A 10-to-50 V boost converter is shown in Fig. 1.

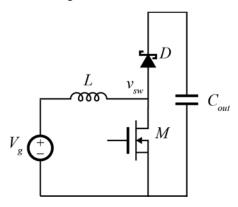


Figure. 1: Boost converter

The diode and MOSFET are implemented with the two devices whose datasheets are linked on the assignment webpage

Taking into account the full nonlinear characteristic of the devices' output capacitances, estimate the total switching energy lost in each period. You may neglect  $Q_g$ , and other sources of losses not cause by these capacitances.