Blue Horizons Project

Setting the course for clean energy

Battery Storage

Technology Presentation

THE CITY OF ASHEVILLE
NORTH CAROLINA

BUNCOMBE COUNTY
FOUNDED 1792
NORTH CAROLINA

DUKE ENERGY®

Battery Storage Introduction

The electricity generated by Duke Utility power plants in Asheville City and Buncombe County will now start to be stored in battery systems.

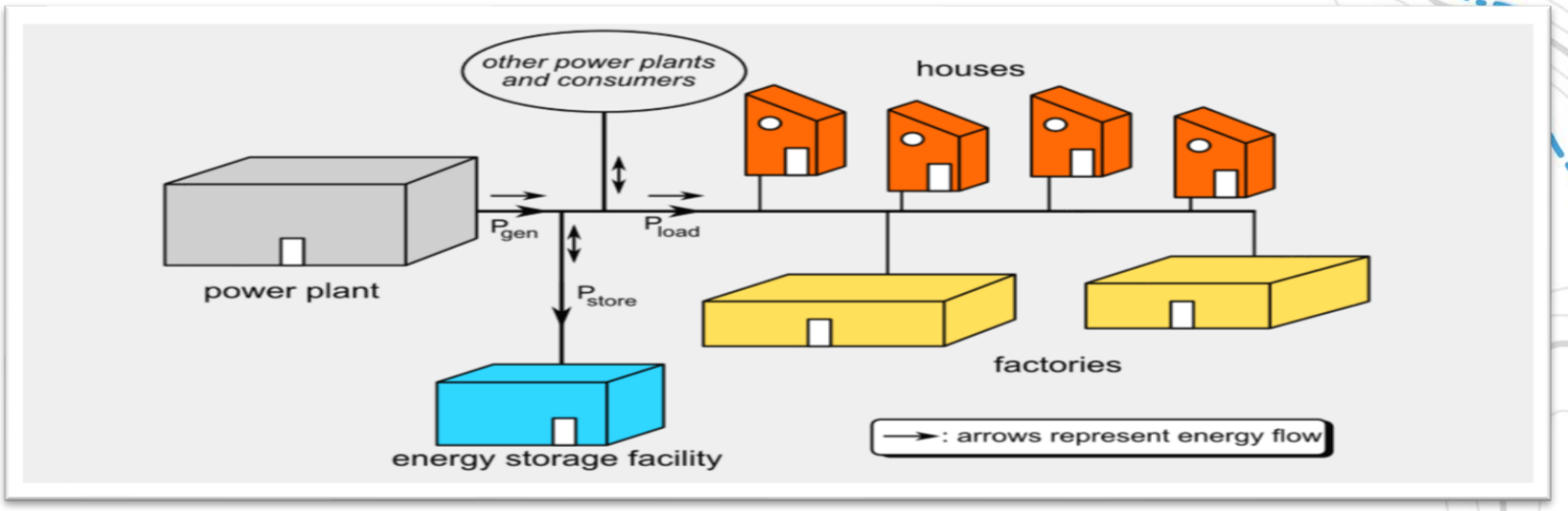
Storing electricity in battery storage systems connected to the utility energy grids allows for that energy to be used at a later time.

Blue Horizons project

How Does Battery Storage Work?

A battery stores electricity to be used at any given time of demand. The stored electricity can come from any energy source, including solar, wind, wave, tidal, geothermal as well as burning fossil fuels.

Electricity produced by Duke Energy utility power plants can charge batteries when energy demand is low and redistribute it during peak load times which decreases the cost of energy for customers and stabilizes the grid.



Blue Horizons project

Benefits of Battery Storage

- Sunlight from solar panels can be stored as electricity in a small home battery that powers your electric vehicle and your home at night and during utility power outages.

- Large scale battery storage systems can store huge amounts of energy from renewable energy any time the wind blows or when the sun shines.

- Small batteries in homes and businesses as well as large scale battery systems make the utility energy grid more stable, efficient, lower cost and offer clean, renewable energy for everyone.

Blue Horizons project

Battery Storage Financial Cost

You can purchase small battery system for your home, like the Tesla Power Wall, for $5,000 with 13 KWh, enough energy to power most homes for a week.

Stored energy can be sold back to the utility's electric grid, which reduces your cost for energy.

Blue Horizons project

Battery Storage Modernizes the Grid

Our Community in Asheville and Buncombe County is committed to creating a cleaner, smarter and more affordable energy future.

Taking the initiative to start using battery storage in our homes and businesses, especially those powered by renewable energies like solar and wind, helps more clean energy find its way to the grid to be distributed to all of our community. Battery storage leads to a brighter, cleaner world of energy for all of us.

Blue Horizons project

Want to Know More?

Frequently Asked Questions

1. Are there any batteries cheaper than $5,000?

Yes you can purchase batteries for storing solar energy for just a few hundred dollars. They may only power your home for a few hours. The battery system cost will increase with the amount of energy that can be stored.

2. Can I use the Federal Tax rebate for solar power on my battery?

Yes, as long as the batteries are charged by solar panels at the home or business.

3. How does the battery connect to other renewable energy sources?

Wind turbines along with wave and tidal generators can be connected in a similar way to solar energy. Geothermal energy would be a little more complex.

Blue Horizons project

Want to Know More?

4. Where can I get advice on which battery will work with my home or business energy setup?

The best choice would be to contact a local solar installation company in your area and ask them to come out and review your monthly utility bills and offer the best solution for your budget.