

Monday, January 18, 2016

Cost of Energy Comparison, Including Levelized Cost of Energy (LCOE) - 2016 Update



There must be numerous ways to compare cost of technologies for generation, storage and delivery of energy. The most widely used measure for this purpose for this purpose has been Levelized Cost of Energy (LCOE). LCOE is also known as LEC (Levelized Energy Cost), LUEC (Levelized Unit Energy Cost), or busbar cost. LRMC (Long-Run Marginal Cost) is a similar but different measure, although it is often presented by LCOE due to LCOE's characteristics being a proxy of LRMC.

I have been updating this list since April 2010. However, there are many critics of using LCOE as a means of comparing the economics of electricity generation technology options (The most notable summary of those criticism: Hirth, L., Ueckerdt, F., & Edenhofer, O. (2015). Integration costs revisited – An economic framework for wind and solar variability. *Renewable Energy*, 74, 925–939. [Full-text at <http://dx.doi.org/10.1016/j.renene.2014.08.065>]). In this new list for 2016, I tried to include a variety of cost comparison metrics, while continuing to provide extensive references for LCOE.

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