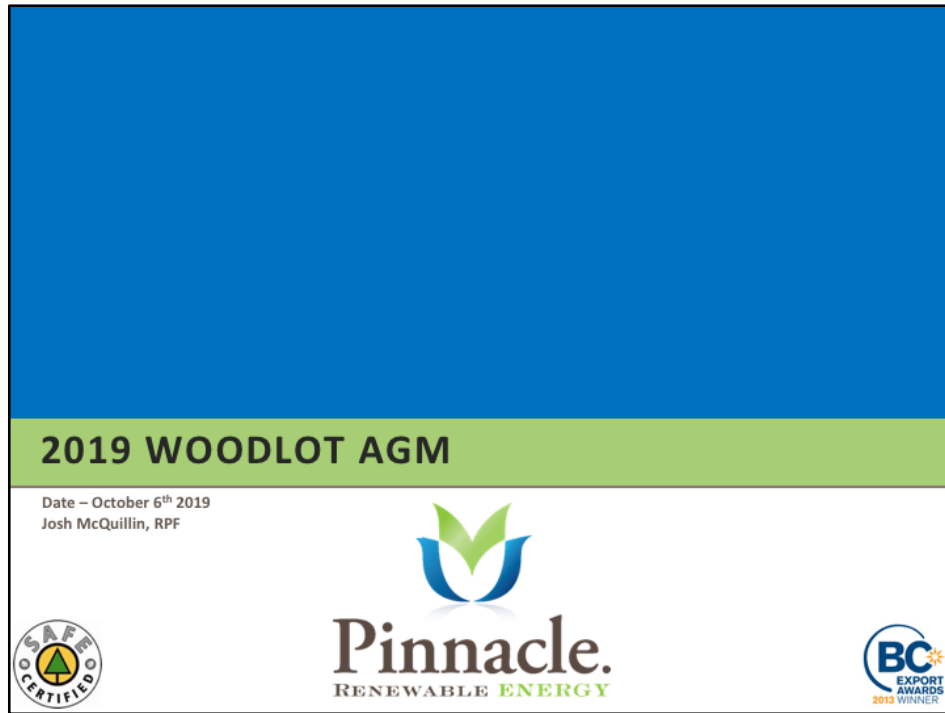



October 17, 2019





2019 WOODLOT AGM

Date – October 6th 2019
Josh McQuillin, RPF



Pinnacle.
RENEWABLE ENERGY



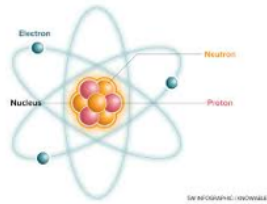
ABOUT US

Pinnacle Renewable Energy (TSX: PL) is one of the world's leading manufacturers and distributors of industrial wood pellets. The pellets are used by large-scale thermal power generators as a greener alternative to coal power, producing a reliable and sustainable form of baseload renewable power.



- Pinnacle Pellet started 30 years ago manufacturing pellet fuel in Kersley.
- Helped support the transformation of the forest sector away from beehive burners. We now want to be part of the next transformation that sees the end of harvest residuals being treated as waste.

Atom anatomy



- We currently supply 1.5% of the UK's power needs and are supporting Japan's search for alternatives to nuclear power.

Our Mission

Our mission is to safely produce quality, renewable energy while returning the greatest value to stakeholders.

Our Vision

Our vision is to be the leading supplier of biomass products to the global renewable energy market.



Our Values

Seeded Through Innovation

- Resourcefulness | Ignite creativity and challenge the status quo
- Stewardship | Challenge carbon every day
- Excitement | Embrace change and celebrate success

Energized By People

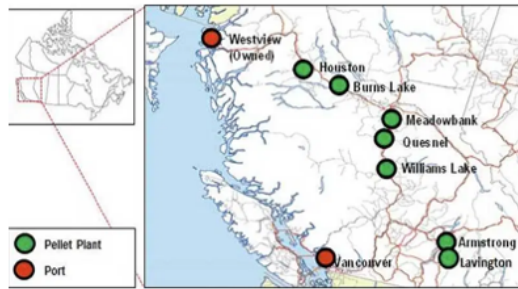
- Commitment | Deliver on time, as promised, every time
- Team | Build partnerships, relationships and take the long view
- Honour | Listen, speak the truth and follow through

Sustained Through Passionate Integrity

- Safety | Own it - at home, at work and everywhere
- Empathy | Care for each other, our customers and our planet
- Excellence | Reach for best in class



- Pinnacle has entered into long-term take-or-pay contracts with customers in the UK, Europe and Asia that represent 109% of its production capacity through 2026.
- With the very recent addition of a plant in High Level Alberta, the Company now operates nine wood pellet production facilities throughout western Canada, and one production facility in Alabama.
- Pinnacle's Canadian production facilities are all located on major rail lines allowing for efficient rail transport to one of two shipping terminals on the B.C. coast:



<https://youtu.be/RvJl3p0rRTM>



Environmental Benefits of using pellets vs non-renewables

- Wood pellets are an economical and sustainable energy source, growing in use around the globe because of their low cost and low environmental impact.
- Pellet production is a growth industry that creates good jobs, especially in rural areas, and boosts regional economies. Renewable pellet fuel burns cleaner than fossil fuel.
- Pellets are renewable because they are essentially carbon neutral, whereas fossil fuels take carbon that was safely stored underground and turn this into CO₂ without any realistic return cycle that recaptures this carbon from the atmosphere and returns it to a benign state.
- Regular firewood can contain up to 48 per cent moisture, which means nearly half of what you pay for with wood heating fuel ends up as steam.
- Pinnacle wood pellets are made from compressed waste wood, with less than six per cent moisture. They burn cleaner, longer and produce more heat.
- Pellet-burning appliances are simpler to operate and more convenient than other wood burning appliances. In fact, they are almost as easy to use as gas, oil or electric heaters.

Production Capacity and Consumption Requirements

- In 2017, Pinnacle produced roughly 1.5 million metric tonnes of pellets – the capabilities today would be over 2 million metric tonnes when all plants reach maximum capacity
 - In BC with the 7 plants, that means that Pinnacle consumes roughly 600 000m³ per plant (4 200 000m³) of fibre in the form of sawdust, shavings, hog, and wood chips (directly produced from logs in our storage yards)
 - Of that, an average of 20% must be procured in either log or grind form directly from the forest (over 800 000m³)



Shavings
<10% moisture content



Sawdust
40-50% moisture



Hog
>45% moisture



How Woodlot's Fit In

- We understand that small tenure holders need to try and recover costs and want to be environmental leaders - we can help with that.
- There are approximately 855 active woodlots in British Columbia with an annual allowable cut (AAC) of around 1.5 million cubic meters annually
- If you assume 15% bio-log content, tenures in the form of woodlots have the potential to produce 225 000m³ of waste wood material, or over ¼ of Pinnacles 800 000m³ annual log and grind requirements



Benefits to Woodlot Owners

- Increased fibre utilization
 - all wood that gets cut down and handled can be utilized
- Grade 4 cut control credits
 - a crown wood tenure holder can apply to the government annually for a credit applied to their cut control, and therefore cut and sell more sawlog within their 5 year cut control
- Eliminate waste survey requirement
 - If a tenure holder applies to have wood scaled under new Concurrent Residual Harvest System, wood can be hauled to our facility prior to waste assessment
 - District assumes a full stumpage rate on 3% of the volume hauled into a Grade 4 facility (eg $(\$4.00 \text{ sawlog stumpage} \times 0.03) + (\$0.25 \text{ SFP permit} \times 0.97) = \0.36)
- Sorting species is not necessary
- Little to no burning required

What Kind of Fibre do we Target?

- We are looking for fibre that nobody else can accept, and our prices reflect that
- Benefit is that Pinnacle can accept virtually any kind of fibre
 - Burnt
 - Checking
 - Rot
 - Forks/Crooks etc.

Pinnacle Log Spec:

- All logs must be processed, limbs, needles and stumps must not be present.
- Nothing over 24 inches at the butt. Will accept any top size.
- All logs will be clear of mud, rock and other debris.
- Log loads must not be spliced together, each bunk must be able to be unloaded safely and efficiently
- Logs certified by (ISO, SFI, CSA, FSC, Other)

Questions?

