

FIBRE PRESENTATION – JUNE 16, 2016



Pinnacle.
RENEWABLE ENERGY INC.



FIBRE UTILIZATION FOR WOOD PELLETS



WHAT IT LOOKED LIKE BEFORE

Sawmill residues: mostly stopped in 1995



Logging residues: unfortunately still a widespread practice...



BURNS LAKE SLASH BURNING : VIEW FROM PELLET PLANT – 2015



CANADA'S TOP FIVE POINT-SOURCE GREENHOUSE GAS EMITTERS

Rank	Facility	Purpose	Tonnes CO ₂
1	Syncrude: Mildred Lake and Aurora North Plants, Fort McMurray, AB	Oil Sands Upgrader	12,549
2	TransAlta: Sundance Thermal Electric Power Generating Plant, Duffield AB	Coal-Fired Power Plant	12,182
3	Capital Power: Genesee Thermal Generating Station, Warburg, AB	Coal-Fired Power Plant	8,998
4	Suncor Energy: Fort McMurray, AB	Oil Sands Upgrader	8,414
5	TransAlta: Keephills Thermal Electric Power Generating Plant, Duffield, AB	Coal-Fired Power Plant	7,609

Source: Canada's 25 Largest Point-Source Greenhouse Gas Emitters (2013) – “Biomass Innovation - Canada's Leading Cleantech Opportunity for GHG Reduction & Economic Prosperity”

GHG EMISSIONS FROM BURNING BC FOREST ROADSIDE / SLASH BURNING

- Province of BC reports GHG emissions from slash burning: see <http://www2.gov.bc.ca/gov/content/environment/climate-change/reports-data/provincial-ghg-inventory-report-bc-s-pir>
- Most recent year reported is 2013
- Total GHG emissions from slash burning: 8.1 million tonnes



HOW DOES BC'S SLASH BURNING RANK?

Rank	Facility	Purpose	Tonnes CO2
1	Syncrude: Mildred Lake and Aurora North Plants, Fort McMurray, AB	Oil Sands Upgrader	12,549
2	TransAlta: Sundance Thermal Electric Power Generating Plant, Duffield AB	Coal-Fired Power Plant	12,182
3	Capital Power: Genesee Thermal Generating Station, Warburg, AB	Coal-Fired Power Plant	8,998
4	Suncor Energy: Fort McMurray, AB	Oil Sands Upgrader	8,414
5	British Columbia: burning forest residuals	Forest Industry	8,144
6	TransAlta: Keephills Thermal Electric Power Generating Plant, Duffield, AB	Coal-Fired Power Plant	7,609

PINNACLE'S QUESNEL PLANT – NOW CLOSED DUE TO LACK OF FIBRE

- **June 2016: Quesnel closed due to lack of fibre**
- **Had operated since 1989**
- **Originally designed to run on dry sawdust and shavings**
- **We need to find a economic sustainable fibre diet for the plant and modify the plant to process this new diet**
- **Investment requires fibre security**



QUESNEL PLANT



We look forward to working with all stakeholders to find a solution

PROVINCIAL FORESTRY FIBRE WORKING GROUP

- Began in earnest following Minister Thomson's 2014 mandate letter
- Participants include government (MFLNR), primary tenure holders, and secondary users
- All stakeholders sincerely wanted to make a meaningful impact
- Resulted in Minister Thomson's 13-point Fibre Action Plan
- The process of translating this goodwill into meaningful actions in the field has been disappointing and we have failed in our implementation

FIBRE ACTION PLAN PROGRESS & IMPACT ON FIBRE SUPPLY (1)

Action Item	Description	Comments
1	Fibre recovery process leading to potential burning restrictions	Leaves onus to prevent slash burning with secondary users. Potential for retribution from primaries.
2	Biomass handling guidelines for loggers	May help keep fibre useable. Minimal impact on supply
3	Update tenure information	No impact on fibre supply
4	Fibre recovery tenures	Only four fibre recovery tenures have been implemented
5	Supplemental forest licences	No impact on fibre supply
6	Expand cruise-based billing	Resistance from primaries. No impact on fibre supply
7	Grade 4 credit to AAC	Chief forester's recent letter puts this policy in jeopardy

FIBRE ACTION PLAN PROGRESS & IMPACT ON FIBRE SUPPLY (2)

Action Item	Description	Comments
8	Fibre utilization baseline	No impact on fibre supply. Resistance from primaries to report publicly on waste volumes
9	Forests for Tomorrow & Forest Carbon Partnership	No impact on fibre supply
10	Low stumpage on residuals	Locked up with treasury board. No impact on fibre supply.
11	Review of waste benchmarks	Locked up with treasury board. No impact on fibre supply.
12	Review waste measuring policy	Resistance from primaries. No impact on fibre supply
13	Move waste measurement offsite	Locked up with treasury board. No impact on fibre supply.

OVERALL ASSESSMENT

- All parties have good intentions
- The actual implementation has not made a meaningful difference to fibre supply and security for secondary users
- In 1995, the Government of BC boldly phased out beehive burners enabling establishment of the pellet industry
- We need a similar bold move for harvest residuals. Now the default position is to burn them. We need to challenge ourselves to utilizing these residuals.
- I believe we should resist the temptation to study and review items for months and months
- This more than Fiber availability and access, it is also doing our part for our Planet.