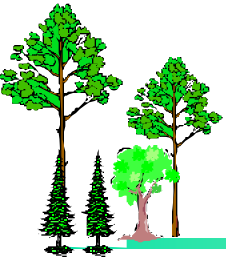


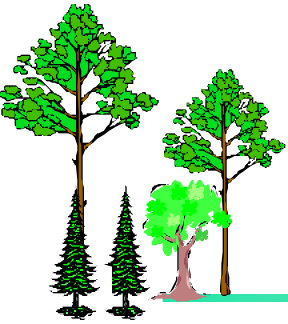
# Bio-energy Trade

- a non-existing Phenomenon?



Bo Hektor

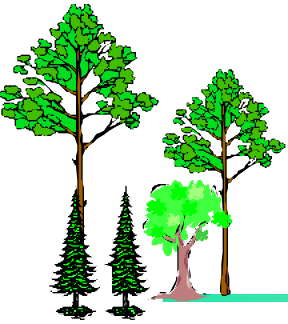
February 2008



- The need for good statistics
  - seen from the perspectives of a company in the RD&D and Trade Development Business

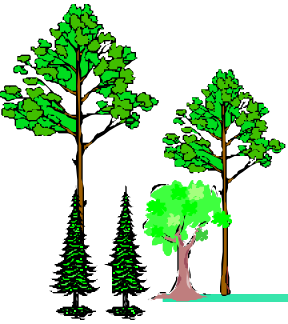
Observations

Cases



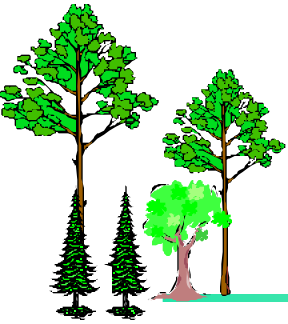
# Statement 1

- “Bio-energy” Trade Statistics is hidden and embedded in other more traditional Trade Flow Data
  - Forest Products
  - Wood products
  - Food/Fodder Products
  - Agriculture Products
  - Energy Carrier
  - Etc.
- Conclusion: True Volume and structure of Bio-energy Trade cannot be verified



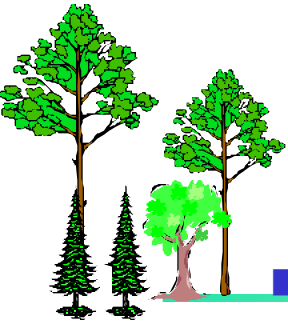
## Statement 2

- Bio-energy Statistics is easy to manipulate
  - to avoid taxes
  - to avoid duties
  - to avoid import/export restrictions
  - to avoid business transparency
  - to simplify reporting
  - Etc.
- Conclusion: The sparse Bio-energy information available in public statistics may be unreliable



## Statement 3

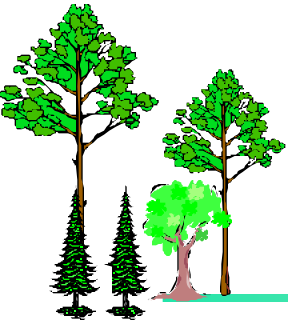
- Trade Flows of Bio-energy will increase to become significant Factors for Logistics, Terms-of-Trade and Policies
  - Liquid fuels                      10 million m3 2050    ???
  - Pellets                              50 million ton 2050    ?
  - Other biomass                    50 million ton 2050    ?
  - Green electricity                100 TWh            2050    ?
- Conclusion: A proper Structure for Statistics should be developed now, to avoid costs and problems later



# Case 1

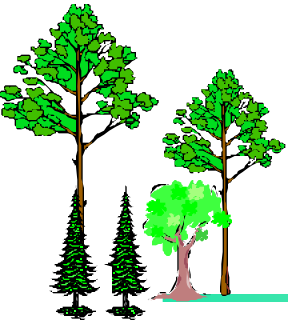
## ■ Financing

- Banks and finance institute "know nothing" about bio-energy
- Potential borrower´s argument: "Bio-energy Trade is growing fast; we need money to support/take part in that trend"
- Lender´s argument: "I cannot find any published information that supports your points of a fast growing trade. Your project is too risky for us."
- Conclusion: Slow growth, Difficulties for SMEs, Dependence of established, "rich" Actors or public support Funds.



## Invalid data - misinterpretations

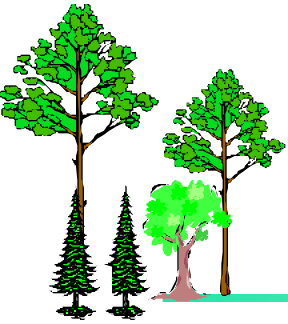
- Ex. Sweden. In CHP Plant systems, fossil fuel tax was paid for heat, but not for electricity generation. Therefore, in the tax declarations biomass was allocated to heat, and fossil fuels to electricity.
- However, these data were used also in the statistical data bases, and led to the conclusion "very little electricity is generated from biomass". (Now abolished)
- Led to confusion, e.g. Swedish sellers of CHP plants claimed that their installations in Swedish plants generated significant amounts of electricity, but the official statistics would not verify that statement.



# Trade flows of biomass "disappear"

## ■ Example Baltic States/Norway

- A few years ago, one could see large piles of firewood in Baltic ports. Port authorities claimed that the destination was Norway.
- Port and shipping data indicated a trade volume of about 2 million m<sup>3</sup> per year.
- A quantity of that magnitude was distributed by supermarket chains to "attraction prices" for use in week-end and vacation houses.
- This flow has "disappeared" in the trade statistics.



## Uncertainty reduces Growth

- Mature (big) Corporations shun Uncertainty
  - Banks, Utilities, Forestry, Agriculture, Real Estate, Shipping, etc.
- Other companies are adapted to handle RISKS (but not Uncertainty)
  - Development Funds, Traders, Stock Brokers, etc., and **entrepreneurs**
- Improved Bio-energy Statistics will enhance Growth