

THE  
**CADMUS**  
GROUP, INC.

# EPA Webinar Series on EM&V

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# The New and The Old: Old Paradigm

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## Retrospective Assessments

- The evaluator comes in on the tail end of the project.
- Looks back.
- Often looks for things that were not done right.
- Often needed data were never collected.

# The New and The Old: New Paradigm

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## Real Time

The evaluator is in on the project from the beginning. The evaluation and the implementation team work together.

Great advantages:

- The evaluator is no longer the “auditor.”
- Great for collecting the right data at the time.
- Course corrections in real time.

# Guiding Principles/Transparency

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- Guidelines?
- Protocols?
- Enough to be understood?
- Depends on evaluation utilization: cost recovery, improving design, planning, emission calculations
- At minimum: limitations of methods and results

## *Important Issues to Consider and Resolve*

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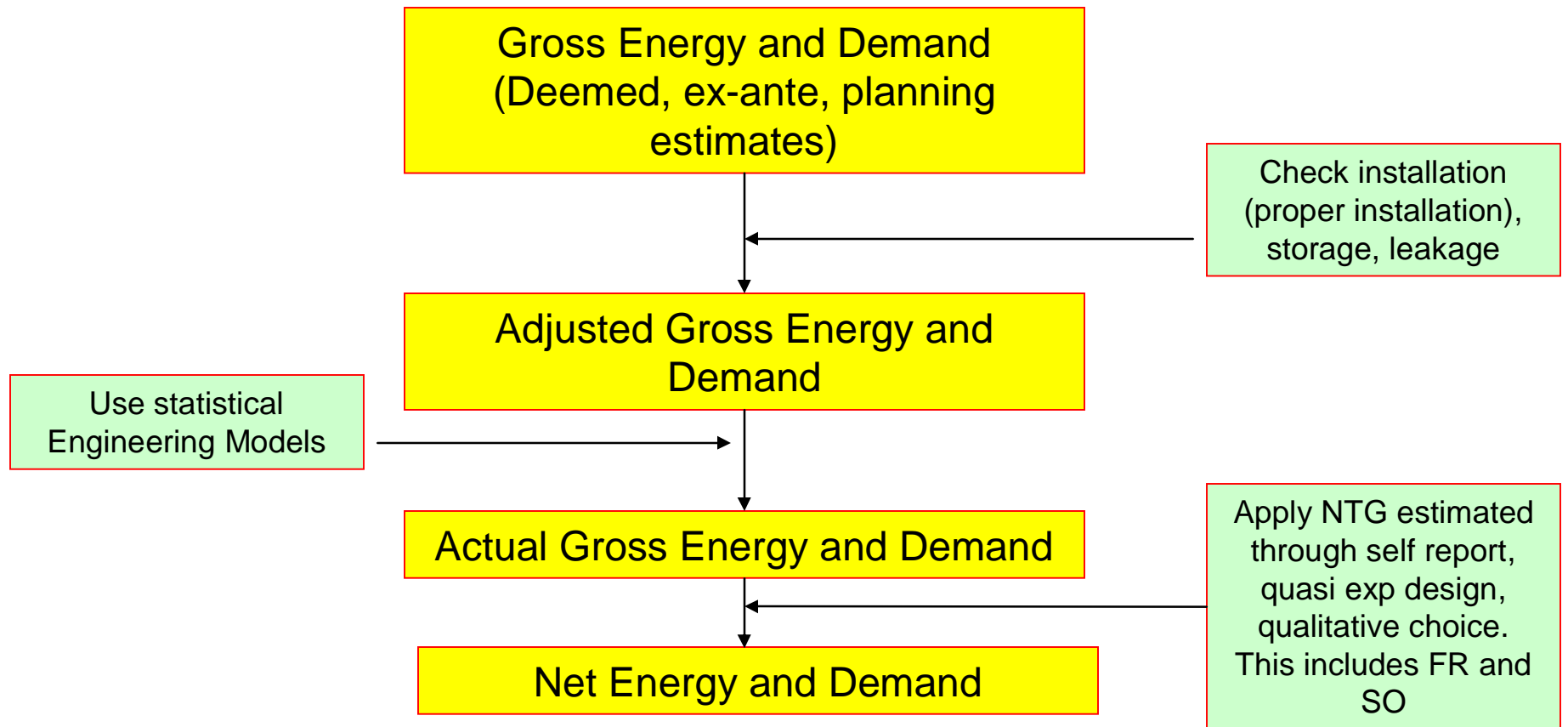
- Cost/Budget. EM&V between 3% and 5%
- Large programs: 3% is sufficient
- Small programs: 3% may not be enough
- Restricting budget to x% for each year can be problematic for early years

# *Important Issues to Consider and Resolve*

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- Clear Definition of terms
  - Make sure that all agree on meaning of
    - Ex-ante
    - Planning Estimates
    - Deemed Values
    - Adjusted Gross
    - Net Savings

# Important Issues to Consider and Resolve



# *Important Issues to Consider and Resolve*

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- Savings metrics
  - How will statutory goals be measured?
  - Do you use gross or net savings?
  - Net Savings used in retrospective or prospective manner?
- Cost Effectiveness
  - Which Test?
  - At what level?
  - What discount rate?
  - Carbon?
  - Jobs?

# *Important Issues to Consider and Resolve*

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- Annual, Annualized, and Lifetime Savings
  - How to treat time measures installed?
  - Storage Rates?
- Confidence and Precision
  - What values?
  - At what level?
- TRM
  - Who prepares? Who adjusts?
  - All utilities follow?
  - Should reported savings use TRM values? Adjusted TRM?

# *Important Issues to Consider and Resolve*

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- **Baseline**
  - Federal/State minimum standards?
  - Current Market Practice?
  - Early replacement versus end of useful life?
  - Baseline for upstream programs?
- **Data Tracking**
  - Implementers use their own?
  - One vs several tracking systems?

## *Important Issues to Consider and Resolve*

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- Do not reinvent the wheel
  - TRM
  - Survey instruments
  - Ex-ante savings
  - Expected useful lives
  - EM&V methods
  - Tracking systems

## *Contact Information*

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