



Figure ES-1. NREL PV system cost benchmark summary (inflation-adjusted), 2010–2020

* The current versions of our cost models make a few significant changes from the versions used in our Q1 2018 benchmark report (Fu, Feldman, and Margolis 2018) and incorporate costs that had previously not been benchmarked in as much detail. To better distinguish the historical cost trends from the changes to our cost models, we also calculate Q1 2019 and Q1 2020 PV benchmarks using the Q1 2018 versions of the residential, commercial, and utility-scale PV models. The “Additional Costs from Model Updates” category represents the difference between modeled results. Using the previous costs models, the Q1 2019 and Q1 2020 benchmarks are calculated to be: Q1 2019 = \$2.56/WDC and Q1 2020 = \$2.47/WDC (residential PV); Q1 2019 = \$1.71/WDC and Q1 2020 = \$1.64/WDC (commercial PV); Q1 2019 = \$0.94/WDC and Q1 2020 = \$0.89/WDC (utility-scale PV, fixed-Tilt); Q1 2019 = \$1.01/WDC and Q1 2020 = \$0.96/WDC (utility-scale PV, one-axis tracker). Appendix A provides a detailed discussion of the changes made to the models between last year’s versions (Fu, Feldman, and Margolis 2018) and this year’s versions.