



# Action Plan to Reduce Greenhouse Gas Emissions



## What is Local Law 97 and who does it affect?

Local Law 97 is challenging owners, facility managers, architects, and engineers to develop creative solutions to meet the Law's ambitious greenhouse gas emissions reduction requirements. All buildings in New York City that are 25,000 sq. feet or larger, two or more buildings on the same tax lot that together exceed 50,000 sq. feet and two or more condominium buildings governed by the same board of managers that together exceed 50,000 sq. feet are covered under the law.

Affected buildings will need to meet new energy efficiency and greenhouse gas emissions limits by 2024 with updated limits implemented in 2030. The goal is to reduce greenhouse gas emissions produced by the identified buildings by 40% by 2030 and 80% by 2050.

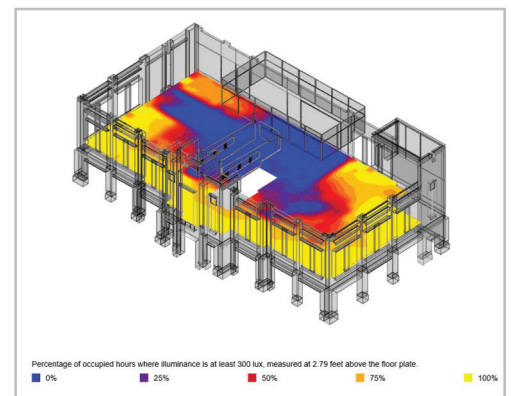
The path to successfully meeting these requirements starts with an experienced team who has a history of developing creative energy conservation strategies that yield actionable plans and achieve real results.

## Three Potential Pathways, In Combination Or Individually, To Reduce Greenhouse Gas Emissions

### 1 DEEP ENERGY RETROFITS

Our approach to Deep Energy Retrofits entails first developing accurate simulations of the base case operating conditions then developing detailed written scopes of work that describe the full impact of proposed changes. We understand that the cost of the recommendations need to be justified by their energy and operational savings, and our scopes need to be driven by a balance of savings, physical constraints, and occupant comfort/safety.

- Step 1 | Data Collection, Pre-Inspection Survey Utility Baseline & Rates
- Step 2 | Site Visit and Data Analysis
- Step 3 | Base Case Models
- Step 4 | Calibrate & Validate Base Case
- Step 5 | Simulating Energy Conservation Measures (ECMs)
- Step 6 | ECM Development Phase
- Step 7 | ECM Construction Cost Estimating
- Step 8 | ASHRAE Level 3 Audit Report Development, Review & Finalization
- Step 9 | Deep Energy Retrofit (DER) Scope of Work & Technical Report Preparation
- Step 10 | DER Technical Report



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## 2 ELECTRIFICATION

Many buildings are significantly above emissions limits and will require comprehensive retrofits or alternate compliance by 2030. Emissions limits and compliance requirements begin in 2024. Implementing energy management strategies for your properties doesn't happen overnight.

**The time to plan is now!**

Renewable energy credits and/or emissions offsets like electrification provide the flexibility to comply with upcoming limits and regulations!

### Electrification benefits:

- Shifting source energy from fossil fuels to electric
- Leverage renewable energy generation
- Leverage carbon reductions in the grid
- Creates a path to transformative changes
- Creates a path to carbon neutrality



### WENDEL'S PHASED APPROACH:

- Phase 1 - Heat Recovery Assessment
- Phase 2 - Expansion
- Phase 3 - District System Assessment
- Phase 4 - Future Technology solutions

Critical Elements: The Load, The Plant & The Utility | Electrification Specific Plans focus on the Plant but include systems and strategies which impact both the load & the utility

## 3 ANALYTICS

### WENDEL'S UNIQUE ENERGY OPTIMIZATION SERVICES

Wendel's approach starts with a dedicated engineer assigned to work directly with a university's facilities management team. Utilizing analytics, we can analyze all buildings on a campus and prioritize which diagnostics should be converted to internal work orders, contracted projects, or capital upgrades. Wendel has worked with universities to develop multi-step approaches unique to each institution to maximize the impact of the diagnostic tool.

### REAL-LIFE EXAMPLE:

STEP 1: TRIAGE AND CLASSIFY ISSUES

STEP 2: PRIORITIZE AND CREATE TEAM ACTIONS

STEP 3: VERIFY COMPLETED ACTIONS

STEP 4: UTILITY REBATES ANALYSIS

*“Our services help our clients turn analytics into actions with real and measurable results.”*

### Climate Mobilization Act: Compliance Timeline:

