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STATE AND COMMUNITY PROGRAMS


Emerging Technologies for the Next Decade

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Ground Rules

- Product/Technology – not on market now or in limited sales
- List is not inclusive, is subjective, and is not certified by DOE
- Future is time/event dependant
- Groups: 3 – 5 years, >5 years
- Residential and commercial market potential

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In 3 – 5 Years

- Household laundry
- Electric heat pump water heater
- Condensing gas water heater
- Combination condensing gas space and water heater

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In 3 – 5 Years (cont)

- SSL – LED (initial products)
- Solid state ceramic lighting
- Electrodeless lamps
- Spectrally enhanced lighting
 - Molecular radiators
 - Phosphors

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In 3 – 5 Years (cont)

- Commercial refrigeration
- Commercial rooftop unitary AC
- Window – enhanced R rating
- Other possibilities

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Greater than 5 Years

- Fuel cells
- Photovoltaic cells
- Controls, with sensors
- Storage – thermal and electrical

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Greater than 5 Years (cont)

- Heat transfer in micro-channel devices
- Nanotechnology
- SSL – LEDs (advanced products)
- SSL – OLED (lighting, PV, electro-tint)

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Greater than 5 Years (cont)

- Advanced construction – methods and materials
- Advanced windows – heat transfer, transmittance, and shading
- “Zero Energy” Buildings
- Other possibilities

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