

DR/EE Synergies: DR as a Gateway to Energy Efficiency

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10/28/08

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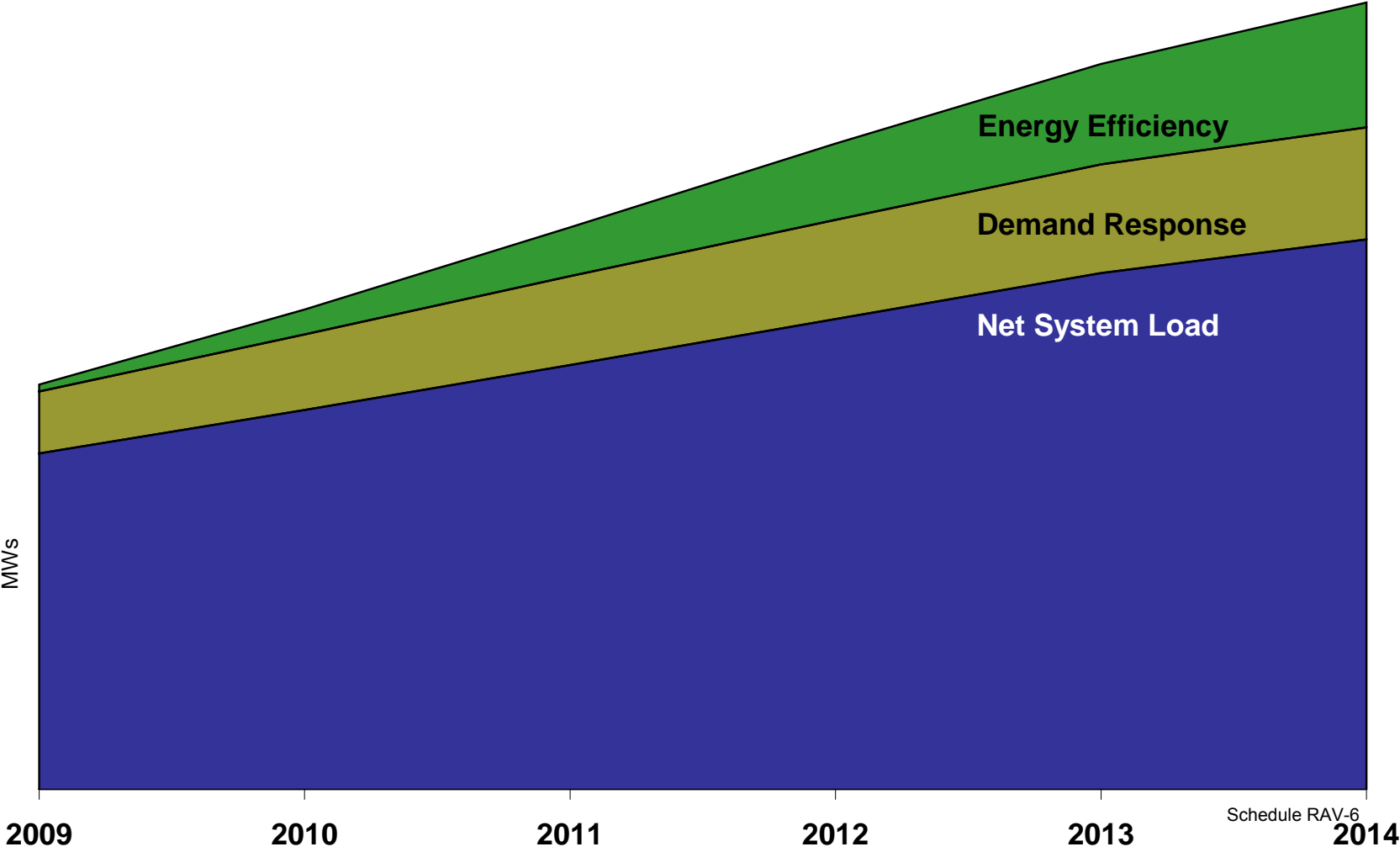


KCP&L's Commitment to Sustainable Supply



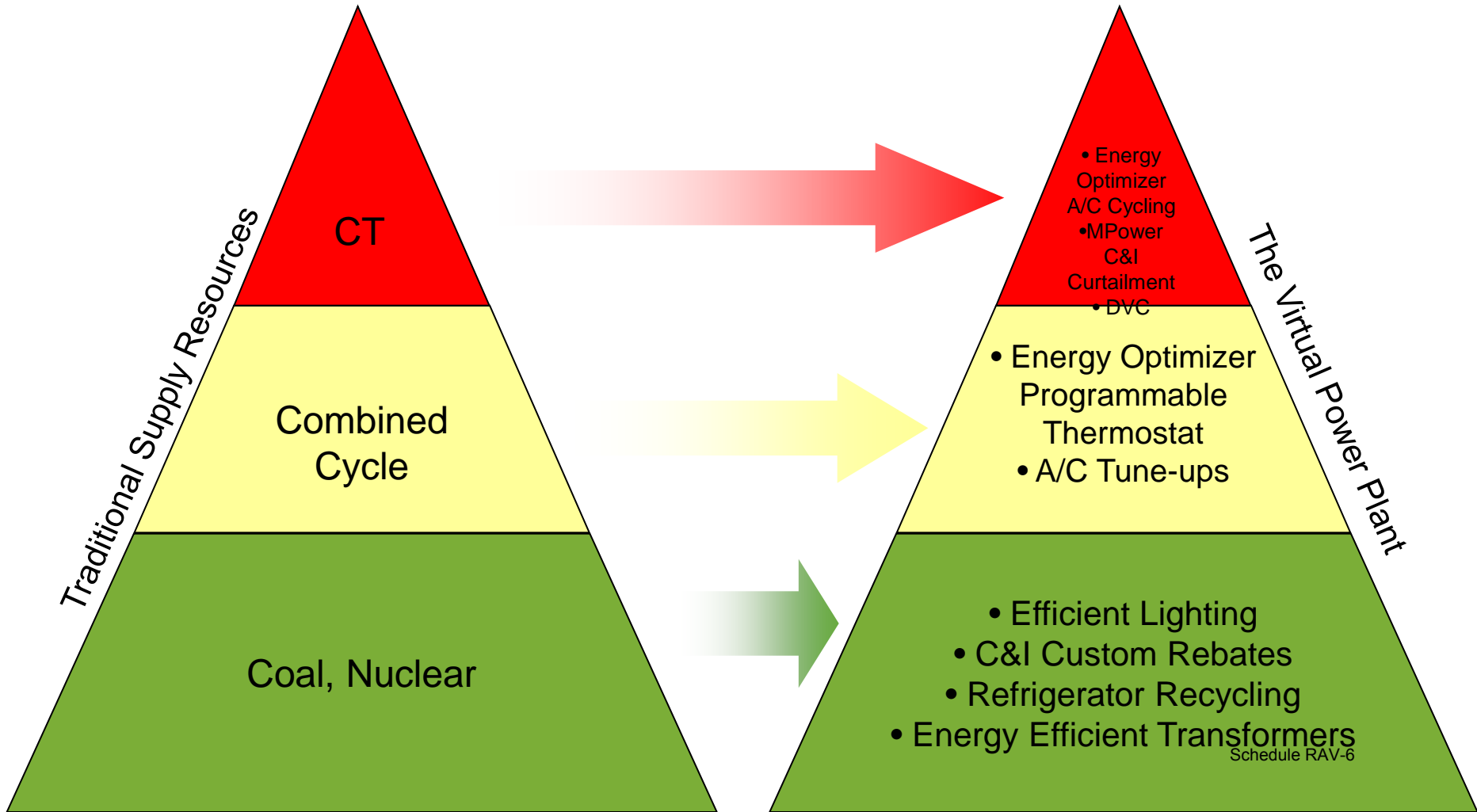
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DR & EE as a Real Supply Resource



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DR + EE + Smart Grid = Virtual Power Plant



DR as the “Gateway” Measure



- DR benefits are immediate and substantial
- Energy efficiency benefits accrue over time and are harder to recognize
- “Front-line” decision makers recognize value of DR
- Easy win for utility and customer
- DR provides capital for energy efficiency projects

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Examples

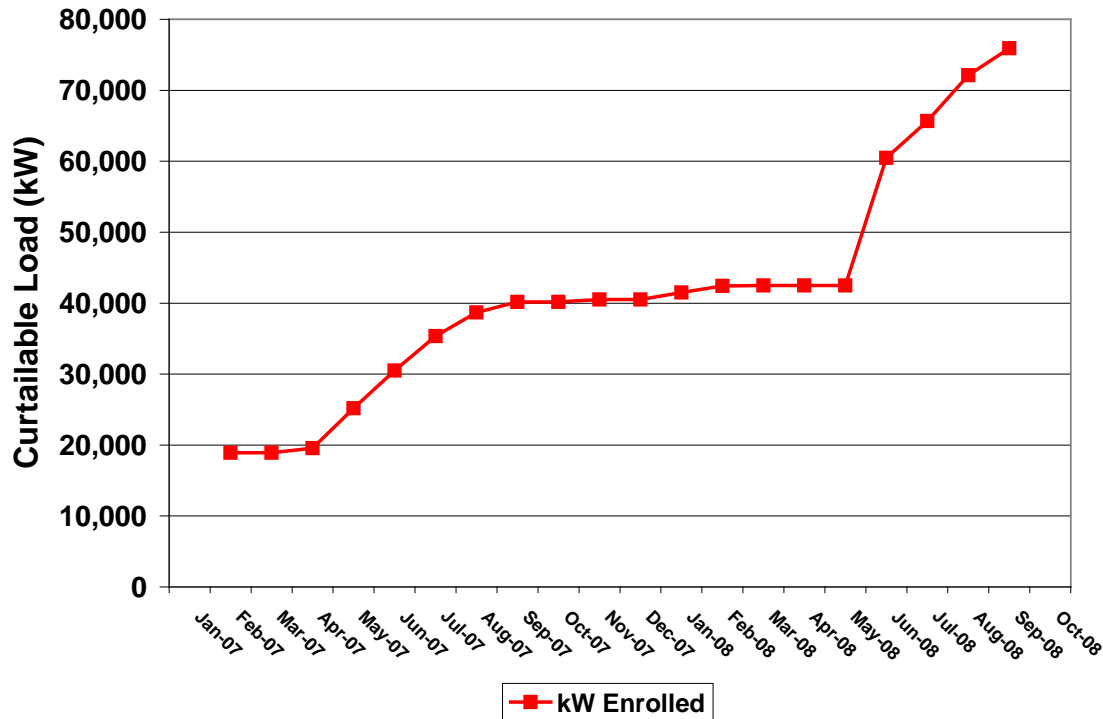
- Grocery chain uses DR to fund lighting controls
 - 21-store chain
 - Installed “night-mode” switch in each store
 - Controls 50% of lighting load
 - Provides means for curtailing
 - Provides year-round energy efficiency savings
- Grain mill audit leads to DR and EE opportunities
 - Audit revealed easy opportunity for DR participation
 - Once in DR program, completed lighting retrofit
- Telecom company turns idle assets into DR dollars and lighting retrofit
 - 12 MW of backup generation sitting idle
 - DR provides opportunities to test generators under load
 - DR provides dollars for 2009 lighting retrofit

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KCP&L's View/Experience

- Because it is such a natural lead-in to EE, DR efforts should be “turbo-charged”
 - Aggregators
 - Infrastructure
 - Get as many customers in as quickly as possible, to start laying groundwork for energy efficiency

KCP&L MPower Participation Growth

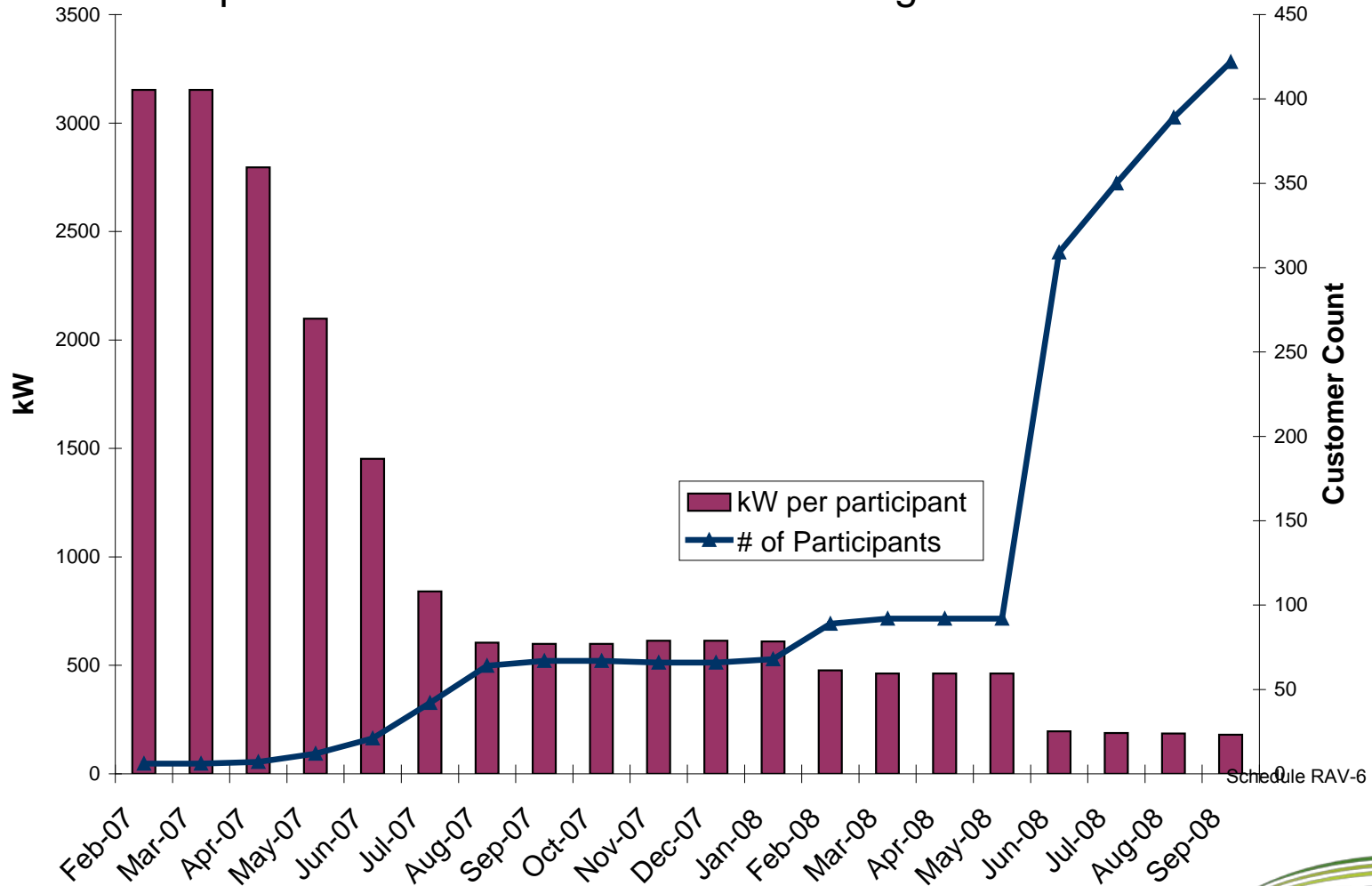


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KCP&L's View/Experience



...But...beware: the “turbo-charged” approach presents a whole new set of challenges...



Future: How do we achieve full DR/EE integration?



- Third parties and channel partners
 - Energy Curtailment Specialists – Delivering MWs **and MWhs**
 - Small commercial market – Deliver max value on **every** customer contact
 - HVAC Contractors – Delivering Energy Optimizer PCT program **in partnership** with Honeywell
- Building internal capabilities
 - As markets mature, they become less economical to serve
 - Building an internal sales capability allows utility to serve the mature market while entering new markets
- Technology
 - Commercial market – Real-time data and automation
 - Residential market – DR technologies enable price response and EE

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Future: How do we achieve full DR/EE integration?



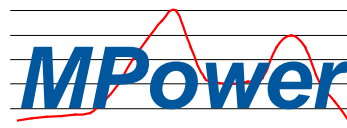
Close the gap on the mid-size commercial DR market...

Large Commercial

Mid-Size Commercial

Small Commercial

Residential



Energy Optimizer

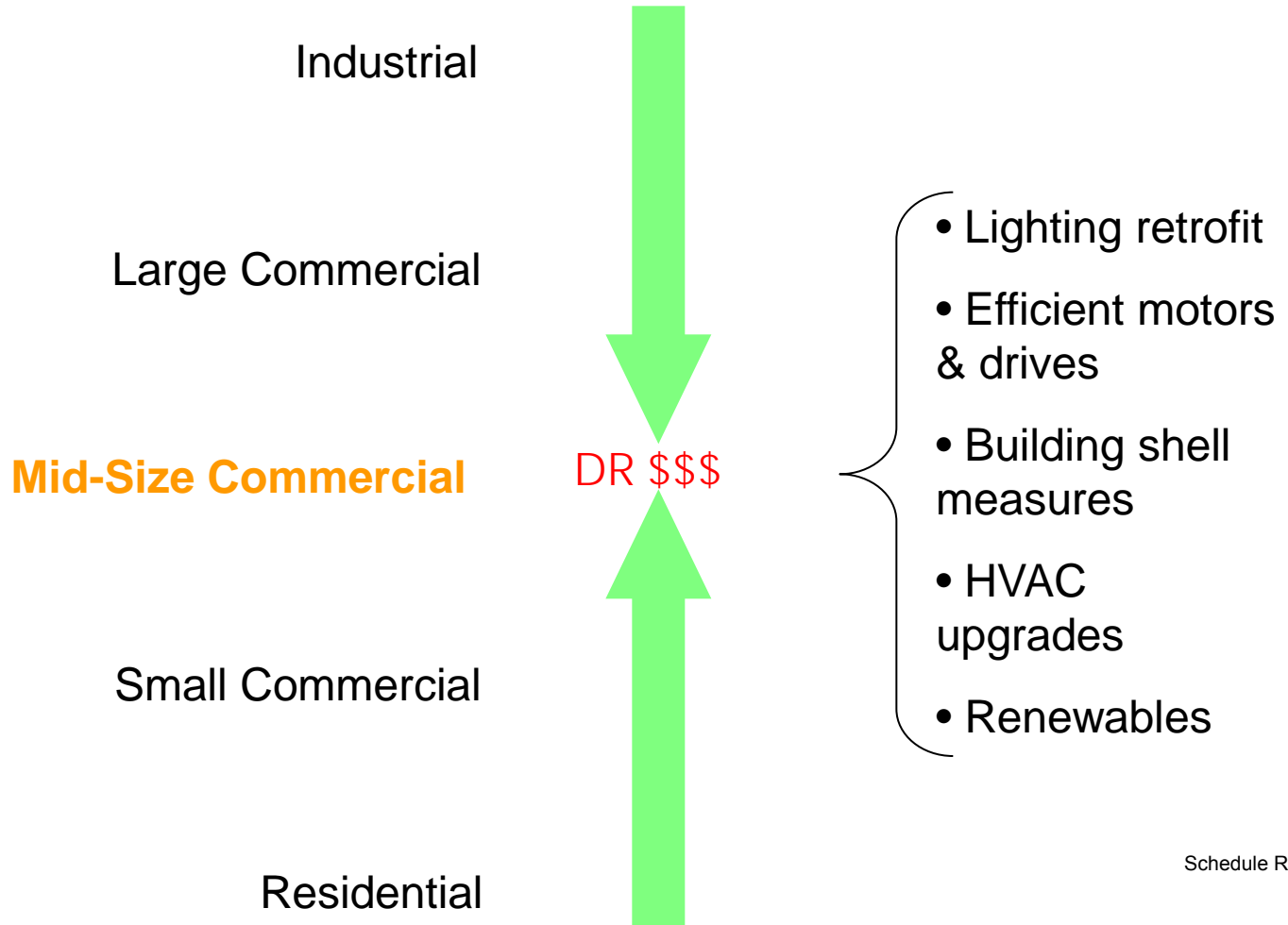


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Future: How do we achieve full DR/EE integration?



...and energy efficiency will follow...



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