Powering Sustainability@

**Integrated Planning**
- **Aligning Values:** Ensuring our energy planning aligns with the broader institutional goals and values.
- **Long-Range Goalsetting:** Always targeting a sustainable and renewable future on campus.
- **Promoting Our Core Mission:** Integrating teaching and research into energy management.

**Key Success Metrics**
- 18% reduction in energy costs since 2010
- 69% of research graduates are working in management
- $60K savings rates amongst our graduates
- 93% reduction in electricity since 2010
- 26% reduction in natural gas usage since 2010
- Carbon Neutral since 2010

**Investing in Infrastructure**
- **400 kW Wood Pellet Plant:** Installed 2009
- **4 MW Biomass Gasification Plant:** Installed 2011
- **District Heating Expansion:** Commissioned in 2016

**Continuous Optimization**
- Lighting Retrofits, Improved Scheduling, Controls Improvement

**Student Research**
- **Heat Recovery:** Investigated the potential for recovering waste heat off our biomass plant.
- **Renewable Energy:** Assessed the potential for wind and solar energy on campus.
- **Bioenergy Ash Management:** Tested applications of bioenergy ash as a fertilizer.

**Community Engagement**
- **Community Planning:** Providing guidance from ideation to completion.
- **Knowledge Transfer:** Developing and compiling educational resources and open data.
- **Proof of concept:** Demonstrating successful operation.

**Community Engagement**
- **Sharing Best Practices:** Promoting energy conservation across British Columbia as part of BC Hydro’s ‘Energy Wise’ Network.
- **Energy Conservation Campaigns:** Lights Out, Sweater Day, Resilience Energy Challenge.
- **Sustainability Events:** Bike To Work Week, Green Day, Bioenergy Day.

**Enabling Finances**
- **Funding:** $250,000 internal line of credit to fund on-campus energy projects.
- **Repayment:** 80% of project savings until loan has been repaid, then 50% of savings for remainder of project life.
- **Leverage:** Fund has leveraged initial investment 4.4 times since inception in 2012.

**Looking into the Future**
- **Greenhouse Gas Reduction:** Exploring new options for transitioning away from natural gas (e.g., heat pumps).
- **Building Green:** Designing efficient and sustainable buildings as the campus expands.
- **Increasing Efficiency:** Working towards our 2020 energy reduction target of 25% below 2010.

**About UNBC**
- 1:9 Faculty Student Ratio
- Located in Northern BC’s Largest City
- 2,700 FTE

**Fostering Sustainable Behaviour**
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