

# Sustainability - Energy Design and Management Guideline

Finalized Revision

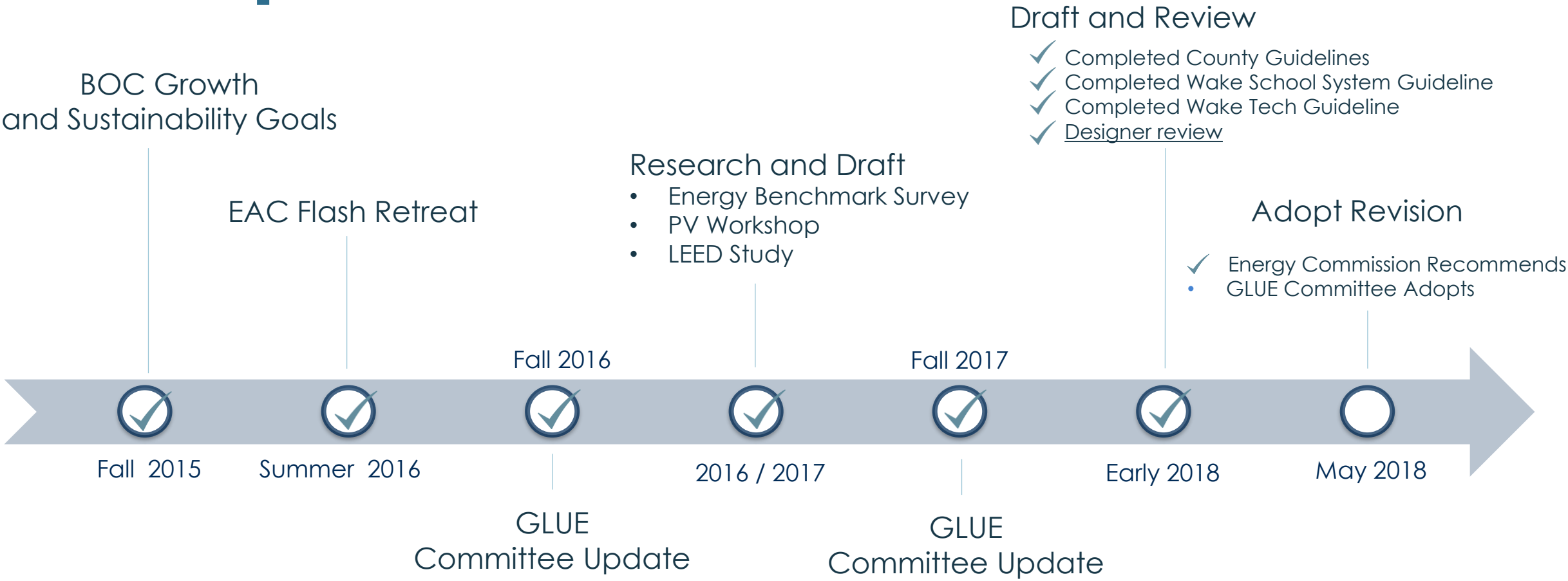


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# Completion Timeline



# 2018 Energy Guideline



# Key Takeaways

1. Align the Energy Review Process to the Design Process
  - Minimizes design cost
2. Validate and Improve Building Performance Targets
  - Facilitates early Energy Commission input
  - Aligns building efficiency target to LEED – Minimum 14% better than code
3. Define Sustainable, Efficient Design Elements
  - Uses methodology that works for all building types
  - Ensures that design incorporates sustainable elements
4. Establish a Renewable Energy Position
  - Consideration of greenhouse gas in the evaluation process
  - **Solar Ready** – all new construction will be solar ready
5. Develop an Emerging Technology Evaluation Process
  - Considers renewables early and throughout in design
  - Incorporates an approach to research and development and new technologies

# Wake 3 - Partners



Governed Separately, Volunteered Participation

## Why Partner?

- Public Accountability and Transparency
- All compete for Wake County dollars
- Collectively over 30 Million square feet
  - Large Utility Budgets
  - Consume natural resources

## Wake<sup>3</sup> Commitment

- Assemble annually
- Report energy consumption metrics
- Share and Leverage R&D

# Design Commonalities

Custom Building Performance Target

Senate Bill 668

Sustainable Strategies

Presentations to an advisory/Review Committee

Energy Model Required in Design

Life Cycle Cost Analysis

Submetering

Solar Ready Buildings

Emerging Technology Evaluation Process

Commissioning Required for New Construction

Design Reporting Forms



# Management Commonalities

			
Annual Meeting	●	●	●
Annual Energy Performance Metric	●	●	●
Utility Data Storage and Analysis	●	●	●
Energy Conservation Plan/Policy	●		●
Energy Conservation Measure – Capital Projects	●	●	●
Energy Service Performance Contracting		●	
Building Management Systems	●	●	●

# Wake County Board of Commissioners

Guideline is in response to board action:

- Board's Energy Policy
- Board's Endorsement Paris Climate Agreement
- Board Initiative to Update Guideline



# Wake County Energy Conservation and Management Policy

Adopted by Board of Commissioners 1992

## Policy Authorizes and Requires:

- Energy Conservation programs
- Revision of Energy Design Guidelines
- Energy Guideline in designer contracts
- Use and collection of energy data in operations and utility budget forecasting

# Wake County Paris Climate Agreement Resolution

Adopted by Board of Commissioners June 5, 2017

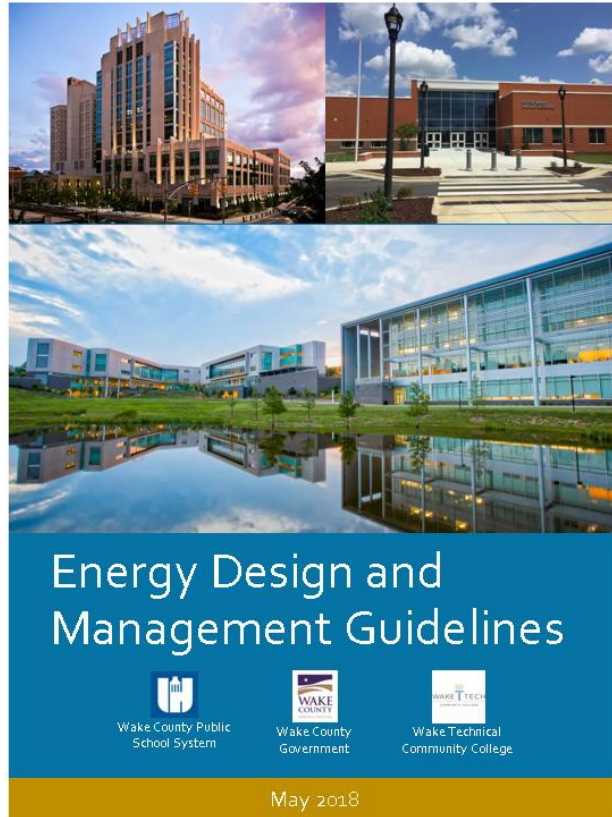
## Endorses:

- Goals of Paris Climate Agreement

## Commits County Operations:

- Continue efforts toward sustainability and reduction of greenhouse gas...

# Requested Action

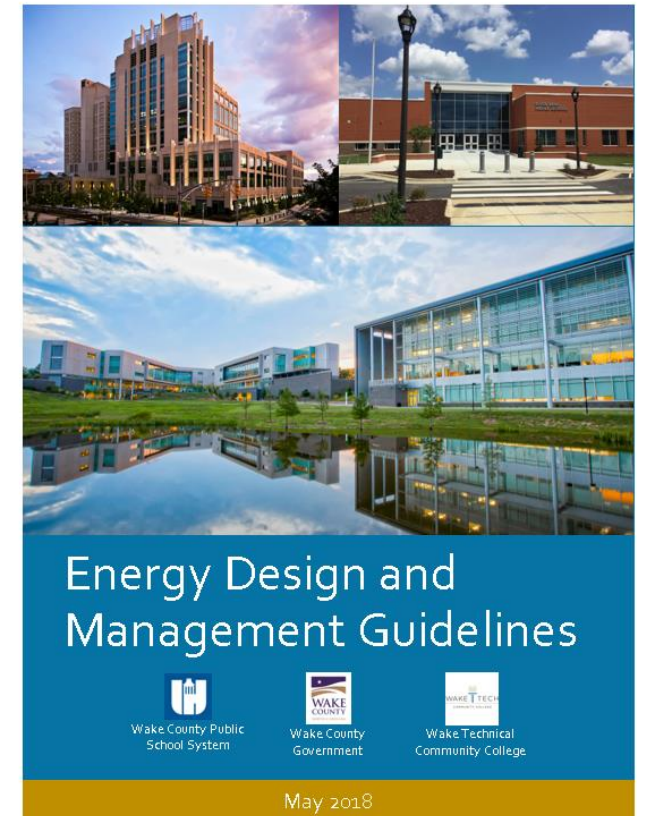


*Request consensus for Adoption of the Energy Design and Management Guideline effective May 1, 2018.*

# Next Steps

May 1<sup>st</sup>, 2018

1. Update construction design contracts
2. Schedule Annual Wake<sup>3</sup> Meeting
3. Report Annual Energy Metrics



# Completion Timeline

