

ACEEE Conference on Health, Environment and Energy

*Holistic Approaches for Optimizing Health
and Energy Effectiveness in Buildings*

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Need for Holistic Approach

A dearth of coherent methods exists with which to credibly assure optimal environmental performance throughout the life-span of occupied facilities

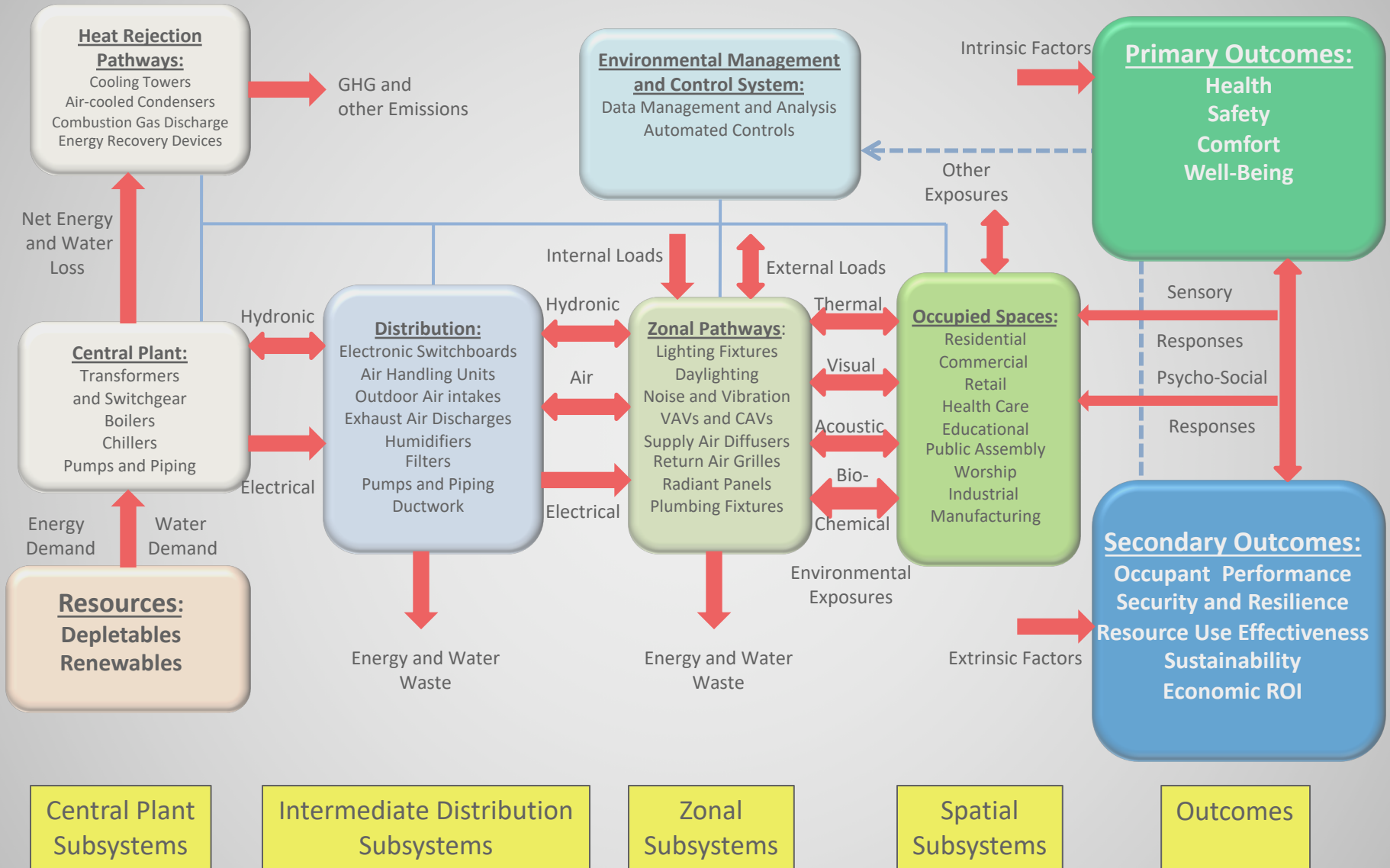
Basic causes are:

- ***Different perspectives of expected outcomes by:***
 - ***Facility users (e.g., customers, residents, care-givers, staff, management) and***
 - ***Designers and operators of facilities***
- ***Significant errors in:***
 - ***Predictive methods (i.e., modeling and simulation) during design, and***
 - ***Measurements and interpretations during operations***
- ***Lack of procedures for error and uncertainty analyses in facility performance evaluations***

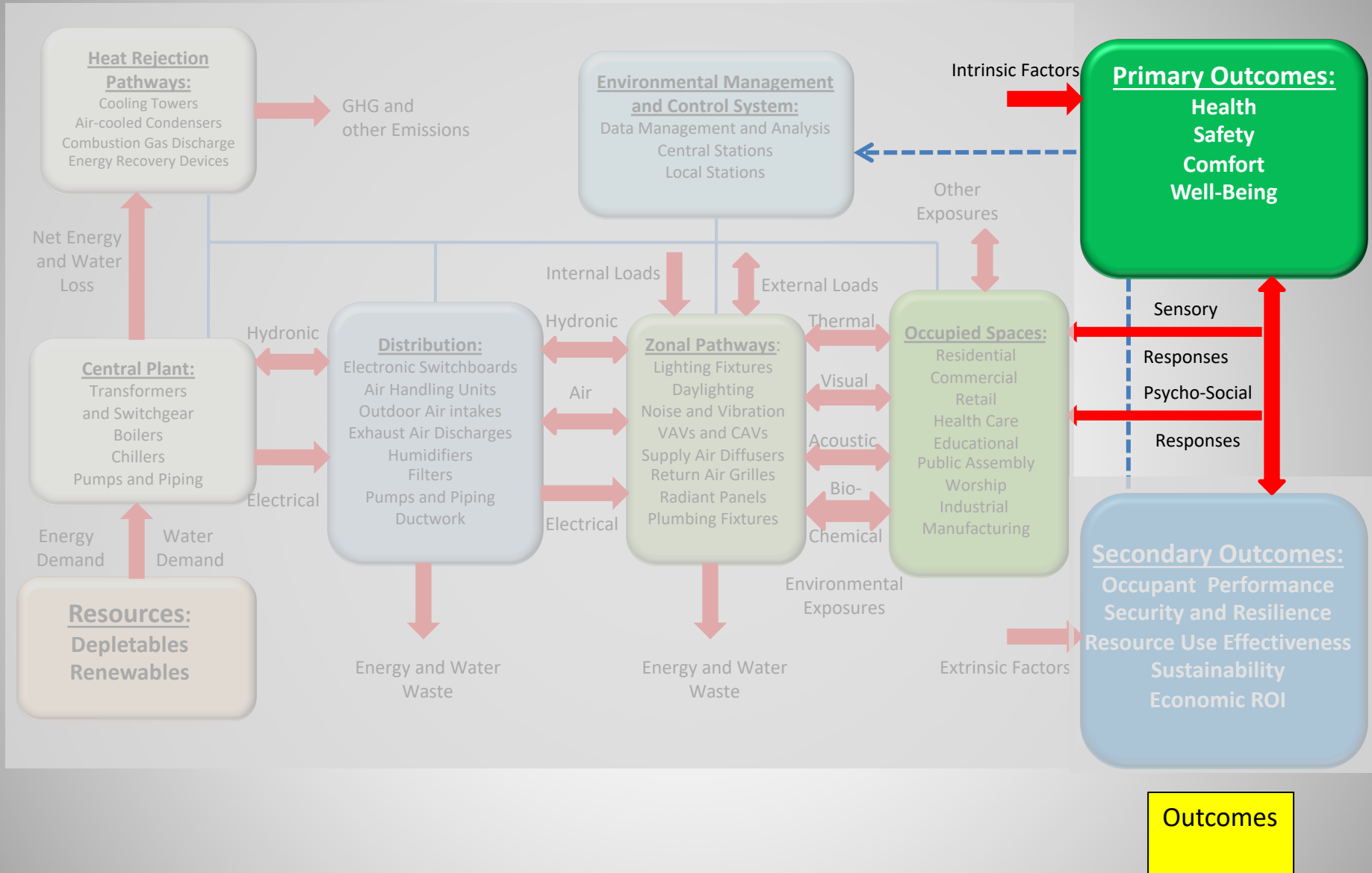
Background: Eldercare Facilities

- ***Control of environmental exposures may differentially affect the health and well-being of the aging population***
- ***Accountability for health and well-being of occupants must be based on credible data***
- ***No guidelines exist for evaluating the performance of occupied eldercare facilities***

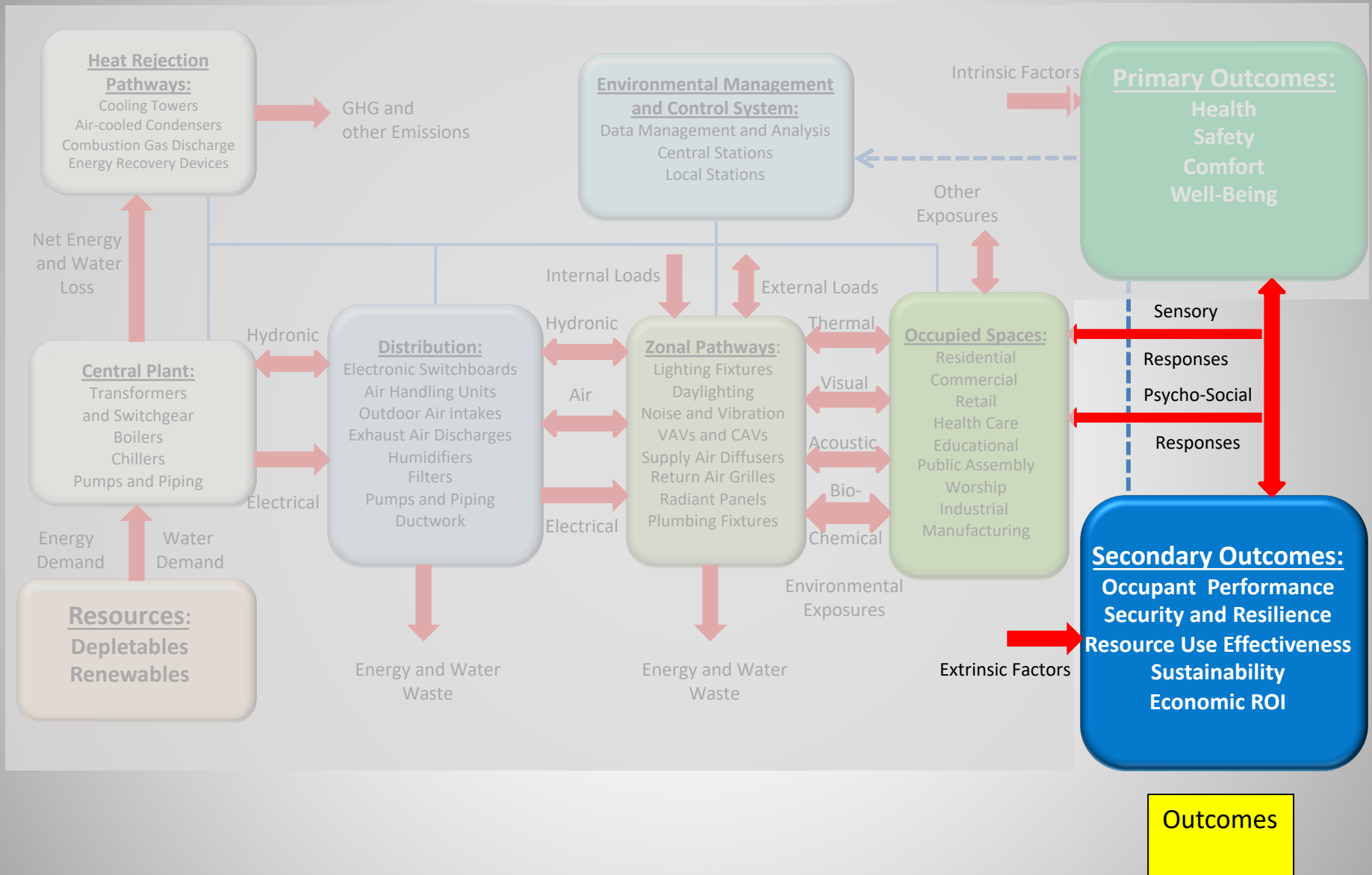
Holistic Framework for Optimizing Health and Energy Effectiveness



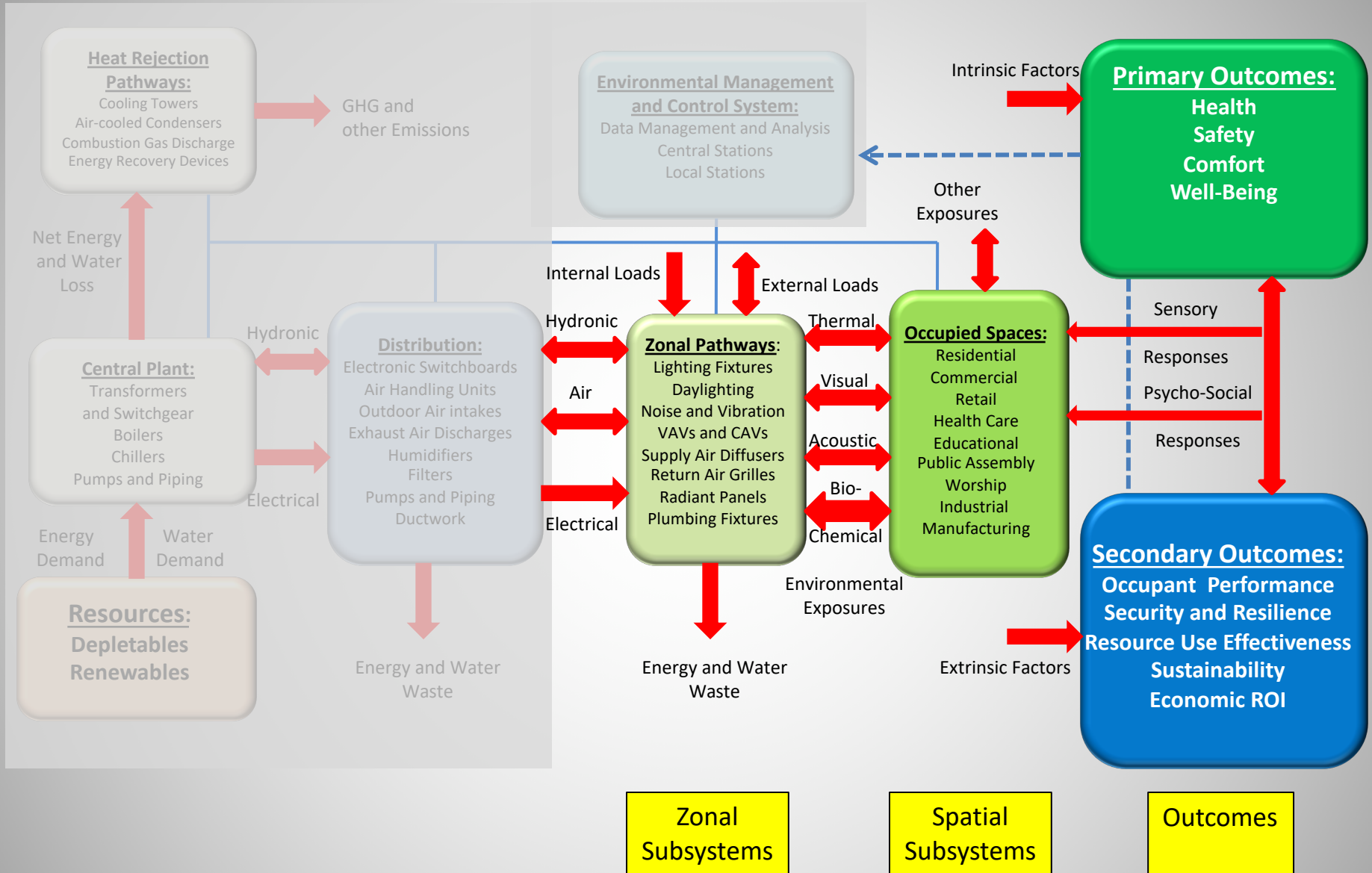
Holistic Framework for Optimizing Health and Energy Effectiveness



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