

# Research Priorities for More Efficient Use of Critical Materials from a U.S. Corporate Perspective

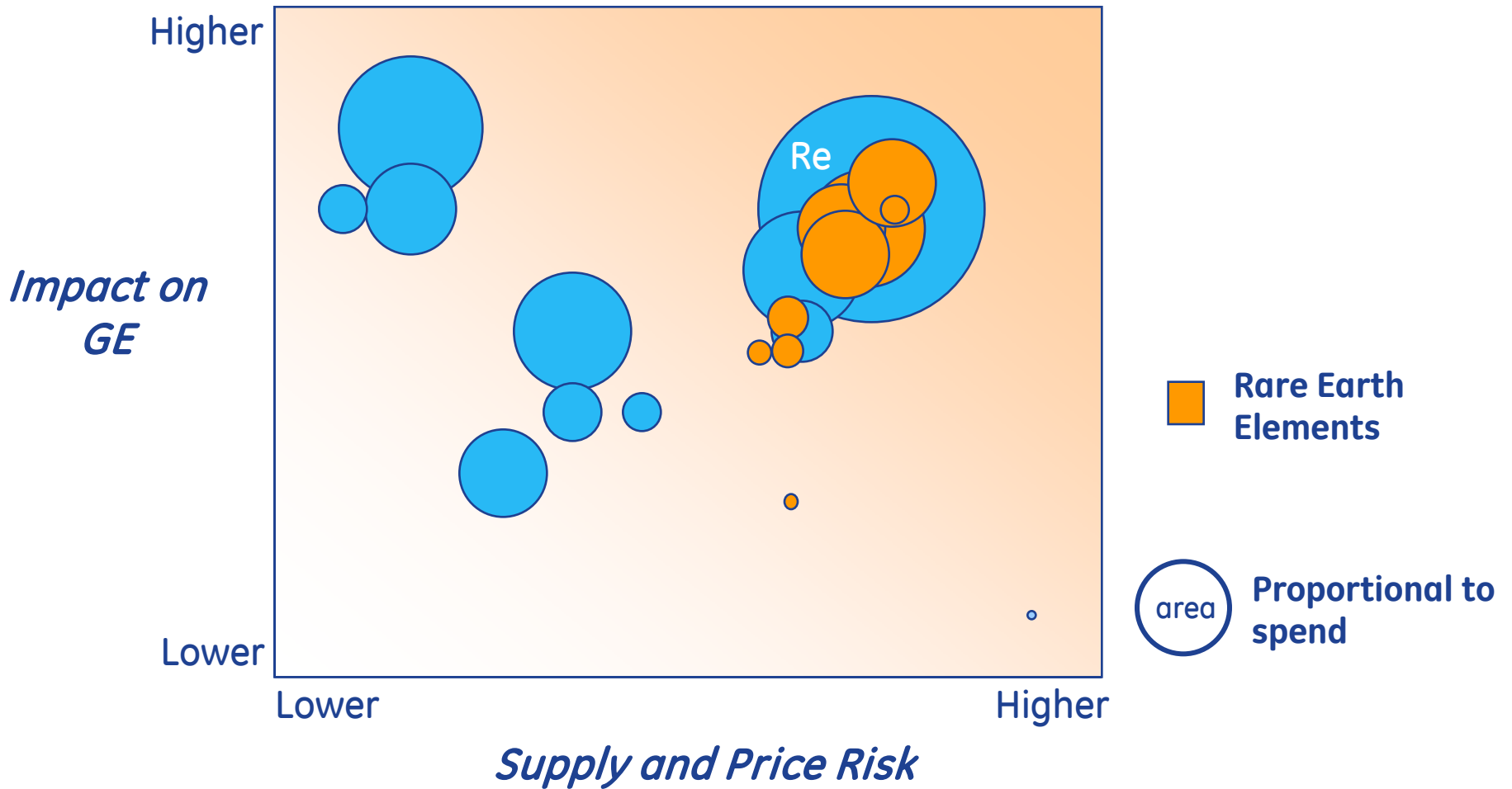
Trans-Atlantic Workshop on Rare Earth Elements and Other Critical Materials for a Clean Energy Future

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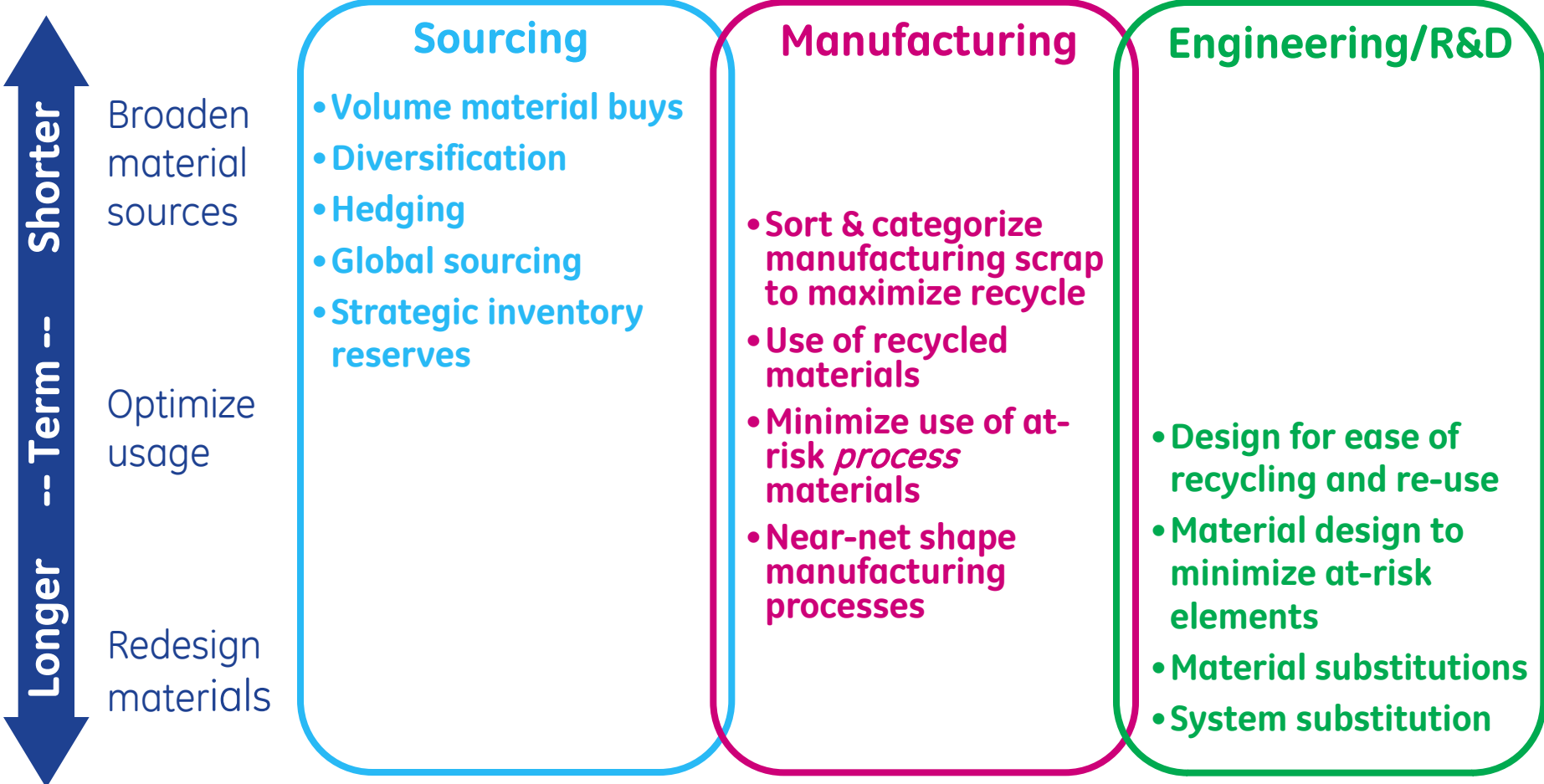
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# GE Criticality Diagram



# OEM Technology Options in Addressing Metals Supply Challenges



Each element and each application will use a unique mix of options

# Research Approaches

## Rare Earths

- Lighting
  - Recycling of fluorescent lamp phosphors
  - Development of phosphors with reduced RE content
- Permanent Magnets / Wind
  - Development of PM recycling approaches
  - Development of PMs with reduced RE content
  - System design solutions

## Tellurium

- CdTe solar
  - Develop technology to reduce the CdTe layer thickness