

Figure 3.2: Chart of Wind Power Types.

Land type & scale	Technologies	Land use issues	Legal
Private Land: Terrestrial Utility- Scale	Current state of the art is 1.5 to 3.5 MW turbines from 216 feet (66m) to 328 feet (100m) tall.	According to awea.org, utility scale wind requires about sixty acres per megawatt of installed capacity. Turbines located on ridgelines in hilly terrain can require as little as two acres per megawatt.	Accumulation of leases, easements, or severed wind deeds for a “farm.” A buffer zone is required to prevent upwind turbines from deflecting downwind resources.
Private Land: Terrestrial Distributed Wind	Mostly rural applications; relatively rare and inefficient in urban areas because of obstructions.	Rooftop or yard installation.	For landowners’ own electricity use.
Public Land	Similar to Terrestrial Utility-Scale	Acquisition & land issues to be discussed in Chapter 8.	On state land, leases from states. On federal level, the Bureau of Land Management uses rights of way (ROW) or rights of use and easement (RUE).
Offshore wind	Generally larger turbines than for terrestrial wind, current proposals up to 7.5 MW.	Acquisition & land issues to be discussed in Chapter 8.	Permitting through federal government for turbines more than three miles from shore. States generally regulate the area between, so state permits or leases will be required for facilities closer to shore and for connection to shore for federal offshore turbines.