## CASES PARTNERSHIP

COMMUNITY APPROPRIATE SUSTAINABLE ENERGY SECURITY

**CASES Webinar Series:** 

Supporting Indigenous clean energy shifts with asset-based community development

April 28th 12-1pm MDT

Remote and Indigenous communities in Canada have a unique opportunity to mobilize the vast amount of wood-based biomass adjacent to them to meet their energy needs, while supporting a local economy, and reducing greenhouse gas (GHG) emissions. Asset-based community development allows communities to build on their unique assets and mobilize local resources to realize and develop their strengths. This study realized in collaboration with five remote and Indigenous communities in central and northern Canada first focuses on identifying risks and challenges to the wood-based bioenergy supply chain. Main risks identified include high initial investments of bioenergy projects, the logistical and operational challenges of developing sustainable wood supply chains in remote locations, limited opportunities for community leadership of bioenergy projects, and climate change. To minimize risks we suggest that stable and sustainable supply chains be implemented by restoring community-based resources management supported by local knowledge and workforce. Supporting colearning between partners and among communities can improve knowledge and innovations sharing and using local feedstock. Next, we assessed the GHG mitigation potential of replacing imported diesel fuel with wood-based bioenergy in a remote and Indigenous community, Fort McPherson, NWT. Using a life cycle assessment based model, we compared the timing of GHG benefits when utilizing locally harvested wood chips and imported wood pellets. We found that replacing diesel fuel with saw mill residue pellets resulted in slightly faster GHG benefits than local willow chips.

Join us on April 28th to hear more about the Project!





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PRESENTED BY: Nicolas Mansuy and Jennifer Buss, NRCAN

Nicolas Mansuy is a researcher with the Canadian Forest Service – Natural Resources Canada based in Edmonton. Nicolas leads projects in wood-based bioenergy development in Indigenous and remote communities as well as community-based landscape restoration. Nicolas is also an Adjunct Professor in the Faculty of Environmental Science-Resource Economics at the University of Alberta and an Adjunct Professor in Environmental Science at Université du Québec en Abitibi-Témiscamingue. Nicolas received a Ph.D from the University of Montreal.

Jennifer Buss is a Data Analyst working with Nicolas Mansuy at the Canadian Forest Service and has been researching bioenergy in remote and Indigenous communities since 2020. She received a Bachelors of Science in Environmental and Conservation Science and a Masters of Science in Land Reclamation from the University of Alberta

The presentation will be live through WebEx

APRIL 28TH 12 -1pm MDT

Meeting link: https://usask.webex.com/usask/j.php?MTID=m08099df46fecfde30ddeb6a82050c9c6

Meeting number: 145 876 6793

Password: casespartnership

A recording will be made available on the CASES website:

https://renewableenergy.usask.ca/events/cases-webinar-series.php



