



Supplementary Fig. S3. Sensitivities of the projected peak warming by 2100 to key parameters in the model. Peak warming by 2100 is projected when initiating a strong incentive for mitigation in a set of sensitivity experiments, which vary the rate of learning (L_R) (a), atmospheric lifetime of CO_2 (τ_L) (b), time of lag in the response of global warming to CO_2 emissions (τ_R) (c), the threshold of global warming to cross catastrophic tipping points in the climate system (T_{50}) (d), the maximal climatic damage caused by crossing catastrophic tipping points as a percentage to GDP (d_c) (e), the elasticity of substitution between energy and non-energy inputs (σ_Y) (f), the elasticity of substitution between fossil fuel and renewable energy (σ_E) (g), the rate of growth in the productivity (k_p) (h), capacity of backstop technologies abating emissions at a cost of \$100 per tCO_2 (i), and the abrupt increase in energy-use efficiency over 2025–2050 (k_u) (j). The impact of varying each parameter is estimated separately while keeping other parameters unchanged ($L_R=10\%$, $\tau_L=400$ years, $\tau_R=10$ years, $T_{50}=2^\circ\text{C}$, $d_c=50\%$, $\sigma_Y=0.5$, $\sigma_E=2$, $k_p=1\% \text{ y}^{-1}$, $B_S=0$, and $k_u=1\% \text{ y}^{-1}$).