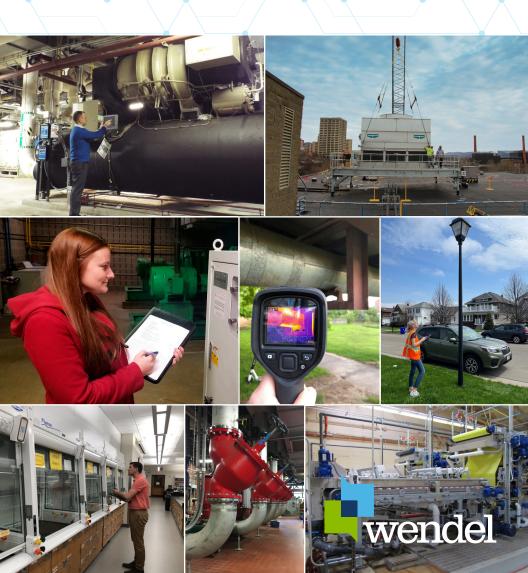


ENERGY

efficient services • solution technologies









Heating

You can achieve up to 30% utility savings by incorporating condensing boilers, boiler controls and upgraded unitary equipment.





Healthy buildings utilize approaches such as demand controlled ventilation, heat recovery, and bi-polar ionization to reduce energy cost and increase environmental benefits.





Poorly sealed buildings are uncomfortable for occupants and result in wasted energy. Sealing windows, installing door weather stripping and adding insulation will reduce energy costs.

Cooling



Cooling systems can range from simple AC units to large chiller plant networks. Energy savings are achieved through upgrading equipment, optimizing schedules and load management.

Control & Building Automation



HVAC and lighting controls are important to optimize the efficiency of building systems. Successful Building Automation Systems will provide a user friendly interface to customize the sequence of operations for simple and effective system modifications.



Central Plants

Central Plants and District loops present opportunities to manage site energy usage and leverage campus loads to further reduce costs and energy savings through distributed generation.

Steam & Hot Water Plants

- Steam Traps
- Stack Economizers
- Boiler Controls
- Combustion Air Management
- Boiler Replacements
- Pump/VFD Optimization
- Steam to Hot Water Conversion
- Decentralize Boilers
- Renewable Fuel Sources

Chiller Plants

- Chiller Plant Optimization
- Chiller Replacement
- Cooling Tower Upgrades
- Water Management/Treatment
- Variable Primary Systems
- Free Cooling Systems

Distributed Generation and Central Heat Recovery System

- PRV to Microturbine
- Heat Recovery Heat Pumps
- Combined Heat & Power System
- Tri-gen Plant

Electrification of Plants

- Heat Recovery Assessment
- Plant Expansion
- District System Assessment
- Future Technology Solutions



Water & Wastewater Systems

The systems used to produce drinkable water and to remove pollutants from wastewater are some of the most expensive assets to manage. Evolving technologies used along with energy conservation measures present opportunities to provide these critical services while reducing your energy and operational costs.

Water and wastewater system efficiency opportunities include:

WATER SYSTEMS

- Pump and Pump Station Upgrades
- Baseflow Pumps
- Mechanical Rebuilds
- Right Sizing Pumps
- Low Headloss Coatings
- Filtration System Upgrades
- Increased Filter Media Depth
- Low Water Backwashing
- Realtime Backwashing Control
- Variable Speed Drive and Motor Upgrades
- Low Headloss Valves
- Enhanced Sedimentation Facilities (Tube Settlers)
- Chemical Addition Optimization
- Energy Management and SCADA Systems
- Residual Management Upgrades
- Water Meter Upgrades, Automation and Leak Detection

WASTEWATER SYSTEMS

- Blower Upgrades
- Turbo Blowers
- Hybrid Blowers
- Baseflow Blowers
- Right Sizing Blowers
- Aeration System Upgrades
- Dissolved Oxygen Control Systems
- Headworks Upgrades
- Level Controlled Bar Screens
- Vortex Grit Removal Systems
- Anaerobic and Aerobic Digester Upgrades
- Combined Heat and Power Systems
- Microturbine Power Generation
- Solids Handling Upgrades
- Sludge Thickening Upgrades
- Dewatering Upgrades
- Sludge Drying Upgrades
- Polymer System Upgrades
- Clarifier and Return Activated Sludge Upgrades







Renewables

Energy generated from renewable sources results in a cleaner and healthier environment. The combination of energy conservation with renewable technologies provides a holistic solution to sustainable goals.

- Solar Electric (Photovoltaic)
- Solar Thermal
- Geothermal
- Combined Heat & Power
- Biomass
- Wind
- Fuel Cell
- Battery Storage

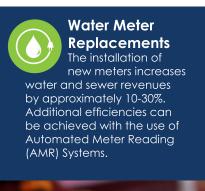
Submetering

Data measured is data managed.

Submetering provides increased visibility into facility operations and allows for real time identification of equipment operational issues. Quickly addressing these issues minimizes wasted energy and maintains building comfort.

Submeters can be installed on a variety of systems such as:

- Electric
- Natural Gas
- Propane
- Fuel Oil
- Hot Water
- Steam
- Chilled Water
- Water
- Condensate



Alternative Fuels for Vehicles

Wendel has decades of experience in the assessment of alternative fuels for vehicles. Our services include developing feasibility studies, comprehensive master plans, and detailed designs for electric vehicle charging, CNG fueling, and hydrogen fueling. Our feasibility studies, master plans, and designs also include upgrades to maintenance and storage facilities to accommodate these alternative fuels.



Alternative Fuel Advantages:



Save mone



Preserve the environmen

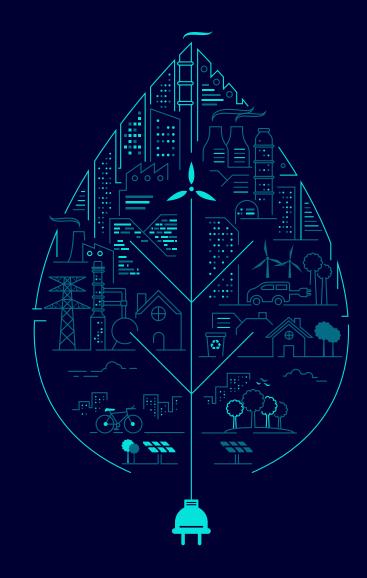


Available funding



Less Green House Gas Emissio





SOLUTIONS

Wendel has the expertise to establish a personalized Climate Action Plan and a proven track record of reducing energy and operational costs by 20-40%.

The Wendel Advantage

There are many advantages when working with Wendel, below are a sample of the perks you get when working with us!



"Open Book" Philosophy

Cost & fee transparency through the life cycle of a project. No hidden fees or mark ups.



Lower Overhead

Our consulting company structure with lower overheads results in lower costs. **Lower costs = more project.**



Competitive Construction Costs

Wendel obtains competitive material & labor pricing from qualified subcontractors, to drive the project cost down.



Multiple Financing Options

Wendel explores multiple financing options with fiscal advisors to select the most advantageous financing programs including identifying and obtaining energy related rebates, grants, incentives, and low interest loans that reduce project costs for our customers.



Manufacturer Neutrality & No Conflict of Interest

Wendel is not affiliated with a manufacturer and therefore can recommend equipment that best meets client needs.



Professionally Led Team

Industry professionals lead the project - Certified Energy Managers (CEM) and Professional Engineers (PE). Our ethics have the owner's best interest in mind.



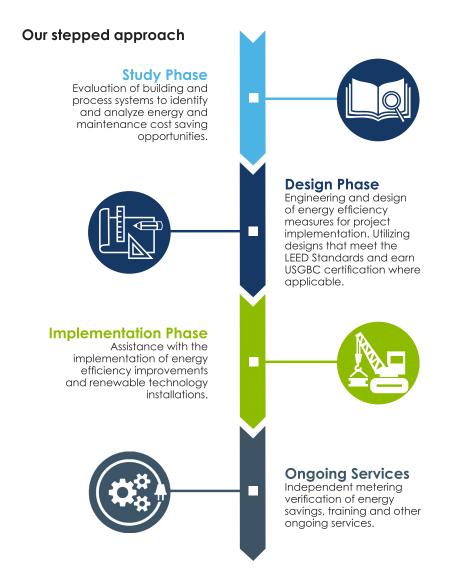
Owner maintains full control of the project

Our interactive & transparent business philosophy ensures that the owner is directly involved in each phase of the project



Accountability

Wendel maintains a consistent leadership team throughout the project. Our team, including Wendel owners, are responsible for the project's overall success. The expertise for these activities lies within Wendel's own employees.



How much can you save?

Our energy team is here to help you save money. The services we offer deliver long-term value by helping you do more with less.

With a variety of specialty services and staff, we are able to collaborate with you to create a custom project plan that maximizes your annual savings.



Design Phase

Wendel performs all design work in-house, following standard design processes, consistent with our ISO 9001:2015 Certification

We listen.

Wendel will efficiently integrate any input from staff. This effort will include a design coordination/kickoff meeting to confirm project scope, design standards, construction contracts, schedules and estimated costs. The overall objective will be to avoid duplicate efforts, reduce potential conflict and reduce overall costs.

Keeping costs down.

Our approach reduces the project cost by detailing subcontractor's scope of work and leveraging competitive pricing. Wendel will ensure the design is in compliance with all applicable state, local and regulatory agency codes.

Our field engineers will work with the design team to ensure the selected improvements proposed for the facilities will provide systems that can be operated and maintained efficiently and effectively by personnel.







Sustainable Design

It is our moral responsibility to practice and promote sustainability. This is reflected in our mission to advance the quality of life in our communities. With every project, we take into account the effects our design choices might have on the environment and we take measures to ensure our work elevates and rejuvenates communities. We share a mission of following sustainable principles to meet our clients' needs and preserve the integrity of the environment for future generations.



Ongoing Services



Project Commissioning

In order for energy projects to be successful, they must be commissioned to operate correctly. Without this step, the energy savings may not materialize. We have found that early integration of the commissioning team into the design and construction process, proper scheduling of commissioning elements during construction and timely communication are key components to a well commissioned project.



Scheduled Preventative Maintenance

It's a best practice to provide scheduled preventative maintenance of the systems installed by the project. We will work with the client to contract and provide these services. Some of the factors to consider in evaluating maintenance service contract options include complexity of the proposed equipment/technology, the client's in-house maintenance capabilities and existing service maintenance contracts.



Training of On Site Staff

Training is conducted by factory-trained representatives. Hands-on training occurs during the start-up and commissioning of the systems.

Proper commissioning and training of the maintenance staff is extremely important to keep both operational and energy costs optimized.



Monitoring of Energy Use/ Measurement and Verification

An activity called Measurement and Verification (M&V) is performed to ensure the project is achieving the guaranteed annual energy savings. The data is used to generate M&V reports to document annual energy savings.

The M&V plan will clearly present engineering formulas that will be used to account for such factors as weather, occupancy, and facility use changes. Transparency is a key attribute of Wendel's process. Wendel will perform regular inspections and collect necessary consumption data for purposes of making comparisons to the Energy Baseline and calculating the actual energy savings realized each year.



Analytic Systems

Building analytics, can be a powerful tool for engineering and facilities teams to assist in improving and maintaining their building systems.

Analytics can quickly enhance the client's ability to take corrective action in a timely manner. Wendel has helped clients effectively onboard analytics software, develop proper workflow processes, implement corrective actions, and verify completed work. As part of the analytics engagement, detailed reports are developed showing progress with each completed issue and its energy impact on the facility. These reports have been accepted by utilities as justification for obtaining incentives.

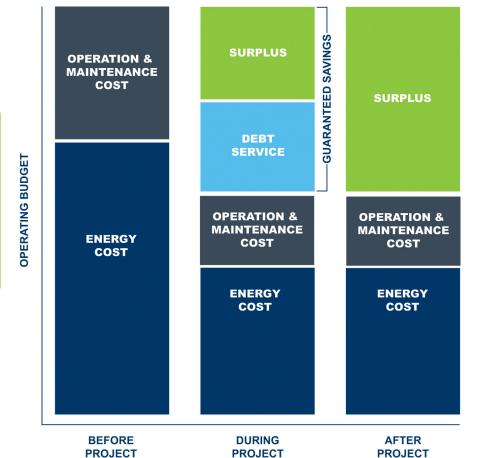


A Unique Approach to Saving Money and Implementing Your Project

Energy Performance Contract (EPC)

Our Professionally Led approach to energy savings performance contacting puts you in charge of your project. Our team of experts guide you through a stepped-approach, but you have the control over how quickly and when your project advances.

Our unique open book pricing shows our customers fees they may not see with other ESCOs. Our true open book approach includes; Fully transparent construction costs including competitively priced materials and labor, subcontractor's invoices and prevailing wages and certified payroll; Full disclosure of ESCO fees; Transparent project contingency.







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