

# Exploring Wood Fuel Specifications To Develop Regional Wood Pellet Standards for the Northeast



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# Background

- Greater push to use biomass fuels as an alternative to fossil fuels
- Limited information on components of wood pellet fuels
- Identify policy relevant strategies to reduce or control impacts from air emissions and/or solid waste
- Key questions:
  - What is the value/variability of analytical methods?
  - What is the efficacy of existing programs for pellet standards?
  - How could a regional pellet fuel standard be developed and implemented?
  - Other issues

# Project Overview

- Analytical Assessment
  - Complete analysis on a variety of wood pellets using digestion and ashing methods
  - Conduct intra-lab variability analysis
- Policy Assessment
  - Review existing certification methods and assess for use as a regional pellet fuel standard
  - Analyze critical policy issues
- Policy Recommendations
  - Draft recommendations for Northeast wood pellet fuel standards

# Project Partners & Workgroups

- Project partners include:
  - NYSERDA
  - NESCAUM
  - Clarkson University
  - CONEG
- NESCAUM and CONEG are convening workgroups comprised of Northeast state staff to provide technical and policy input

# Analytical Assessment

- Collect various brands of pellets
- Conduct analysis on digestion versus ash analysis for 4 categories of analysis:
  - Basic characterization (ASTM “proximate analysis”) calorific value, moisture content, ash content
  - Ions: sulfate and chlorine by IC
  - Trace metals by ICP-MS
  - Mercury - gold trap followed by CVAA analysis
- Characterize variability and LOD

# Pellet Standards



# Potential Sources of Elevated Elements

- Harvesting/processing practices
- Uptake from soluble sources
- Wood species
- Inclusion of bark
- Manufacturing components
- Use of waste wood

# Policy Assessment

- Which pellet fuels to address?
  - Wood: commercial and/or residential
  - Other biomass pellets
- What should be certified?
  - The feedstock, the facility or the fuel?
- What analytical/compliance methods to employ?
- Who will be the enforcing authority?
- What resources will be required by the oversight authority and industry to implement?
- Where are the potential funding mechanisms?



# Policy Recommendations

- After considering need and options, draft recommendations for regional wood fuel standards as appropriate
- Conduct stakeholder process to solicit input on draft standards
- Finalize recommendations and work with states to implement

# Project Supported By



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**QUESTIONS?**