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Net Vs. Gross Savings

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Defining Gross Savings

- Market-driven installation:
  - Diff between efficiency measure & standard measure
    - e.g., E-Star washer vs. one meeting minimum fed standard
    - e.g., E-Star new home vs. one built to code
- Discretionary retrofit
  - Diff between new condition and old condition
    - e.g., before and after attic insulation added

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Defining Net Savings

- Net savings = Gross savings adjusted for:
  - Free riders
    - the % who would have installed the measure w/o the program
      - ✓ Full free rider
      - ✓ Partial free rider
  - Spillover
    - Other savings indirectly caused by the program
      - ✓ Participant spillover
      - ✓ Non-participant spillover
  - Net-to-gross ratio
    - Sometimes a single value integrating free ridership & spillover

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Reasons to care about Net

- Environmental: need to maximize savings
- Economic: need program $ spent wisely
- Regulatory: need rewards to be for real savings

The danger from inadequate attention on net: *I have seen program administrators either propose efficiency programs likely to have high free ridership or intentionally pursue enrollment of free riders in their programs because it was easier to meet regulator goals and/or earn shareholder incentives for performance given constrained budgets.*

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Concerns about focus on Net Savings

- Harder to deal w/attribution (for free ridership and spillover)
  - More players simultaneously promoting efficiency
  - Fewer "comparison groups" of regions w/o programs
- Studies can be very expensive
  - ...and evaluation budgets are limited
  - ...and there are so many other evaluation priorities
- Applicability of results is often short-lived – hard to keep up
  - Market conditions changing ever-more quickly
  - So are program designs (as they should be, to adapt to markets)
- Can create counter-productive incentives
  - over-emphasis on widgets and rebates - if spillover ignored
  - over-emphasis on short-term – if focus is on just this year's impact

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Key questions

- Is this an "all-or-nothing" proposition?
  - ...or can we use both, just in different applications/conditions?
- Can we discourage free ridership w/o focus on net? How?
- Can we focus on net w/o undue cost or attention? How?

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Now on to the *real* experts…