



Source: Berkeley Lab database

Figure 22. Installed Wind Project Costs by Region: 2007-2008 Projects

**After Increasing Dramatically in Recent Years, Turbine Prices Showed Signs of Easing in Late 2008**

Increases in wind power prices and overall installed project costs mirror increases in the cost of wind turbines over the last several years. Berkeley Lab has gathered data on 59 U.S. wind turbine transactions totaling 21,100 MW, including 10 transactions summing to 4,500 MW in 2008 alone. Figure 23 depicts these reported wind turbine transaction prices.

Sources of transaction price data vary, but most derive from press releases and press reports. Wind turbine transactions differ in the services offered (e.g., whether towers and installation are provided, the length of the service agreement, etc.) and on the timing of future turbine delivery, driving some of the observed intra-year variability in transaction prices. Nonetheless, most of the transactions included in the Berkeley Lab dataset likely include turbines, towers, erection, and limited warranty and service agreements.<sup>38</sup>

Since hitting a low point of roughly \$700/kW in the 2000-2002 period, turbine prices appear to have increased by approximately \$700/kW (100%), on average, through 2008. Between 2007 and 2008, capacity-weighted average turbine prices increased by roughly \$90/kW (7%), from \$1,270/kW to \$1,360/kW. Increases in turbine prices over this period have been caused by several factors, including the declining value of the U.S. dollar relative to the Euro, increased materials and energy input prices (e.g., steel and oil), a general move by manufacturers to improve their profitability, shortages in certain turbine components, an up-scaling of turbine size (and hub height), and improved sophistication of turbine design (e.g., improved grid interactions).

<sup>38</sup> Because of data limitations, the precise content of many of the individual transactions is not known.