



Figure 5.1 **Top panel:** Fossil-fuel CO₂ emissions for two scenarios: one “business as usual” [red] and the other with net emissions peaking before 2020 and then reducing rapidly to near zero emissions by 2100, with the cumulative emission between 2000 and 2050 capped at 1000 billion tonnes of CO₂ [blue]. **Bottom panel:** Median projections and uncertainties of global-mean surface air temperature based on these two emissions scenarios out to 2100. The darkest shaded range for each scenario indicates the most likely temperature rise (50% of simulations fall within this range). Adapted from Meinshausen *et al.* (2009).