1067-60-2409Rene Carmona* (rcarmona@princeton.edu), Dept of OR and Financial Engg, Princeton
University, Princeton, NJ 08544. Emissions Option Pricing and Singular BSDEs. Preliminary
report.

We give a brief review of the equilibrium theory of cap-and-trade schemes in order to motivate the assumptions of several reduced form models which we present and compare. Pricing and hedging options in these models lead to the solution of forward-backward stochastic differential equations with a non-smooth terminal condition, and we spend the second part of the talk analyzing these equations, demonstrating among other things that expected results do not always hold true. (Received September 23, 2010)