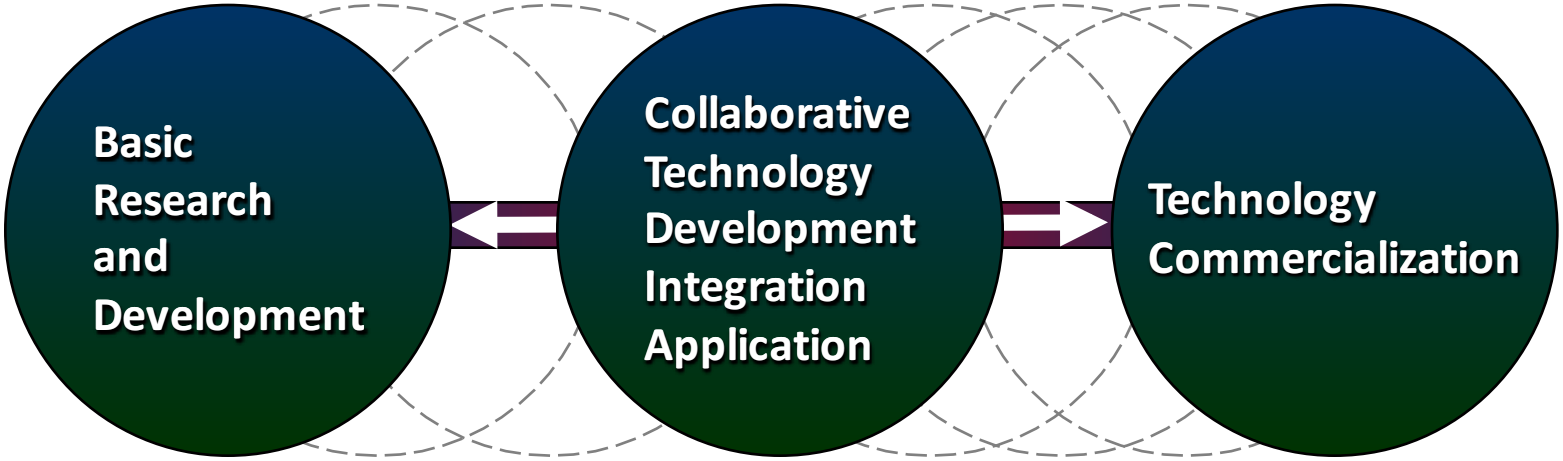
ATMOsphere AMERICA
business case
natural refrigerants
25 & 26 June - Atlanta, Georgia

EPRI

Market Opportunities Session

EPRI's Role

Help Move Technologies to the Commercialization Stage…



National Laboratories
Universities

EPRI

Suppliers
Vendors

"Technology Accelerator!"

EPRI's Interest

EPRI interest comes from utility & customer needs

Potential for Energy Efficiency savings

- Commercial refrigeration is underserved in EE programs

Legislation pushing new technology

- Changes coming – starting in refrigeration, moving elsewhere
- Need options that save energy, reduce demand

Helping customers understand their options

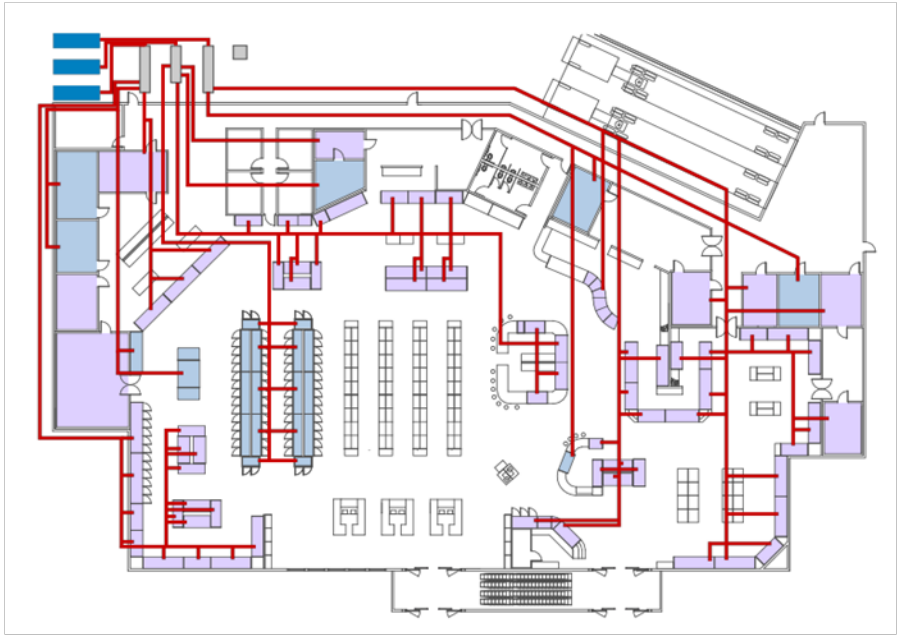
- Utilities are a go-to source for customer solutions

Environmental concerns

- Atmospheric impact in some applications doubled by refrigerant leaks

EPRI's Efforts

- Focus where the changes are happening first: Commercial Refrigeration
  - Commercial refrigeration systems are among the largest users (and leakers) of refrigerants
  - Typical supermarket or refrigerated warehouse has *thousands of pounds* of refrigerant charge
- ~6% of all commercial building energy is used for refrigeration
  - Supermarkets: 47% of all energy is refrigeration



EPRI's Efforts

Ongoing Research Projects

- Laboratory testing: CO_2 "Booster" system
  - Can CO_2 systems be designed to have equivalent efficiency in hot conditions?
- Field testing: NH_3/CO_2 system in a food processing facility
  - Real world operating conditions: replacing part of R507A refrigeration system
    - Existing system left in-place for baseline
  - Ammonia efficiency, CO_2 in occupied spaces for safety

AMERICA ATMOsphere

business case

natural refrigerants

25 & 26 June - Atlanta, Georgia

Insert text