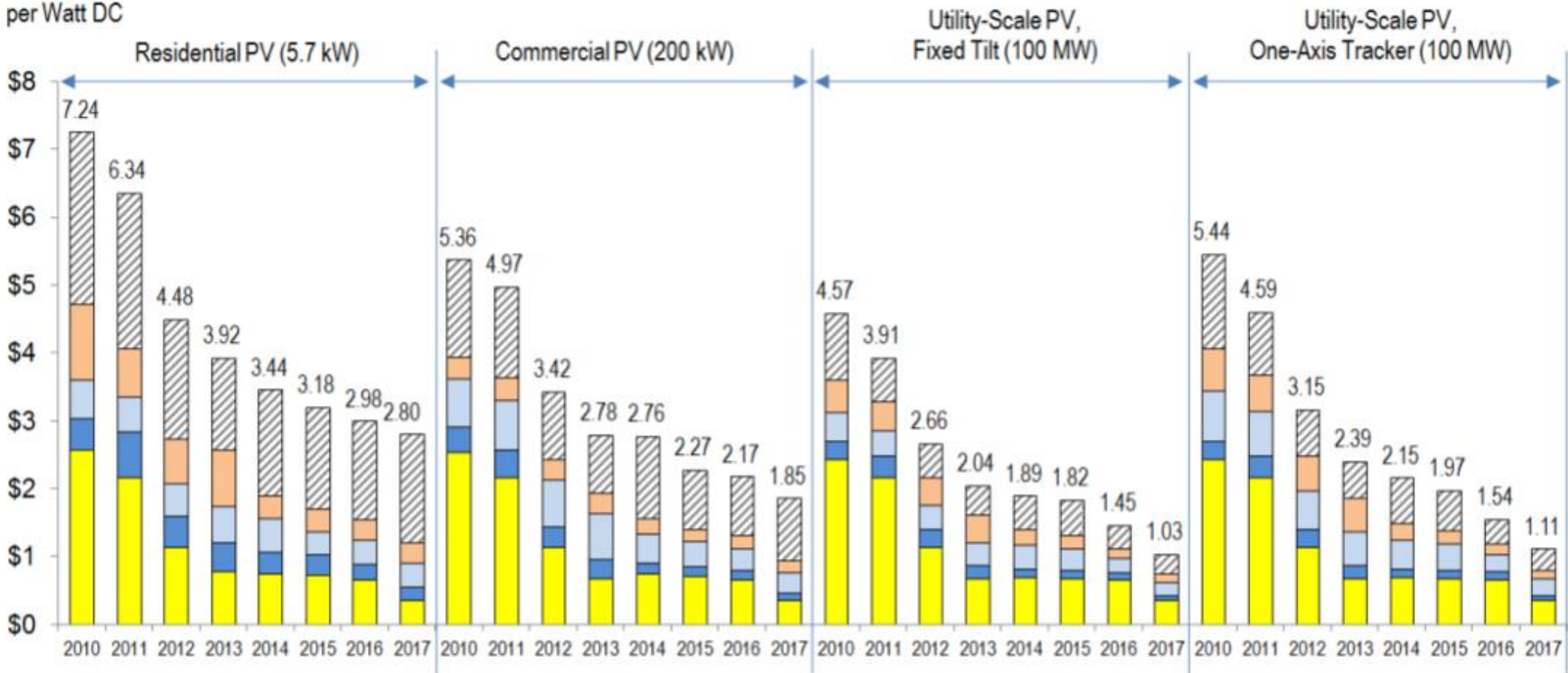


NREL PV system cost benchmark 2017

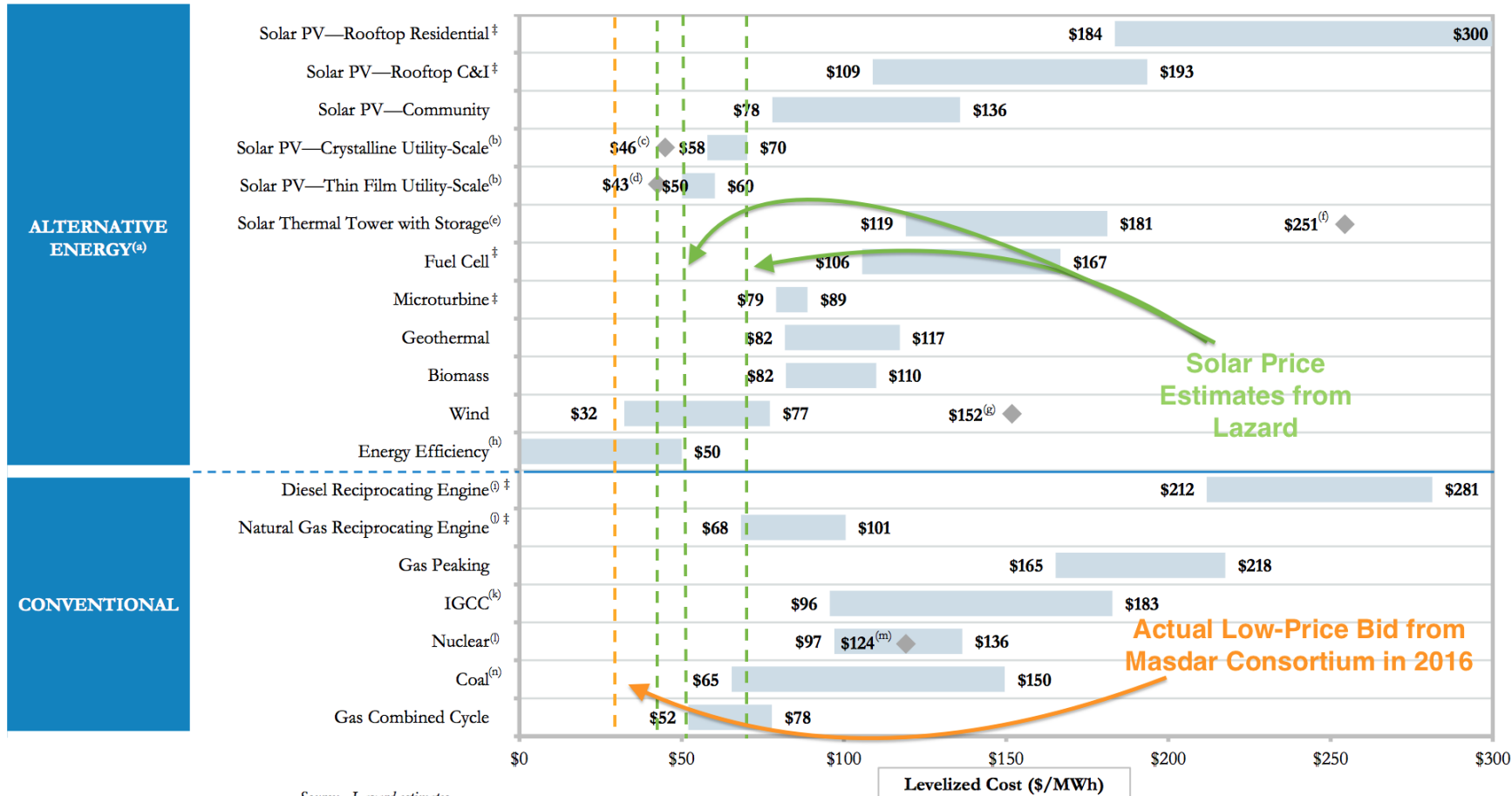
2017 USD
per Watt DC



- ▨ Soft Costs - Others (PII, Land Acquisition, Sales Tax, Overhead, and Net Profit)
- ▤ Soft Costs - Install Labor
- ▥ Hardware BOS - Structural and Electrical Components
- ▦ Inverter
- ▧ Module

Unsubsidized Levelized Cost of Energy Comparison

Certain Alternative Energy generation technologies are cost-competitive with conventional generation technologies under some scenarios; such observation does not take into account potential social and environmental externalities (e.g., social costs of distributed generation, environmental consequences of certain conventional generation technologies, etc.) or reliability-related considerations (e.g., transmission and back-up generation costs associated with certain Alternative Energy technologies)

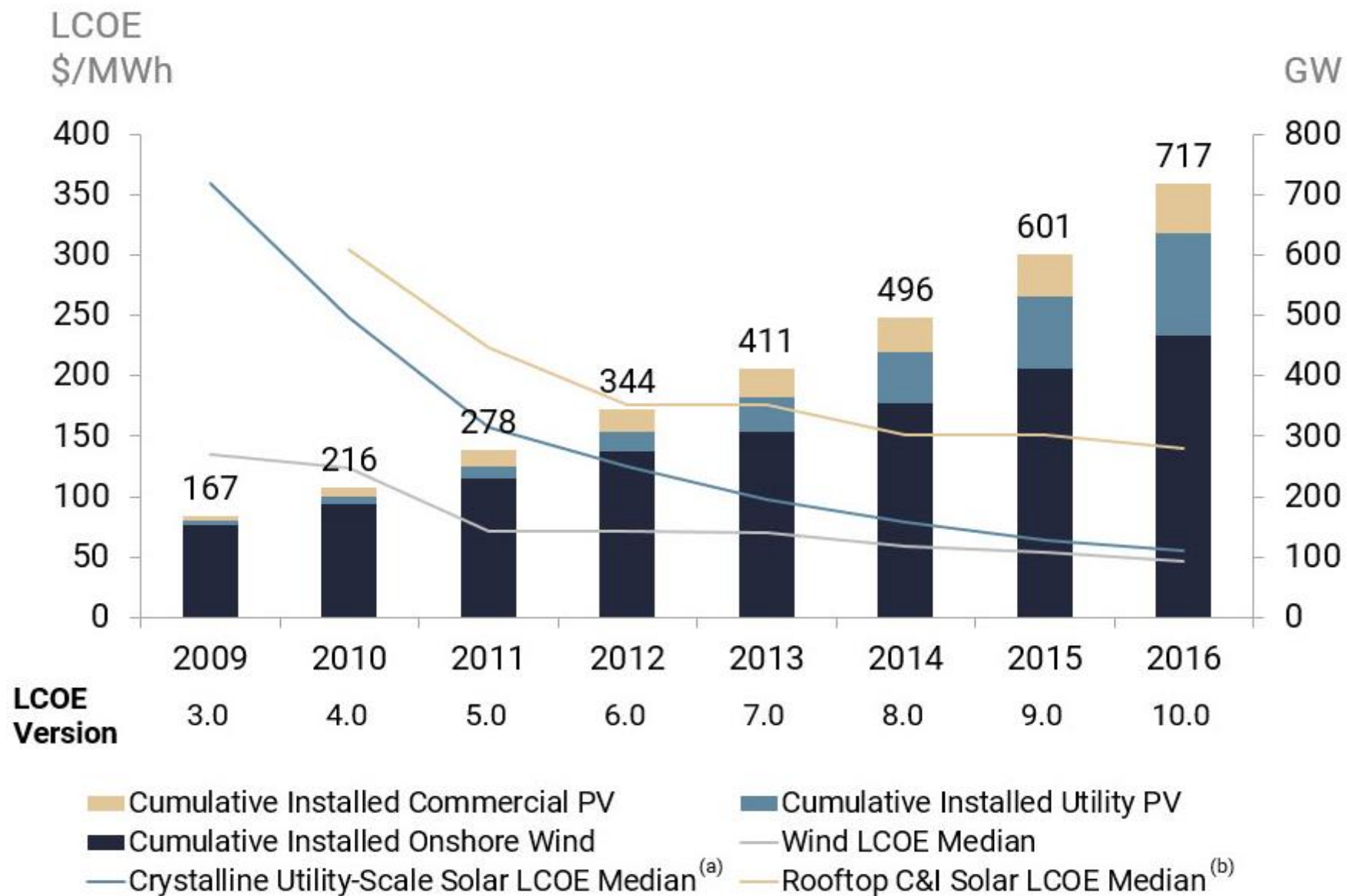


Source: Lazard estimates.

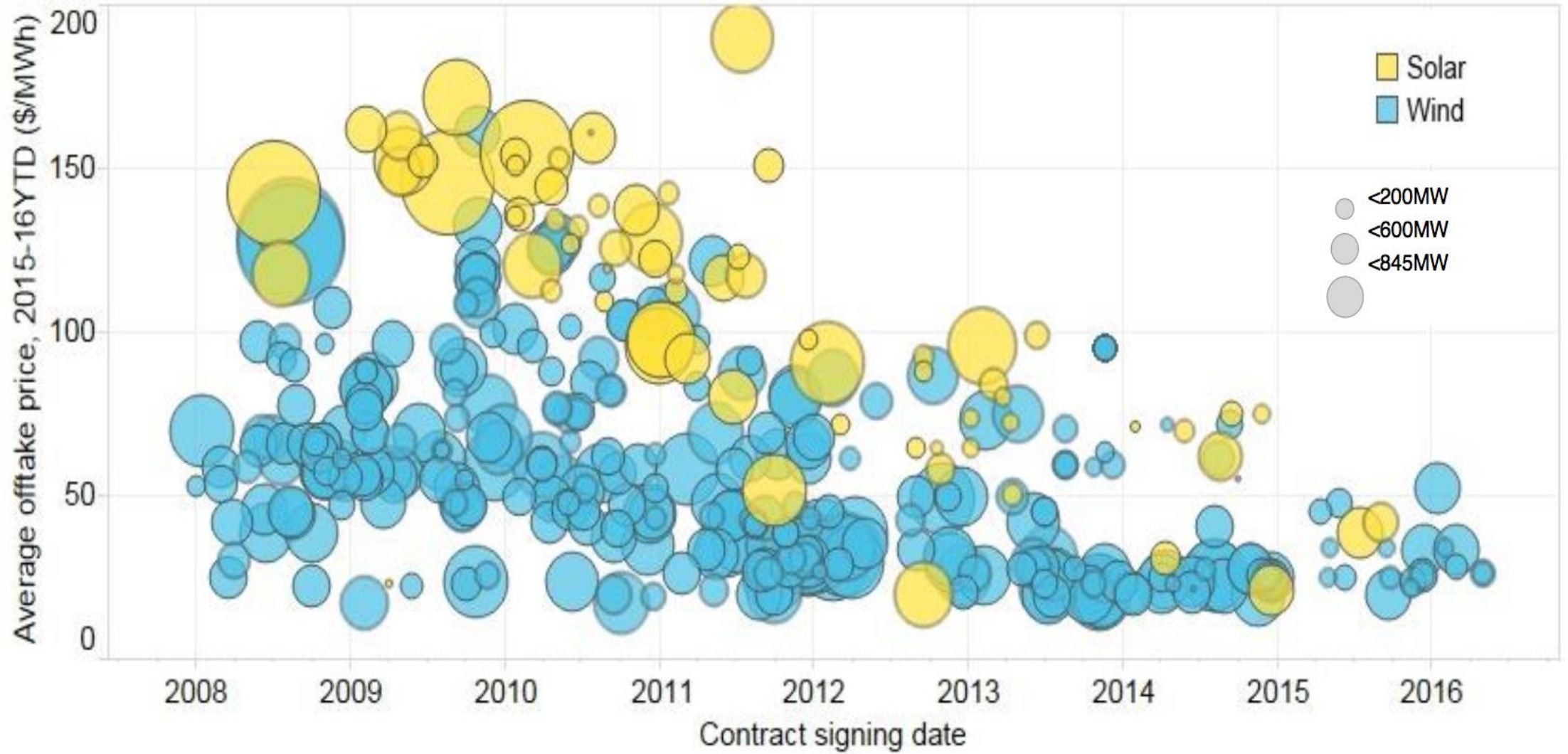
Note: Here and throughout this presentation, unless otherwise indicated, analysis assumes 60% debt at 8% interest rate and 40% equity at 12% cost for both conventional and Alternative Energy generation technologies. Assumes diesel price of ~\$2.50 per gallon, Northern Appalachian bituminous coal price of ~\$2.00 per MMBtu and a natural gas price of ~\$3.50 per MMBtu for all applicable technologies other than Natural Gas Reciprocating Engine, which assumes ~\$5.50 per MMBtu. Analysis does not reflect potential impact of evolving regulations/rules promulgated pursuant to the EPA's Clean Power Plan. See following page for footnotes.

Unsubsidized Levelized Cost of Wind/Solar PV

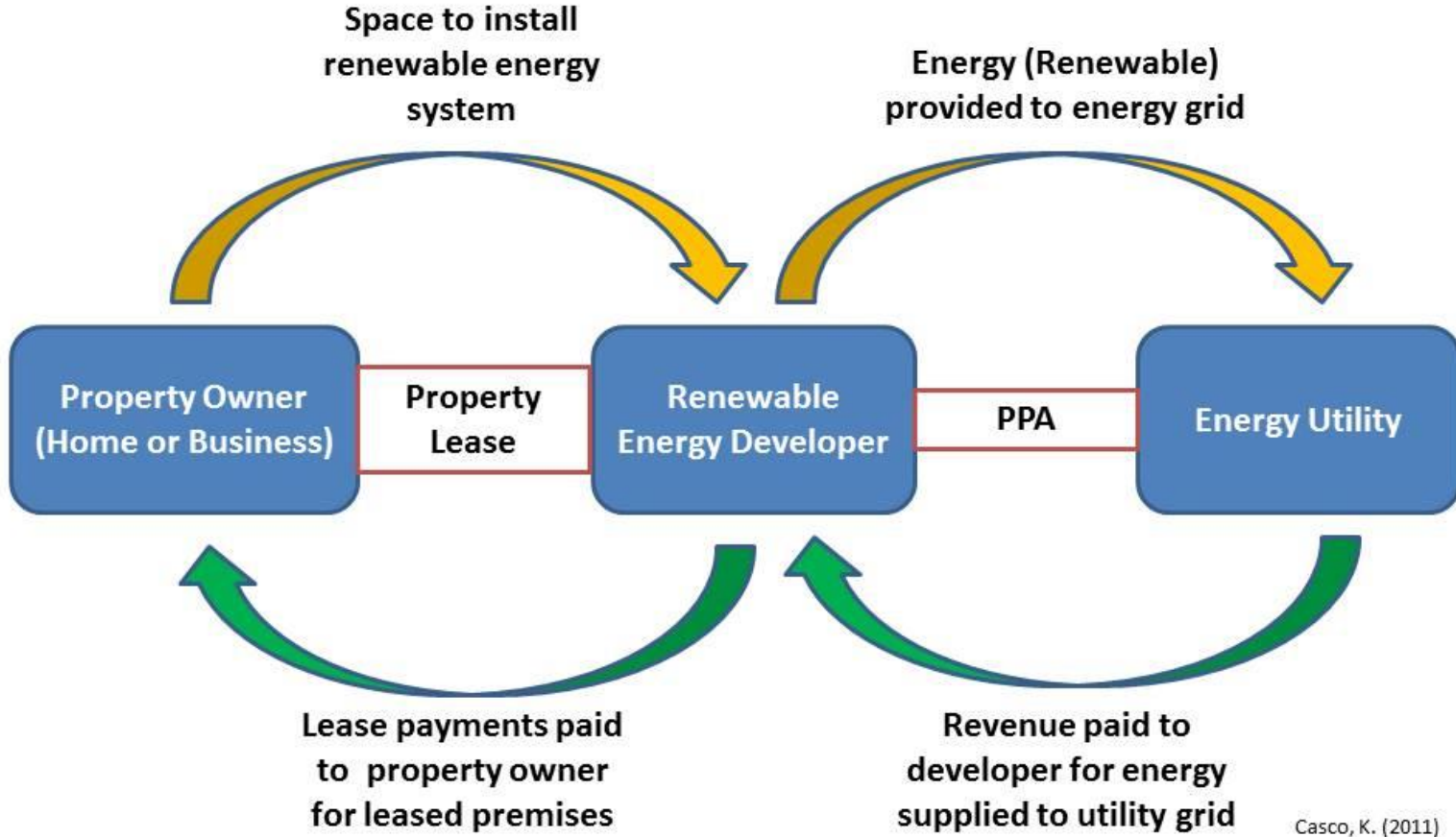
Source: Lazard, BNEF 2017



Offtake prices for wind and solar PPAs (\$/MWh) Bloomberg 2017



The PPA Model: Onsite



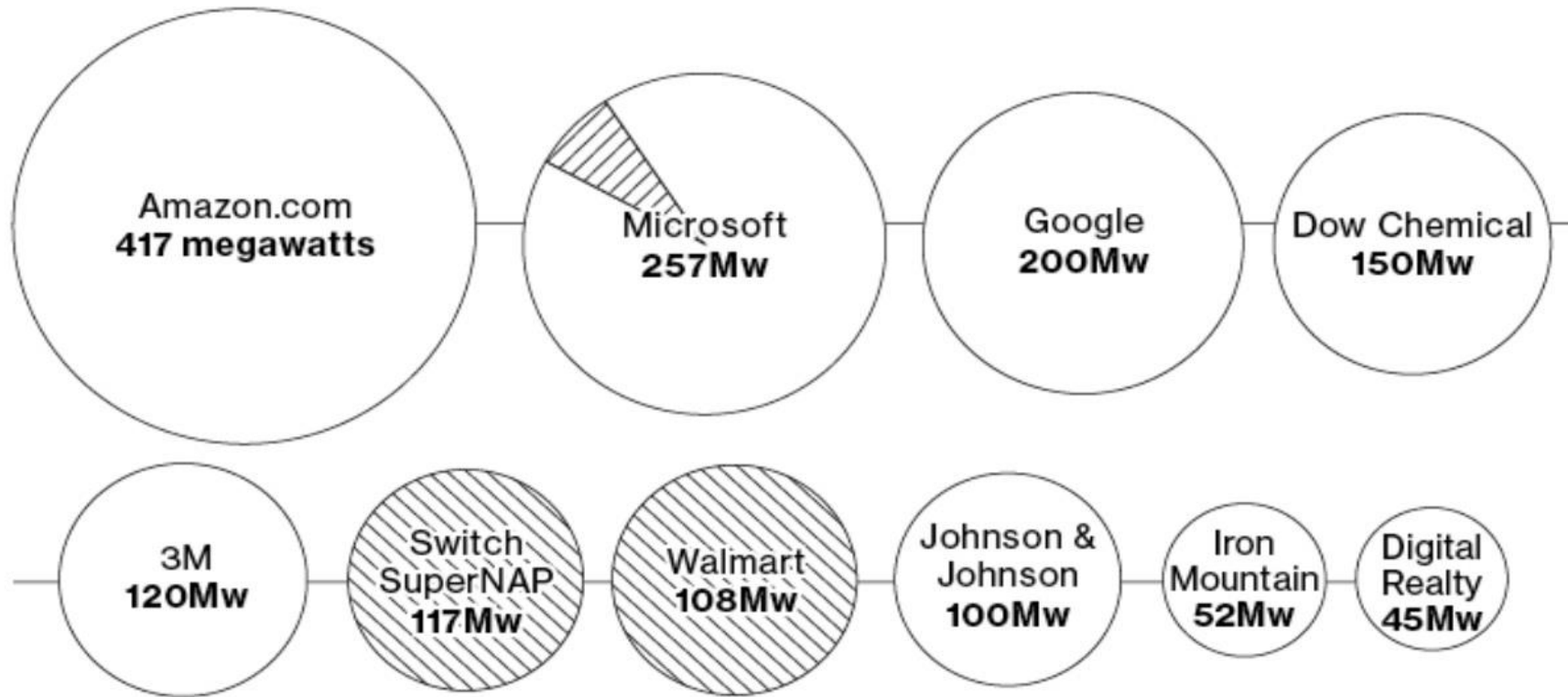
Casco, K. (2011)

Mix of wind and solar (US deals)

Greener Companies

The 10 biggest signers of renewable-energy deals in 2016

□ Wind ▨ Solar



GETTY IMAGES; ENERGY CONTRACT DATA THROUGH NOV. 14;
DATA: BLOOMBERG NEW ENERGY FINANCE; GRAPHIC BY BLOOMBERG BUSINESSWEEK