

# Climate Changed Turbines in Landfill Trigger Debate Over Wind's Dirty Downside



Wind turbines may be carbon-free, but they're not recyclable.

A photograph of dozens of giant turbine blades dumped into a Wyoming landfill touched off a debate Wednesday on Twitter about wind power's environmental drawbacks. The argument may be only beginning.

Fiberglass turbine blades – which in some cases are as long a football field – aren't easy to recycle. And with BloombergNEF expecting up to 2 gigawatts worth of turbines to be refitted this year and next, there could be heaps more headed for dumps.



A technician repairs a wind turbine blade in Adair, Iowa.

Photographer: Daniel Acker/Bloomberg

Cynthia Langston, solid waste division manager for the city of Casper, declined to say where the turbine debris came from. But she's happy to have it. The 1,000 blades will bring in about \$675,000 for the landfill, helping keep trash costs low for local residents. Plus, Langston said, wind-farm junk is less toxic than other garbage.

"It's much cleaner than the contaminated soil and demolition projects from the oil and gas industry," Langston said in an interview. "These are about as non-toxic as you can get."

Wind turbine blades represent a "vanishingly small fraction" of overall waste in the U.S., according to the American Wind Energy Association.

Sachin Shah, chief executive officer of one of the world's largest clean-power operators, Brookfield Renewable Partners LP, said "there will be an aggressive effort to re-use

materials” in the years ahead.