Supplementary Section

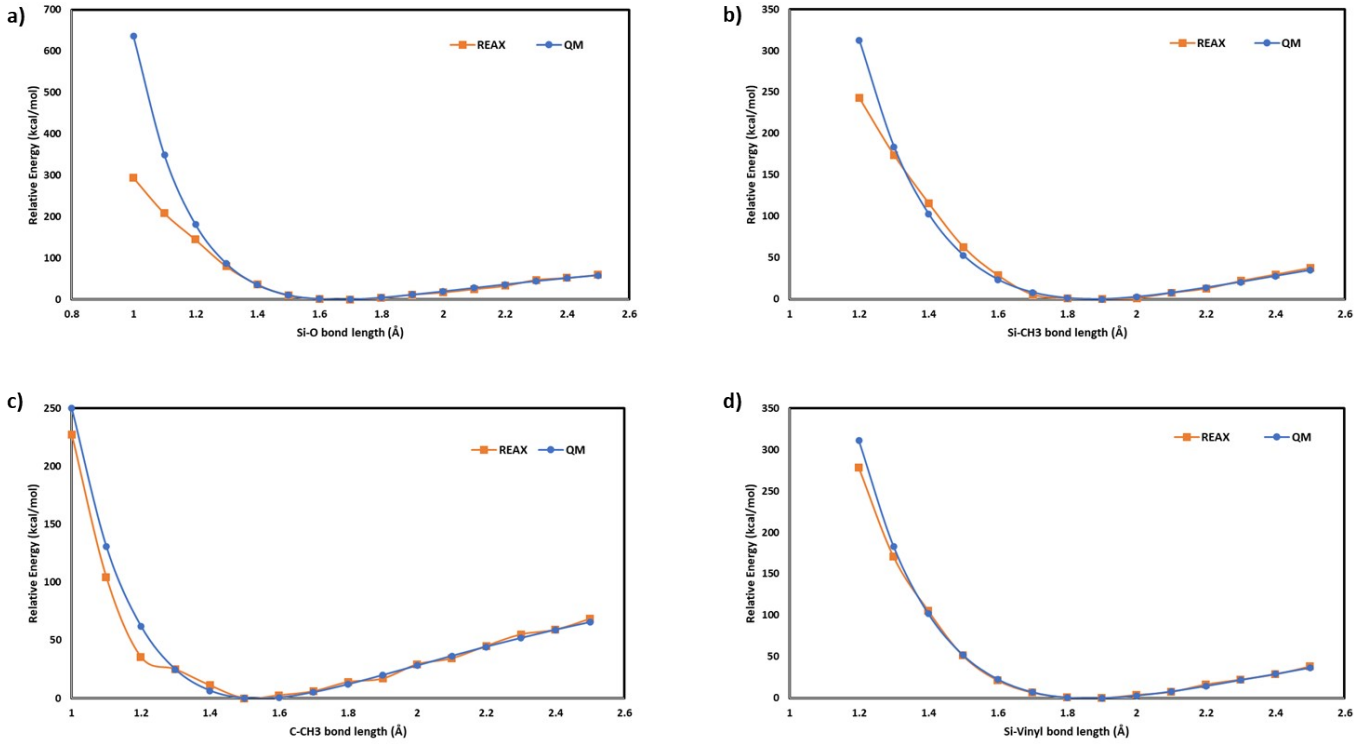

Figure S1: Comparison of the ReaxFF and DFT bond dissociation energies for the following bonds: a) Si-O, b) Si-CH3, c) C-CH3, and d) Si-Vinyl.

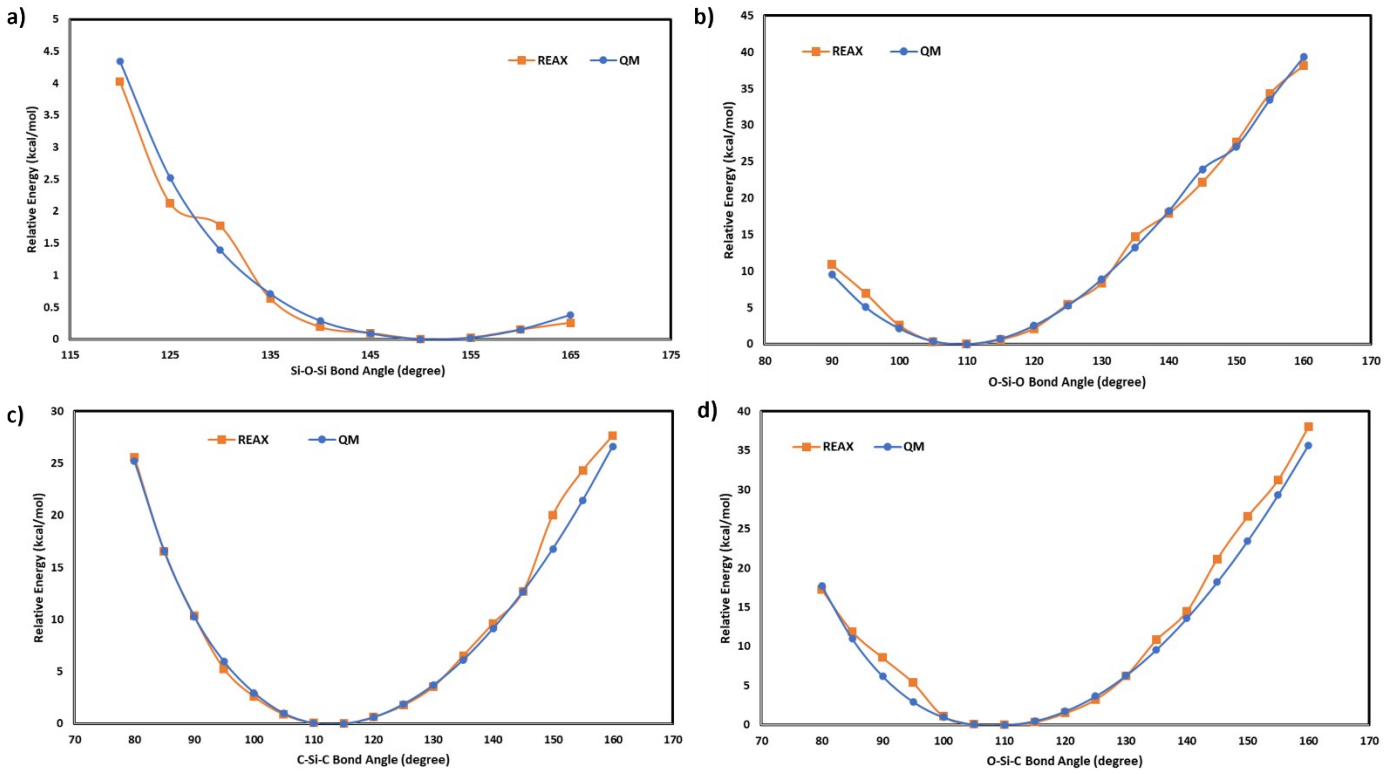

Figure S2. Comparison of the ReaxFF and DFT bond angle distortion energies for the following bonds: a) Si-O-Si, b) O-Si-O, c) C-Si-C, and d) O-Si-C.