How big is a forest biofuel resource? Politicians' questions and researchers' answers.

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Based on national forest inventory data, SLU researchers estimated the available amount of forest fuel to be 73,5 TWh per year, after standardised reductions. With this report as a starting point, the Swedish Forest Industries Federation made an enquiry to all its member companies selling forest fuel, asking them to extrapolate from today's harvest data to cover all sites considered accessible to harvesting within ten years, and reached the figure 33,5 TWh per year. A number of previous and later studies land at estimates either between these two "ceiling" and "floor" values, or somewhat higher. The discrepancy highlights the importance of defining and communicating the criteria employed in the data analysis. Such criteria are discussed in the presentation.
However, my main point here is the importance of considering the "end use" of the information. The Swedish Prime Minister appointed a special commission in late 2005 to examine ways of reducing the country's dependence on oil and coal, and SLU was requested to contribute with biofuel information. While the commission had access to our full data, we chose to put forward the low estimate, as the prime interest was to find out how much biomass could be available for conversion to petrol and diesel substitutes after satisfying existing, ongoing and projected power plant requirements. The high estimate, on the other hand, is of interest to modellers of carbon sequestration scenarios or for considering long-term expansion possibilities. However, the most concrete issue today is whether the power sector is able to overpay the pulping industry because of various tax breaks and emissions trade. For that kind analysis, only market balance studies are appropriate, while the absolute size of the biomass resource is quite irrelevant.