IS ENERGY STORAGE ‘TRANSFORMATIVE’?

DECENTRALIZATION & THE FUTURE OF ONTARIO’S ENERGY SYSTEM

Presented by: James Gaede, Postdoctoral Fellow
School of Environment, Resources and Sustainability

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UNIVERSITY OF WATERLOO
FACULTY OF ENVIRONMENT
WHAT IS ‘SOCIAL ACCEPTANCE’?

“A] favourable or positive response (including attitude, intention, behaviour and – where appropriate – use) relating to a proposed or in situ technology or socio-technical system, by members of a given social unit (country or region, community or town and household, organization)”

UPHAM ET AL. 2015

A network map illustrating the largest current research fronts in the domain of social acceptance of energy & fuels

IMAGE CREDIT: GAEDE & ROWLANDS (2016)
ES IN ONTARIO: A ROCK AND A HARD PLACE

SYSTEM LEVEL (‘JACK-KNIFE’)
- Surplus baseload gen. (SBG)
- Optimization / Flexibility
- Relationship w. natural gas
- Relationship w. renewables
- Services (i.e., ES is niche)

DISTRIBUTION LEVEL (DEPENDS)
- Central v. Decentralization
- LDCs as ES proponent
- LDC as a platform
- Risks to LDC / System
- Regulatory Complications

END-USER (‘DISRUPTIVE’?)
- Cost control
- Residential
- Net metering
- Third-parties
- Remote communities
IS ENERGY STORAGE TRANSFORMATIVE?

Jack-knife

Disruptive

Adaptive

Gateway

NOW

FUTURE

NO

YES