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LIFE CYCLE ASSESSMENT AND U.S. LNG: OVER-REACH AND OPPORTUNITIES

Ted A. Williams
American Gas Association



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- U.S. Policy on LNG and Use of Life Cycle Assessment (LCA): Is It Really LCA?
 - National Energy Technology Laboratory (NETL) Studies
 - Industry Studies.
- What “Best Practices” of LCA Are Missing from Studies?
- Is It Really About U.S. LNG and Exports?
- LCA Impacts of LNG – Compared to What?

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- U.S. Regulatory Considerations and LCA – LNG Exports:
 - National Environmental Policy Act (NEPA) Interpretations
 - Project Impacts versus Fuel Cycle Impacts
 - “Cumulative Impacts”
 - “Project Alternatives”
 - Is the Public Policy Issue LNG or Fracking?

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- Regulatory versus “Social License” Questions:
 - Carbon Emissions and Monetisation
 - Beyond Social Cost of Carbon (SCC) – Benefits of Carbon-Based Fuels
 - LCA’s Potential Contribution: Benefits versus Costs of Natural Gas (via LNG) Compared to Other Energy Forms
 - Land Use, Water Use, Opportunity Costs of Capital Investment, Market Failure, “Sustainability.”

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- International and IGU Opportunities:
 - Demonstrate Public Policy Applications of LCA
 - Develop Consistent “Best Practices” for Energy System LCAs
 - Develop Advocacy Messages Around LCA Arguments
 - Develop Technology and Operational Roadmaps for Improved Environmental Performance (LNG as a Case Study).

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- Specific Recommendations – For LNG, At Least:
 - Target More LNG Chains
 - Expand Technical System Boundaries
 - Pay Greater Attention to Process/Operating Conditions and Co-Products
 - Go Beyond Air Emissions and Climate Change
 - *Challenge Competing Energy Forms*
 - Expand Public Data Development.