

MICRO WIND POWER

Micro wind turbines are those with a capacity of 100 kilowatts (kW) or less.¹ They are often used to power pumps, charge batteries, and provide electrification in rural areas that lack access to the grid. They can also be placed on large structures, such as skyscrapers; in fact, the Eiffel Tower has several microturbines that produce electricity for use onsite. Micro turbines are an emerging technology and little is known about how turbulence, noise, visual impacts, and animal strikes may affect their ability to be deployed at scale. While micro turbines will not play a major role in producing renewable energy for the masses, they can be ideal in certain applications, such as when they bring power to locations that do not yet have access to it. They can also be installed as a DER in any area where zoning allows them, as an alternative to rooftop solar. There are even DIY kits available for homeowners who wish to assemble and install their own rooftop turbines.²

- Fishery friendliness: Micro wind turbines placed on rooftops are fishery friendly because the location of their deployment is within the developed footprint (i.e., it is deployed on homes and buildings, rather than in waterbodies or waterways) and it has no impacts on land use. Even when placed on the ground, the scale of these installations is so small that it is unlikely to impact aquatic and marine ecosystems and resources.
- Co-benefits: The primary co-benefit of micro wind is provision of electricity to areas without access to the grid.
- Environmental externalities: Although little is known about the environmental impacts of micro wind turbines, it is possible that turbine strikes may affect birds and bats.
- Policy catalysts: Micro wind turbine installation can be supported through any policy that encourages or lowers barriers to DER, including net metering programs, standard offer contracts such as feed-in tariffs, interconnection standards, tax incentives, grants, loans, on-bill repayment/financing, carbon pricing, and renewable/clean energy standards, and DER carveouts.
- More information:
 - [Drawdown: Micro wind turbines](#)
 - [Department of Energy: Small wind guidebook](#)
 - [Wikipedia: Small wind turbine](#)

Continue reading at <https://fisheryfriendlyclimateaction.org/solutions>

¹ Project Drawdown: “Micro wind turbines.” <https://drawdown.org/solutions/micro-wind-turbines>

² Project Drawdown: “Micro wind turbines.” <https://drawdown.org/solutions/micro-wind-turbines>