

# We can have a 100% green energy grid

The technology is already here for reliable, renewable energy



## Compressed Air Storage



The excess energy generated by renewable power stations is used to compress air. The denser result has potential energy that is released once the air is allowed to expand again during times of peak demand.

## Pumped Hydro Storage



Excess energy is used to pump water uphill. When needed, water is allowed to flow back downhill, turning a turbine to create electricity as it moves. (It is important that this is sited in ecologically appropriate areas.)

## Battery Technology



A battery farm in Australia stores enough energy to power 30,000 homes for an hour. Texas is getting its own battery farm to handle the energy demands of 20,000 homes on a hot summer day.

Several companies now produce batteries specifically intended for storing renewable energy that small buildings, like homes, generate.

## Smart Grids



Smart grids are important for integrating renewables into our energy mix. Smart grids provide increased security, reduce outage risk, lower energy costs, allow industrial-sized operations to understand the impacts of small solutions, offer the ability to reroute electricity around a faulty part of the grid, and allow for automatically reporting outages for faster repair.

## How do we get to 100% green energy?



Rather than continuing to invest in fossil fuel infrastructure, state and federal governments can instead choose to help with the transition to cheap renewable energy, and save consumers health and financial costs. The technology to switch to a 100% green energy grid isn't coming in several decades; it's here now and continues to improve.

Learn more at [sierraclub.org/wisconsin/blog/2021/09/green-energy-and-reliability](https://sierraclub.org/wisconsin/blog/2021/09/green-energy-and-reliability)



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