## Key considerations

- GHG results for heat applications are 'better' than for electricity-only; CHP can be attractive
- Existing biomass power plants might have 'paid back' carbon debt
- Baseline and future scenario assumptions drive results
  - Volume of biomass (does current market support demand?)
  - Supply/Demand study to determine 'risk' for additional harvests
- Biomass markets rarely drive harvest decisions but can intensify harvests (Buchholz et a. 2019)
- Forest C stock trajectories are uncertain, some harvest activities can stabilize carbon (e.g., beetle risk; Gunn et al. 2020)



## How do we maximize the benefits of wood bioenergy?



Academic rigor, journalistic flair

https://theconversation.com/if-we-burn-wood-for-energy-we-canthave-our-cake-and-eat-it-15634

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## If we burn wood for energy, we can't have our cake and eat it

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Whether more power stations should switch to burning wood or biomass is debatable. David Cheskin/PA

"Getting this right is vital, because we have a window of only the next few decades to stabilise atmospheric greenhouse gases, beyond which some scientists believe climate disruption <u>will be irreversible</u>."

- Favor thermal or combined heat and power over electricity generation only
- Favor small scale, high efficiency applications
- Practice excellent forestry that maintains high carbon stocking and retains key elements of stand structure
- Ensure that wood biomass production meets the four tests