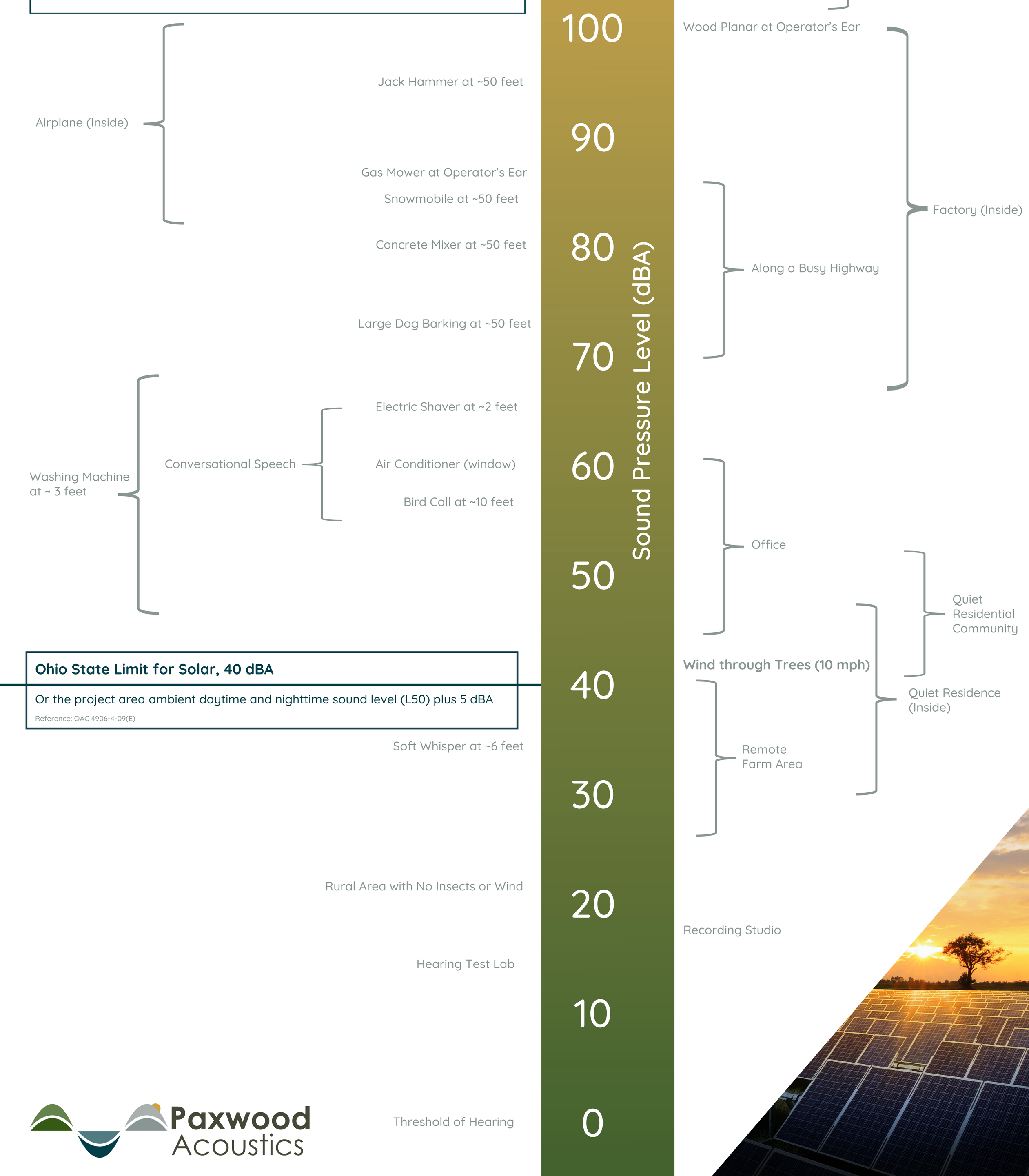
The Sound of Solar

Do photovoltaic solar projects create sound?

While solar panels do not produce sound, there is some equipment associated with solar projects that can create sound. The primary sources of sound are inverters and transformers. Inverters and medium voltage transformers are typically interspersed among the solar array, and a high voltage transformer is located at the project substation. Transformers can produce sound day or night as they remain energized at night while inverters typically operate during the day when the sun is out, but may also produce sound at night at a reduced level.

Secondary sound sources include trackers which would be located throughout the solar array. Trackers generally produce lower sound levels relative to inverters, and they typically only operate for a few minutes per hour during the day as they rotate the panels to track the sun.

As shown in this chart, the sources associated with solar are relatively lower in sound pressure level than many other everyday sounds.



Ohio State Limit for Solar, 40 dBA

Or the project area ambient daytime and nighttime sound level (L50) plus 5 dBA

Reference: OAC 4906-4-09(E)

Paxwood Acoustics