



# wind turbine graveyards stretching across the landscape.

But Here i want to share the highlighting of another issue linked to renewable energy: 🔍 The "wind turbine graveyard" in Casper, Wyoming, is real and contains more than 1,100 wind turbine blades that have been disposed of and buried in a local landfill since 2019

<https://windexchange.energy.gov/end-of-service-guide> Similar disposal sites exist in West Texas, where thousands of old wind turbine blades have been dumped

<https://www.renewableenergyhub.co.uk/main/wind-turbines/how-long-will-the-wind-turbine-last>

<https://www.sciencedirect.com/science/article/pii/S1364032117313503> Wind turbines have a lifespan of 20-30 years, and since the first wind farm was erected in New Hampshire in 1980, over 12,600 turbines have already been decommissioned ACS C&ENTWI. In the US alone, some 8,000 blades were removed in 2021 <https://energyfollower.com/how-long-do-wind-turbines-last/> , and more than 6,500 blades need to be removed each year in Europe until 2025 <https://www.twi-global.com/technical-knowledge/faqs/how-long-do-wind-turbines-last> ♻️

Why Recycling is Challenging

While more than 85% of wind turbine materials (steel, copper wire, gearing) are recyclable, the blades are not Wind turbines are ageing – what happens next? - Power Technology. Large composite blades are often treated as waste, leading to potential strains on regional landfills and loss of durable materials Wind Turbine Blades Don't Have To End Up In Landfills - Union of Concerned Scientists. The biggest issue impeding recycling is cost Can wind turbine blades be recycled? | National Grid.

Scale of the Problem

An estimated 800,000 tonnes of turbine blades are entering waste streams How can companies recycle wind turbine blades?, and each turbine blade requires between 30 and 44.8 cubic yards of landfill space How long is the lifespan of wind turbines? | Business Norway.

Recent Developments

The good news:

Old wind turbine blades aren't being buried in landfills as much anymore as landfills refuse to accept them Renewable Energy Fact Sheet: Wind Turbines

Carbon Rivers has commercialized technology that can recycle fiberglass from decommissioned wind turbine blades Wind Energy Has A Waste Problem: Disposing Of The Turbines : NPR

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NREL has advanced methods for recyclable wind turbine blades using PECAN resin that can withstand weatherization while remaining recyclable ACS C&EN Cowboy State Daily  
The industry is turning to new materials to ensure blades don't end up in landfills or incinerators Solving wind's dirty secret: innovating wind turbine blade disposal - Power Technology

### Conclusion

The post highlights a real challenge but:

The problem represents a tiny fraction of total solid waste

Policy changes are pushing recycling solutions as landfilling bans take effect Clean Grid

Alliance | Wind Turbine Recycling and Disposal

The industry is rapidly developing recycling technologies

Companies are actively working to solve this sustainability issue

<https://www.facebook.com/reel/728615689964638>