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CAPITAL AND CLIMATE

Record global investment in 2014 driven by greater private investment in renewable energy

- \$391 billion dollars invested in low-carbon technology and climate resilience in 2014, according to new analysis by the Climate Policy Initiative.¹
 - o An 18% increase from the 2013 level of \$331 billion invested.
 - o \$243 billion from private capital and \$148 billion from public funds.
 - o 83% went to low carbon technologies.
- \$292 billion dollars invested in renewable energy in 2014.
 - o 75% of the private capital invested went to renewable energy projects in 2014. This is a 26% increase from 2013 levels, which is all the more striking given the plunging cost of renewable energy.
 - o Private investment in generation from solar photovoltaics (PV) increased 225% from 2013.²
 - o Global rankings for 2014 investment.³
 - 1. China invested the most at \$83 billion, up \$22 billion (+36%) from 2013.
 - 2. The U.S. was the second largest investor in renewables at \$38 billion.
 - 3. Japan was third largest, at \$36 billion, 10% higher than 2013.
 - Analysis by Bloomberg New Energy Finance reveals recent trends similar to these, finding a 19% increase in clean energy investment in 2014 over 2013.⁴
- Globally, nearly 50% of all new power installed was renewable in 2014.⁵
 - o 103 gigawatts (GW) of capacity added by new renewable energy sources last year, compared to 86 GW in 2013.
 - o 95 GW of the added 103 GW were solar and wind installations.
- Rapidly declining costs are driving investment in low-carbon technologies. The following facts are from the U.S. context, but the trends illustrated will be broadly similar globally.

¹ This statistic and all others, except as noted, are from the report: <u>Global Landscape of Climate Finance 2015</u> by The Climate Policy Initiative. The units for all monetary figures are nominal US dollars.

² UN Environment Program and BNEF. 2015. <u>Trends in Renewable Energy Investment</u>, Data Pack, Figure 6.

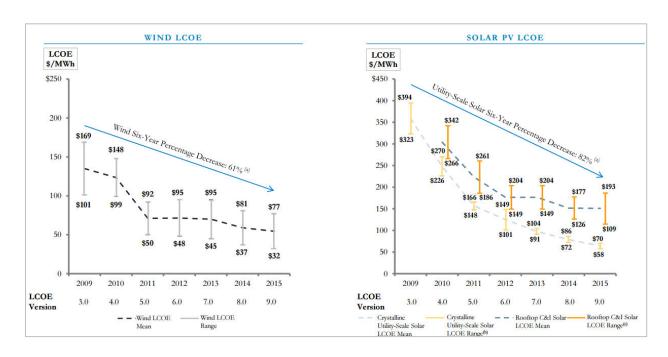
³ UN Environment Program and BNEF. 2015. *Trends in Renewable Energy Investment*

⁴ Bloomberg New Energy Finance updated data (8 October 2015) on global clean energy investment.

⁵ UN Environment Program and BNEF. 2015. <u>Trends in Renewable Energy Investment</u>

- o The city of Austin's municipal utility is paying 5 cents per kilowatt-hour under a recently signed power contract. More recently, the utility has received 1.3 GW of solar PV bids at 4 cents per kilowatt-hour, a further reduction of 20% in less than one year.⁶
- o Light Emitting Diode (LED) light bulbs are an energy efficiency success story. Since 2008, annual installations of LED light bulbs have grown from less than 400,000 to more than 78 million, and LED prices have dropped by almost 90%. LEDs use 80% less energy than incandescent bulbs and last 25 times longer.
- The following data illustrate that renewable energy sources are nearing or have achieved cost competitiveness. Lazard, a respected financial advisory firm, assesses the "levelized cost of electricity" (LCOE), which represents the per-kilowatt-hour (kWh) cost in real dollars of building and operating a generating plant over its lifetime.

Renewable examples ⁸		Conventional examples ⁸	
Utility Scale Solar PV	5.8 – 7 cents/kWh	Natural Gas	6.8 – 10.1 cents/kWh
Wind	3.2 – 7.7 cents/kWh	Coal	6.5 – 15 cents/kWh



⁶ Greentech Media. 2015. Cheapest Solar Ever? (March 14) and *Solar Bids for Less Than 4 Cents* (June 30)

⁷ Department of Energy. 2015. <u>6 Charts That Will Make You Optimistic About America's Clean Energy Future</u>.

⁸ Lazard. 2015. <u>Levelized Cost of Energy Analysis – Version 9.0</u> (Graphics are also sourced from Lazard for noncommercial use.)