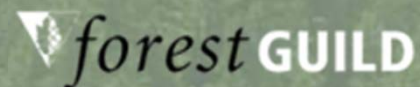
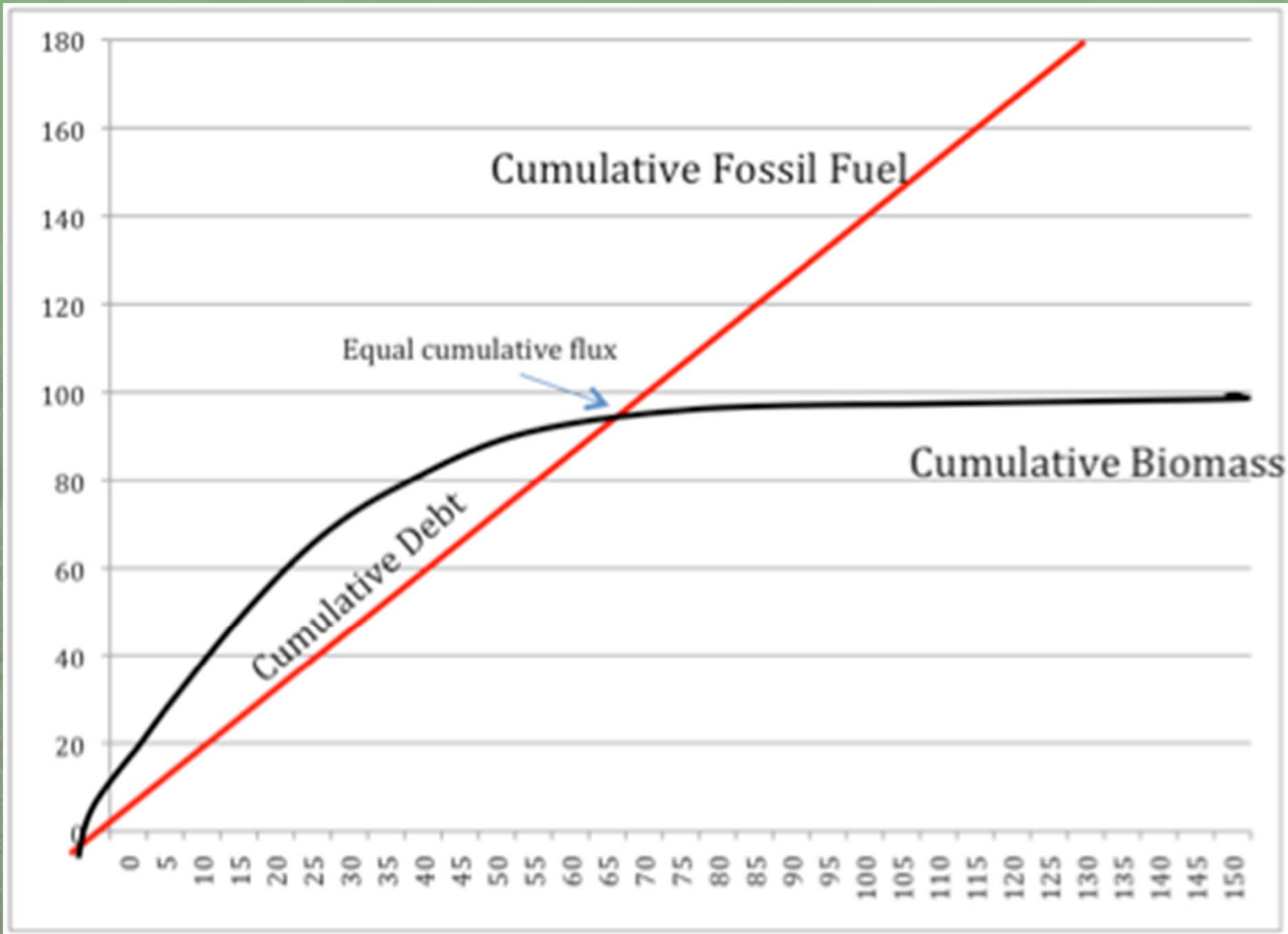


# Some Ways to Think About the Long Term Effects of Biomass on Atmospheric Carbon

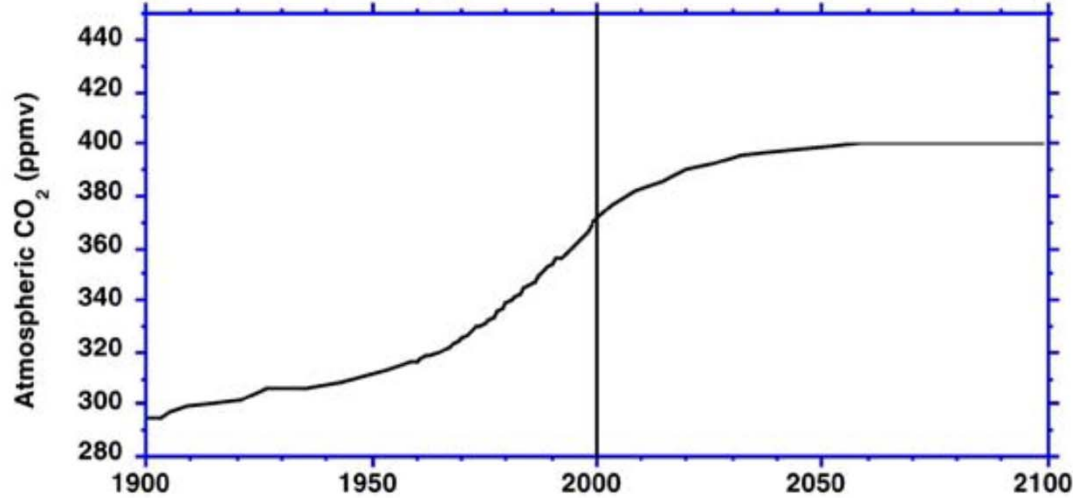
Bob Perschel  
Forest Guild



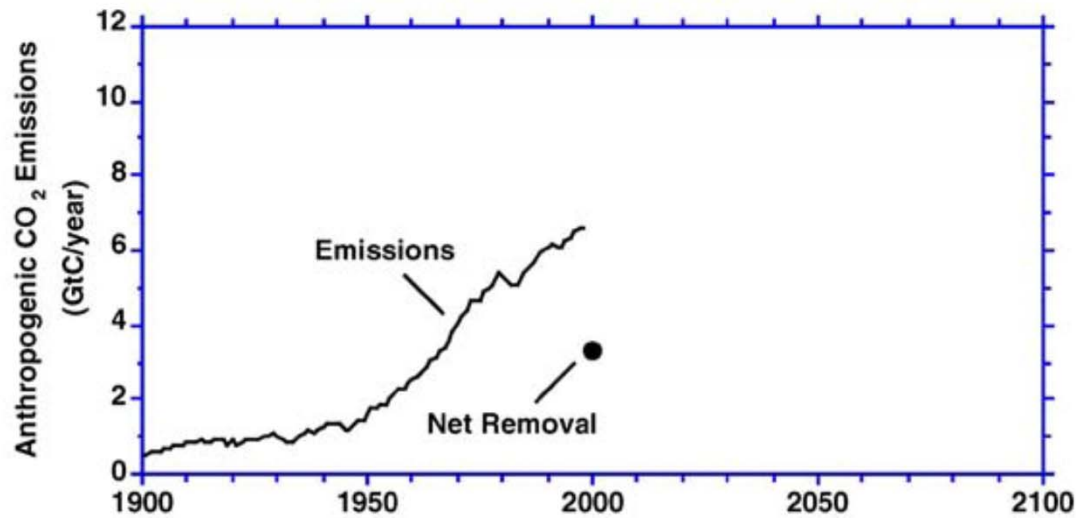
# Landscape Scale Cumulative Carbon Debts & Dividends



Now consider a scenario in which the concentration of CO<sub>2</sub> in the atmosphere gradually rises to 400 ppm, about 8% higher than the level today, then stabilizes by the year 2100, as shown here:

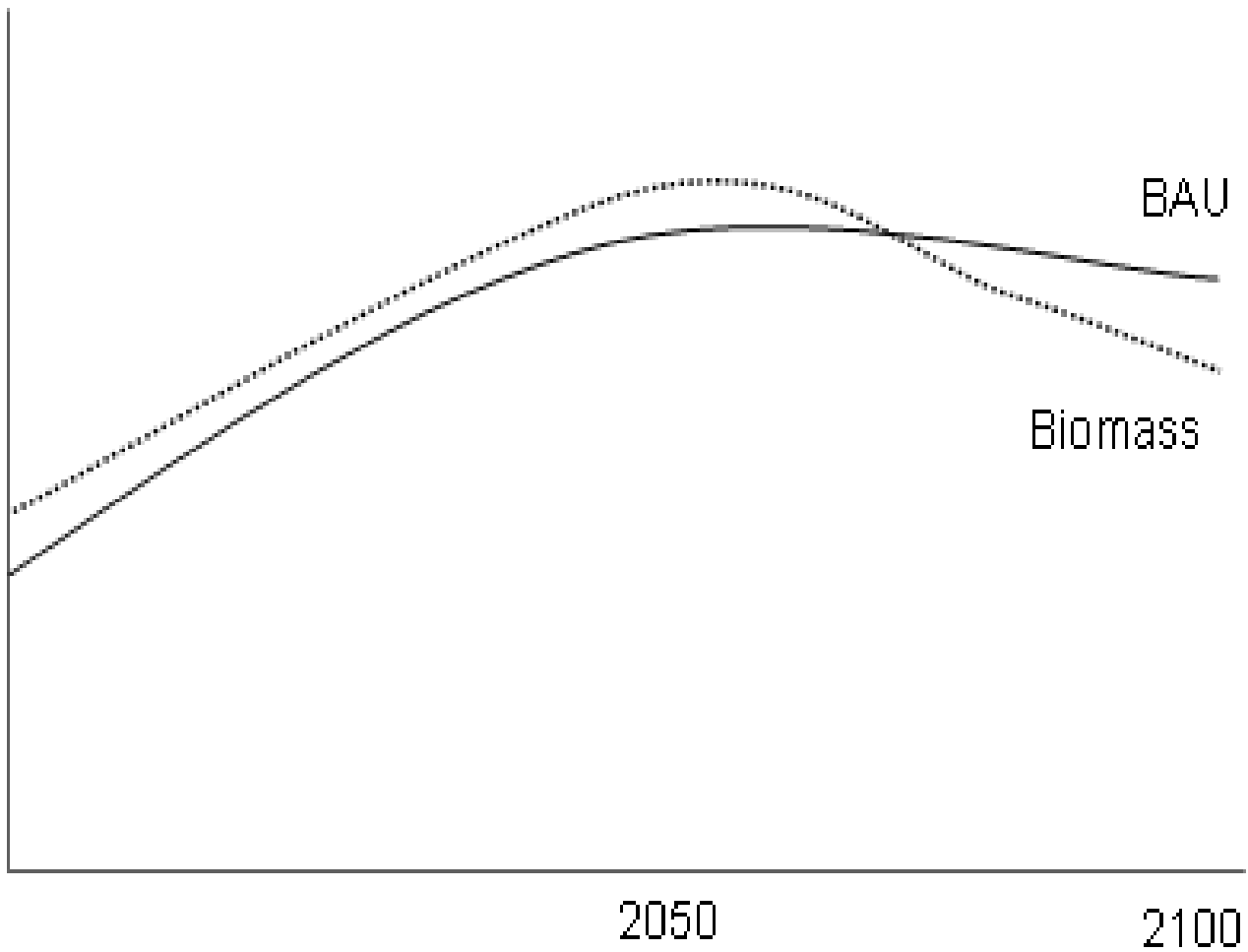


1. The graph below shows anthropogenic CO<sub>2</sub> emissions from 1900-2000, and current net removal of CO<sub>2</sub> from the atmosphere by natural processes. Sketch:
  - a. Your estimate of likely future net CO<sub>2</sub> removal, given the scenario above.
  - b. Your estimate of likely future anthropogenic CO<sub>2</sub> emissions, given the scenario above.

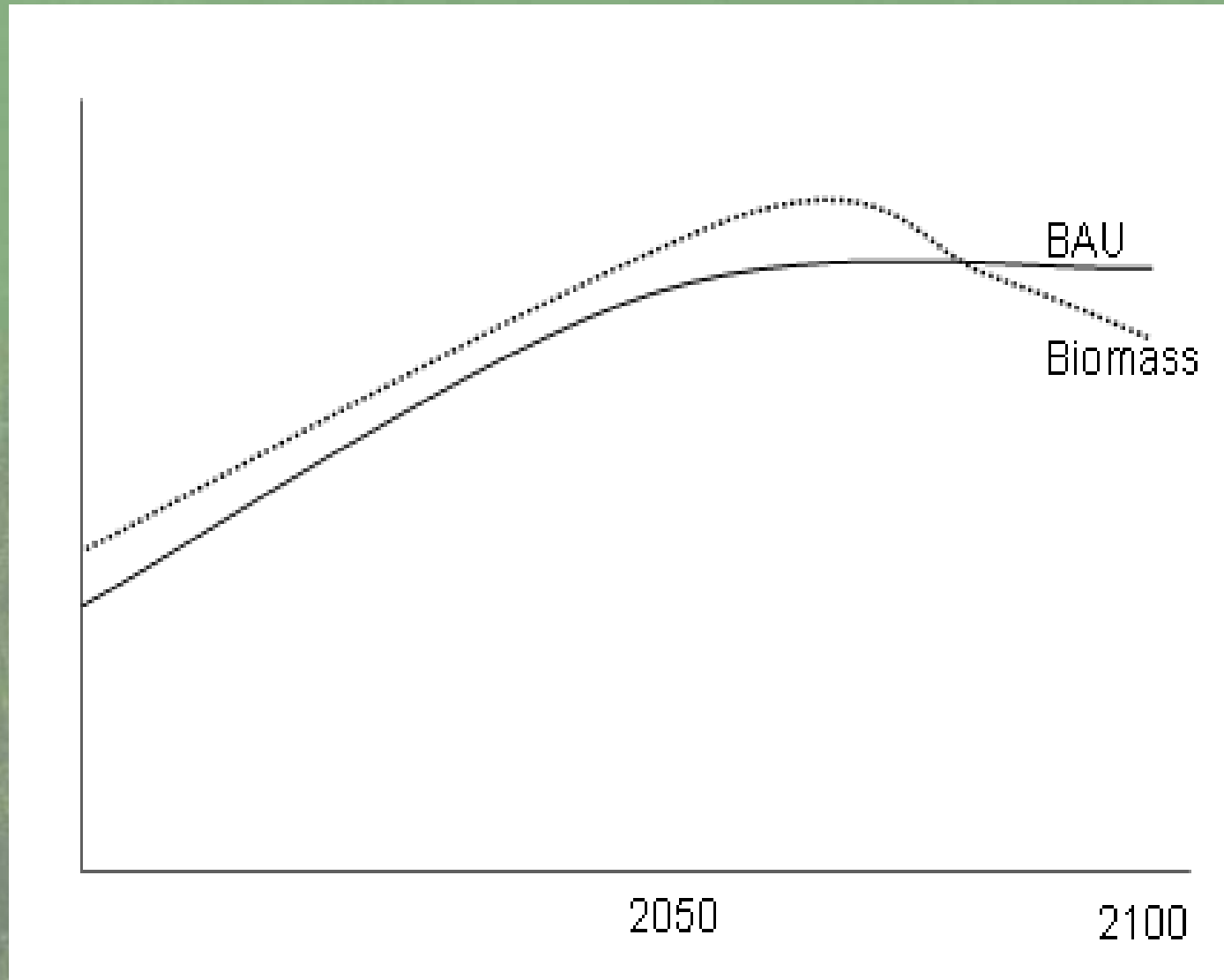


(B) 400 ppm scenario

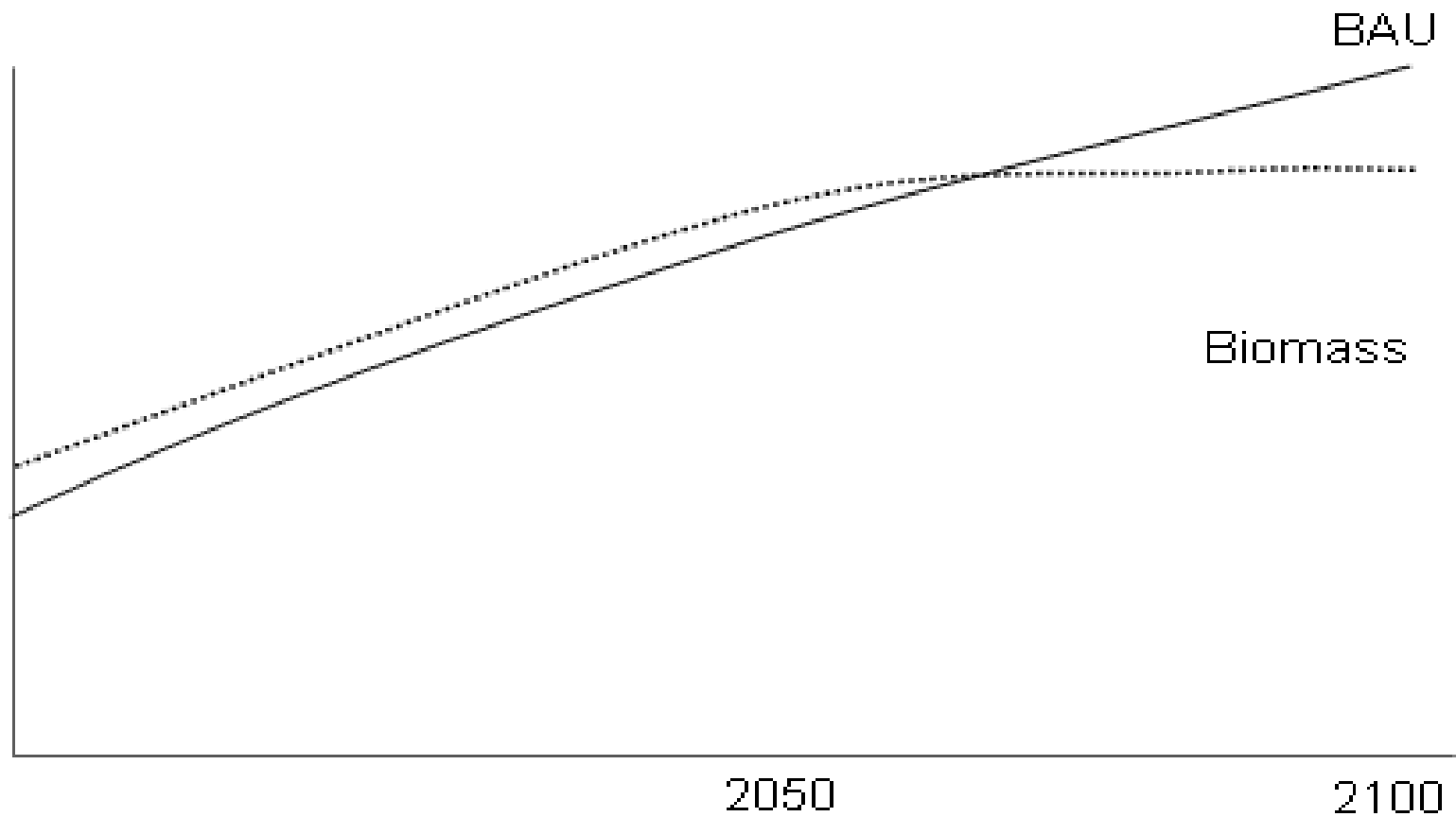
# Carbon Free by 2050



# 80% by 2050



# Failure to hit emissions targets



# Thank you

## <http://www.forestguild.org>

