

NREL's decades of experience span a variety of sponsors and over 2,000 communities, utilities, and businesses.



Energy Transition considerations by Community context

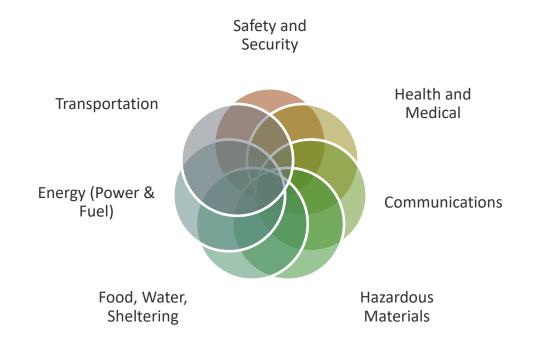
- Cultural
- Clean energy resources
- Energy governance
- Logistical
- Financial

Energy Efficiency Benefits Disproportionate in Rural and Arctic context

- Comfort and indoor air quality safety
- Reduced individual cost / volatility
- Grid flexibility



Connectedness of Systems



https://www.fema.gov/emergency-managers/practitioners/lifelines



It's a long game

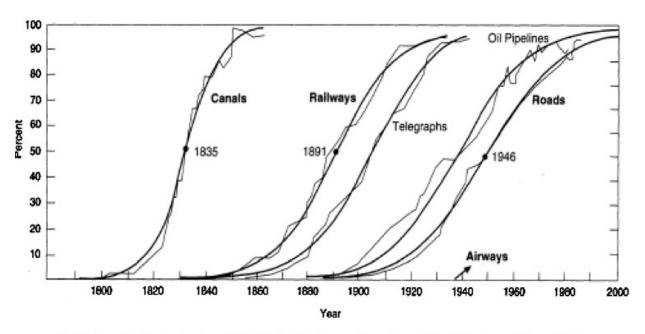


Fig. 1. Growth of Infrastructures in the United States as a Percentage of their Maximum Network Size.

B.K. Sovacool / Energy Research & Social Science 13 (2016) 202–215 From: Grubler Arnulf and Nebojsa Nakicenovic Review, 14 (2) (1991), pp. 313-342 (Spring)

Energy Efficiency Transition in Rural Environments



Different higher stakes, benefits of technologies



Consideration of local interconnected systems



Expanding stakeholders locally



Long game for transition

Readily scalable program with vulnerable communities





Community priorities

Remote, island, and islanded community energy and infrastructure challenges, values, and goals

Partnership approach

Deep energy-sector experience, expertise of the national labs + local, trusted stakeholder organizations

Energy assessment and planning

Provide resources and on-the-ground support

Resilient energy systems

Knowledge sharing → lessons learned, use cases → identified responsive technology needs

