**Solar tracker**

A solar tracker is a device that orients solar panels toward the sun throughout the day. By following the sun's path, these systems maximize the amount of sunlight that solar panels capture, leading to increased energy production.

The primary advantage of using a solar tracker is the significant boost in energy efficiency—up to 25-35% more than fixed-tilt systems. This enhanced efficiency means more power generation, especially in areas with long daylight hours. Solar trackers also optimize space usage, as fewer panels are needed to produce the same amount of energy compared to fixed systems.

Additionally, solar trackers can extend the lifespan of a solar installation by ensuring that panels operate under optimal conditions, reducing wear and tear. This technology is particularly beneficial for large-scale solar farms but is increasingly accessible for residential and commercial installations, making it a smart choice for maximizing energy output.