

Positioning Your Battery Bank

One of the first challenges many DIYers face when beginning the process of constructing a battery bank-coupled wind turbine is where precisely to locate the battery bank.

There are a variety of constraints and limitations that are important to note when choosing a location for the battery bank. Here we try to summarize some of these considerations and make a few suggestions that have been accumulated over the years from our community of DIYers.

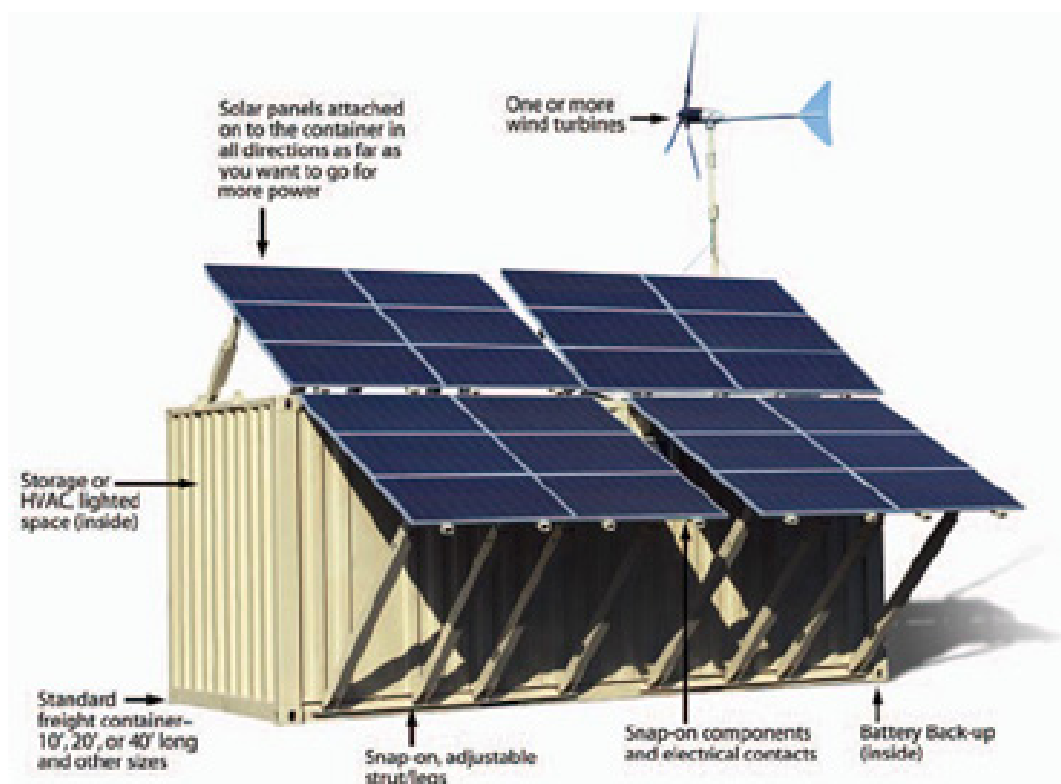
Most batteries operate sub-optimally at low temperatures.

As a result, it's important to consider an appropriate enclosure for your battery bank, especially if your generator operates in cold climates. When considering an enclosure, please note that there should be some ventilation available since many lead-acid batteries release small amounts of exhaust gases which could combust.

Some suggestions to address this problem are to insulate the battery with styrofoam or "spray-on" insulation, to help keep the battery warm.

Some of our customers report using cheap shipping containers for protecting their batteries from extreme cold. Again, be sure to build in ventilation, but also be sure to protect the interior from rain and moisture, as well as bugs and small critters which might chew up the wiring or compromise the integrity.

The diagram below demonstrates how the military deploys enclosures that serve a similar purpose.



Keep the wire from your generator to your battery bank as short as possible.

This is critical if you want to prevent transmission losses and it also saves money on the expenses for wiring.

Now, while it's preferable to keep your batteries as close as possible to your generator itself, it's generally expected

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that you'll have some separation. The distance between your battery and generator will have an influence on the optimal wire gauge to use.

For more information, please visit our [User Forums](#) [1] and browse through the hundreds of useful tips and insights from our community of DIYers!

- [Electricity Storage](#) [2]



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