Building Tomorrow's Grid to Power Your Life

A modern digital energy network

Énergie NB Power

The way we make and use energy is changing.

A smarter grid is key to unlocking an innovative, sustainable and bright future for New Brunswick.

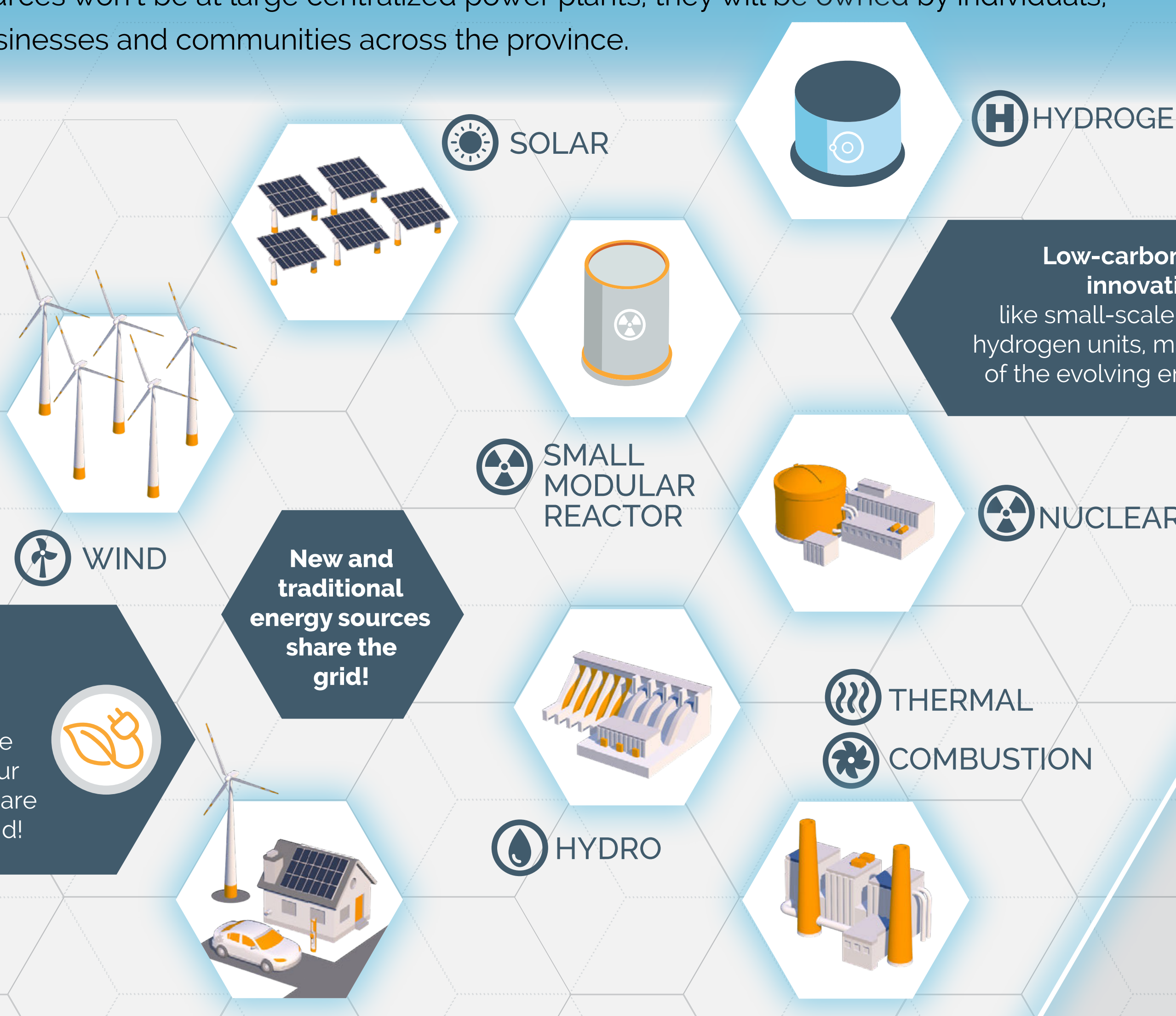
Customer expectations, climate change and new technologies are causing significant changes to the future of energy. To keep pace, NB Power is changing too. As technology advances, we are upgrading the power grid to bring important new benefits to our customers.

The grid is becoming smarter, cleaner, more resilient, efficient and flexible so you will have more choices and opportunities for how you use energy to power your life.

Read on to learn more!

GENERATION

More energy from renewable, low-carbon and customer-owned sources is part of a smarter grid. They are called **distributed energy resources (DERs)** and include rooftop solar, battery storage, small wind and solar farms and small biomass facilities. These new energy sources won't be at large centralized power plants; they will be owned by individuals, businesses and communities across the province.



Low-carbon energy innovations, like small-scale nuclear and hydrogen units, may also be part of the evolving energy system.

New and traditional energy sources share the grid!

Committed to clean energy
Distributed energy resources reduce the carbon footprint of our electricity system. We are building a greener grid!

TRANSMISSION

A smarter grid improves energy efficiency by reducing electricity losses that happen when it must travel long distances over transmission lines. With a smarter grid, electricity is still delivered from generators to where it is used, but more efficiently and at a lower cost.

Digital Energy Platform

Energy supply and demand change constantly. This can make it challenging to manage renewable energy sources, which shift at nature's whim. As more distributed energy resources are brought onto the grid, they need to be carefully balanced with traditional generation. In a smarter grid, System Operators use a **digital energy platform** (systems and software) to manage complex energy and communications networks to seamlessly integrate more renewables.

DISTRIBUTION

A smarter grid uses new technologies that communicate and work together to deliver electricity to you more reliably and efficiently. A smarter grid is more resilient and allows us to more easily identify outages so we can respond faster to impacts from wind, ice storms, floods, or other things that affect your power.

A smarter grid makes more sense!
Advanced sensing and monitoring, substation automation and two-way digital communications over a secure network give us better awareness of the electricity system so we can respond more quickly to power issues.

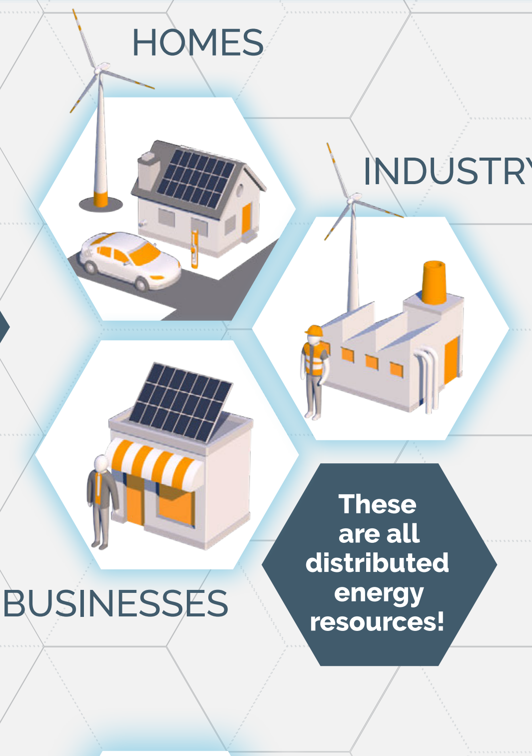
Power created where power is used
Distributed energy resources reduce the distance electricity needs to travel to get to you. This is more efficient and saves money.

Microgrids help distribute electricity and can disconnect from the larger grid and function as a self-sufficient electrical island in case there's a power disruption.

YOUR POWER

A smarter grid, which includes smart meters, means you will have access to detailed energy information so you can better manage your energy use. And it will help you take advantage of innovative energy technologies and solutions like smart thermostats, solar, battery storage and electric vehicles that can give you many new options to power your life.

Smart meters enable two-way communication between customers and NB Power, so you have more choice, control and convenience.



These are all distributed energy resources!

You've got the power!
With a smarter grid you can generate your own power and store it for later – like during a power outage when you need it most.

Secure and easy access to your energy usage data puts you in control.
If you choose, you will be able to share your data with companies that can help you stretch your energy dollars.

Everyone will benefit from a modernized grid!

It offers the ability to integrate more renewable energy sources, reduces winter peak electricity demands, lowers operational costs and carbon emissions. A smarter grid also gives you more information to help you make energy choices!