

NEW BRUNSWICK ELECTRICAL

General Electrical

General electrical questions and home electrical systems

14 Expert Answers from Electric IQ

newbrunswickelectrical.com/construction-brain

Table of Contents

1. What electrical upgrades should I prioritize during a bathroom renovation in New Brunswick?
2. What should I look for when buying a house with old electrical wiring in New Brunswick?
3. How does NB Power's net metering work if I want to install solar panels?
4. How do I find a qualified electrician I can trust in rural New Brunswick?
5. How do I plan the electrical layout for a home renovation in New Brunswick?
6. What is the NB Power time-of-use rate and should I care about it?
7. Is it worth installing solar panels on my house in New Brunswick?
8. What should I look for when hiring an electrician in New Brunswick?
9. How do I safely reset a tripped breaker in my New Brunswick home?
10. How does NB Power's billing work and why is my electric bill so high?
11. What are the most common electrical problems found during home inspections in New Brunswick?
12. How do I find a reliable electrician in rural New Brunswick where there aren't many options?
13. What questions should I ask before hiring an electrician in New Brunswick?
14. What electrical work is needed to convert oil heat to electric heat pump in New Brunswick?

What electrical upgrades should I prioritize during a bathroom renovation in New Brunswick?

During a bathroom renovation in New Brunswick, prioritize GFCI protection, dedicated circuits, proper ventilation wiring, and adequate lighting — these upgrades are code requirements that add safety and value.

Must-have electrical upgrades (CEC requirements):

- **GFCI-protected dedicated circuit:** Every bathroom requires at least one dedicated 20-amp GFCI-protected circuit for the receptacle outlets. In older NB homes, bathrooms often share a circuit with the hallway or bedroom — this must be corrected during renovation
- **GFCI protection on ALL bathroom outlets:** Every receptacle within 1.5 metres of a sink must be GFCI-protected. Best practice: GFCI-protect the entire bathroom circuit at the breaker panel
- **Exhaust fan on its own switch:** The CEC requires mechanical ventilation in bathrooms. Wire the fan independently from the light — a timer switch is ideal, running the fan 15-20 minutes after you leave to clear moisture. This is critical in NB where winter humidity management prevents mould and ice dams
- **In-floor heat circuit** (optional but popular in NB): Electric radiant floor heating requires its own dedicated circuit with GFCI protection. A typical 50 sq ft bathroom mat draws 5-6 amps on a 120V circuit. Popular upgrade in NB due to cold tile floors in winter — most homeowners who install it call it their best renovation decision

Recommended upgrades while walls are open:

- **Recessed LED lighting:** Replace that single ceiling globe with 3-4 recessed LED lights for even, shadow-free illumination. Add a dimmer switch for nighttime use
- **Vanity lighting circuit:** Dedicated circuit for vanity lights separate from the general lighting circuit. Allows different dimming and switching
- **Heated towel rack outlet:** A dedicated receptacle behind or near the towel rack location. Runs on the bathroom circuit if capacity allows. Small luxury that NB homeowners love during cold months
- **USB outlet at the vanity:** Combination outlet with built-in USB-A and USB-C charging ports. Convenient for electric toothbrushes, shavers, and phone charging

NB-specific considerations:

- **Ventilation is critical:** NB's humid summers and cold winters create severe moisture problems in poorly ventilated bathrooms. Specify a fan rated at minimum 80 CFM for a standard bathroom, 110+ CFM for bathrooms with a tub/shower combo. HVI-certified fans are quieter and more effective
- **Electric baseboard heat:** If your bathroom has baseboard heat, the renovation is a good time to replace it with in-floor heating. Frees up wall space and provides more comfortable heat
- **Water-resistant boxes:** All electrical boxes in wet areas (within the shower/tub zone) must be suitable for wet locations

Costs in New Brunswick:

- Basic bathroom electrical upgrade (GFCI, dedicated circuit, fan, lighting): \$1,500-\$3,000
- With in-floor heating and heated towel rack: \$3,000-\$5,000
- TSANB permit: \$100-\$200

Timing tip: Do ALL electrical rough-in before any tile, drywall, or finishing work. Moving wires after tile is installed costs 3-5x more than getting it right during rough-in. Give your electrician the exact layout of fixtures, outlets, and switches before the drywaller starts.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A+ Solar Solutions ?
- BCB Electric ?
- Blue Energy Ltd ?

[View all electrical contractors ?](#)

Q2

What should I look for when buying a house with old electrical wiring in New Brunswick?

Buying a home with outdated electrical wiring is common in New Brunswick — the province has a significant stock of older homes, particularly in cities like Saint John, Fredericton, Moncton, and throughout rural communities.

Understanding the electrical system's condition before closing can save you from surprise repair bills ranging from a few hundred dollars to \$20,000+.

Red Flags to Watch For During Viewings

Before you even hire an inspector, watch for these signs during house viewings:

The electrical panel:

- **Fuse box instead of breakers:** A fuse box indicates the electrical system is from the 1960s or earlier. While fuses work, they indicate the system hasn't been updated in 50+ years. Upgrade cost: **\$2,500–\$5,000**.
- **Federal Pacific Electric (FPE) or Zinsco panel:** Both are documented fire hazards. Replacement is non-negotiable. Cost: **\$2,500–\$5,500**.
- **60-amp or 100-amp service:** Many older NB homes have undersized service. With electric baseboard heat (standard in NB), an EV future, and modern appliances, 200 amps is the realistic minimum. Upgrade cost: **\$2,500–\$5,500**.
- **Double-tapped breakers:** Two wires on one breaker (unless it's a breaker specifically designed for two circuits) is a code violation and fire hazard.
- **Burnt, scorched, or melted components:** Any signs of overheating in or near the panel are serious.

Throughout the house:

- **Two-prong outlets:** No ground wire — indicates pre-1970s wiring. Not immediately dangerous but limits what you can safely plug in and indicates the wiring is 50+ years old.
- **Cloth-covered wiring visible in the basement:** Cloth insulation indicates 1950s or earlier wiring. The insulation becomes brittle and crumbles, exposing bare conductors.
- **Knob-and-tube ceramic insulators:** Visible in unfinished basements or attics. Pre-1940s wiring that should be replaced.
- **Few outlets per room:** Older homes often have only 1–2 outlets per bedroom. People compensate with extension cords and power strips, overloading the limited circuits.
- **Extension cords used as permanent wiring:** A sign that the home lacks adequate outlets and circuits.
- **Warm or discoloured outlet covers:** Touch cover plates — warmth indicates a connection problem behind the plate.
- **Flickering lights not related to bulbs:** Can indicate loose connections or deteriorating wiring.

What the Home Inspector Will Check

A standard NB home inspection includes a **visual evaluation** of the electrical system:

- Panel type, capacity, and condition
- Visible wiring type and condition (where accessible)
- GFCI presence in kitchens, bathrooms, and outdoors
- Outlet grounding (using a plug tester)
- Smoke detector presence and type
- Service entrance condition (weatherhead, meter base, grounding)

Limitations: A home inspector does NOT:

- Open walls to examine hidden wiring
- Perform a full load calculation
- Test every circuit for faults
- Inspect inside the electrical panel (some do, some don't — varies by inspector)
- Verify TSANB permits for past work

When to Hire a Licensed Electrician for Pre-Purchase Inspection

If the home inspector flags **any electrical concerns**, or if the home is **older than 1980**, strongly consider hiring a licensed electrician for a **detailed electrical inspection** before closing. This goes far beyond what a home inspector covers:

What an electrician checks:

- Opens the panel and inspects every breaker, wire connection, and bus bar
- Identifies wiring type throughout (copper NMD, aluminum, knob-and-tube, armoured cable)
- Tests circuit integrity and identifies overloaded circuits
- Checks for unpermitted work (mismatched wire, amateur connections)
- Performs an insulation resistance test if wiring age is a concern
- Assesses whether the system can handle your intended use (EV charger, workshop, heat pump)
- Provides a written report with prioritized recommendations

Cost: \$200–\$400 for a thorough electrical inspection. This is one of the best investments you can make when buying an older NB home.

Common Wiring Types in NB Homes by Era

| Era | Wiring Type | Condition Today | Action Needed | |-----|-----|-----|-----| | Pre-1940 | Knob-and-tube | Insulation crumbling, no ground | **Full rewire: \$8,000–\$15,000** | | 1940–1960 | Rubber-insulated cloth-covered | Insulation degrading, may be brittle | **Rewire or extensive repair: \$5,000–\$15,000** | | 1965–1976 | Aluminum branch circuits | Connections prone to overheating | **Pigtailing: \$3,000–\$6,000** or rewire | | 1970–1990 | Copper NMD (older) | Generally serviceable if undamaged | **Panel upgrade if undersized: \$2,500–\$5,000** | | 1990–present | Copper NMD90 | Good condition expected | **Minor updates only** |

Using Findings in Purchase Negotiations

Electrical issues give you leverage in negotiations:

Major issues (negotiate price reduction or require repair before closing):

- FPE/Zinsco panel: \$3,000–\$5,500 credit
- Knob-and-tube requiring full rewire: \$8,000–\$15,000 credit
- Aluminum wiring requiring pigtail: \$3,000–\$6,000 credit
- 60-amp service requiring upgrade: \$3,000–\$5,500 credit

Moderate issues (negotiate or budget for post-purchase):

- 100-amp service (adequate but limiting): \$2,500–\$5,000 to upgrade
- Missing GFCI protection: \$200–\$600 to add
- Insufficient outlets: \$200–\$400 per new outlet
- Missing or battery-only smoke detectors: \$300–\$600 for hardwired system

Minor issues (budget for post-purchase):

- Cosmetic outlet/switch replacement: \$5–\$10 per device
- Light fixture updates: \$50–\$200 per fixture
- Dimmer switch additions: \$20–\$50 per switch

Insurance Considerations

Before committing to purchase, **check insurance availability**. Call your intended insurer and describe the electrical system honestly:

- **Knob-and-tube:** Many NB insurers won't cover it, or charge 25–50% premium surcharges
- **Aluminum wiring:** Most insurers cover if remediated (pigtailed) with documentation. Some require remediation within 30–90 days of policy start.

- **FPE/Zinsco panels:** Increasingly flagged; some insurers require replacement before issuing a policy
- **60-amp fuse box:** Difficult to insure; most insurers require upgrade

If insurance is unavailable or prohibitively expensive due to the electrical system, factor the immediate upgrade cost into your purchase decision.

TSANB Permit History

You can contact TSANB to check whether **electrical permits were pulled** for work done on the property. This reveals:

- Whether major electrical work (panel upgrades, additions, renovations) was properly permitted and inspected
- Gaps where work appears to have been done without permits
- The most recent electrical inspection date

This information isn't always available for very old work, but permits from the last 20–30 years should be on record.

The Bottom Line

When buying an older New Brunswick home:

- **Look at the panel** during every viewing — it tells you immediately how old and adequate the electrical system is
- **Budget \$200–\$400** for a licensed electrician's pre-purchase inspection on any home built before 1990
- **Factor electrical upgrades into your offer** — don't discover a \$10,000 rewiring need after closing
- **Verify insurance availability** before making an offer — an uninsurable electrical system makes the home effectively unbuyable
- **Check TSANB permit history** for evidence of proper maintenance and upgrades

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A+ Solar Solutions ?
- BCB Electric ?
- A&S Electric Ltd. ?

[View all electrical contractors ?](#)

How does NB Power's net metering work if I want to install solar panels?

Net metering in New Brunswick allows homeowners with solar panels (or other renewable generation) to send excess electricity back to NB Power's grid and receive credits on their bill. It's growing in popularity across the province as solar panel costs drop and electricity rates rise — but the program has specific rules, limits, and electrical requirements you need to understand.

What Is Net Metering?

Net metering means your electricity meter runs in both directions:

- When your solar panels produce **more power than you're using**, the excess flows back to the NB Power grid, and your meter runs backward (you earn credits)
- When your panels produce **less than you need** (nighttime, cloudy days, winter), you draw from the grid normally and your meter runs forward (you use credits or pay)

At the end of each billing period, you pay for only the **net** difference. If you produced more than you consumed, the excess carries forward as a credit for future months.

NB Power's Net Metering Program Rules

Eligibility:

- Available to all NB Power residential customers
- System must be **100 kW or smaller** (residential systems are typically 5–15 kW)
- Generation must be from **renewable sources** — solar (photovoltaic), wind, micro-hydro, or biomass
- Must be connected to NB Power's distribution grid (not applicable for off-grid properties)

Credit structure:

- Excess generation is credited at the **full retail rate** (same rate you pay for electricity — currently approximately \$0.1131/kWh for the first block and \$0.1474/kWh for the second block)
- Credits carry forward month to month
- At the end of the **annual billing cycle** (typically the anniversary of your enrollment), any remaining credits are **reset to zero** — NB Power does not pay cash for excess generation
- This annual reset means oversizing your system too much wastes credits. The goal is to size the system to match your annual consumption as closely as possible

Application process:

- Choose a qualified solar installer (look for NABCEP-certified or equivalent)
- Installer helps complete the **NB Power Net Metering Application**
- NB Power reviews and approves the application (typically 4–8 weeks)
- System is installed and inspected (TSANB electrical inspection required)
- NB Power installs a **bi-directional meter** (no cost to you)
- System is commissioned and you begin generating credits

Electrical Requirements for Solar in NB

Panel and Inverter

A residential solar array has two main electrical components:

Solar panels (DC generation): Panels produce **direct current (DC) electricity** at voltages typically ranging from 300–600V DC for a residential string inverter system. This DC wiring runs from the roof-mounted panels to the inverter location.

Inverter (DC to AC conversion): The inverter converts DC power from the panels to **120/240V AC** that matches your home's electrical system and the NB Power grid. Inverter types:

- **String inverter:** One central inverter handles all panels. Most cost-effective. Located near the panel or in the basement/garage. Cost: **\$1,500–\$3,000** for residential sizes.
- **Microinverters:** Small inverters mounted behind each panel on the roof. Better performance with partial shading. Cost: **\$150–\$300 per panel** (higher total cost but better per-panel optimization).
- **Hybrid inverter:** Combines grid-tied operation with battery storage capability. Allows future battery addition. Cost: **\$2,500–\$5,000**.

Electrical Panel Requirements

Panel capacity: Your main electrical panel must have space for the solar breaker. A typical 5–10 kW solar system requires a **30–60 amp, 240V dedicated breaker** in your main panel.

The 120% rule (CEC Section 64): The CEC limits the total amperage feeding a panel to **120% of the panel's bus rating**. For a 200-amp panel:

- Main breaker: 200A
- Maximum solar backfeed breaker: $200A \times 120\% - 200A = 40A$ (supports up to about 7.6 kW of solar)

- For larger solar arrays, either a panel upgrade or a **supply-side connection** (ahead of the main breaker) is needed

If your home has a **100-amp panel**, the 120% rule severely limits solar capacity. An upgrade to 200-amp service (**\$2,500–\$5,000**) is usually recommended before solar installation.

Disconnect Requirements

AC disconnect: NB Power requires a **visible, lockable AC disconnect switch** between the inverter and the grid connection point. This allows NB Power to safely disconnect your solar system during maintenance.

Typically mounted on the exterior wall near the meter.

DC disconnect: A DC disconnect switch is required between the solar panels and the inverter, allowing the DC side to be safely de-energized for maintenance.

Rapid shutdown: Current CEC requirements mandate rapid shutdown capability — the ability to reduce rooftop DC voltage to safe levels within 30 seconds of activation. Most modern inverters and microinverter systems include this feature.

TSANB Permit

Solar panel installation in New Brunswick requires a **TSANB electrical permit and inspection**. The inspection covers:

- DC wiring from panels to inverter
- AC wiring from inverter to panel
- Disconnect switches
- Grounding and bonding
- Proper breaker sizing and the 120% rule compliance
- Rapid shutdown compliance

Permit fee: **\$100–\$250** depending on system size.

Solar Production in New Brunswick

New Brunswick receives approximately **1,100–1,300 kWh of solar energy per square metre per year** — less than southern Ontario or British Columbia, but still viable for net metering.

Seasonal variation:

- **Summer (June–August):** Peak production — long days (15+ hours of daylight), high sun angle. A 10 kW system can produce **40–50 kWh per day**.
- **Winter (December–February):** Minimum production — short days (8–9 hours), low sun angle, snow coverage. The same system produces **10–15 kWh per day**.
- **Annual total:** A well-positioned 10 kW system in the Moncton/Fredericton/Saint John area produces approximately **11,000–13,000 kWh per year**.

NB-specific factors affecting production:

- **Snow coverage:** Panels with a steep pitch (30°+) self-clear snow faster. Maritime wet snow sticks more than prairie dry snow.
- **Fog and overcast:** Coastal areas (Bay of Fundy, Northumberland Strait) experience more fog and overcast days than inland locations
- **Orientation:** South-facing roof pitch of **30–40 degrees** is optimal for NB's latitude (approximately 46°N)

Cost and Payback

Component Cost Range	----- -----	Solar panels (10 kW system) \$15,000–\$22,000	Inverter
\$1,500–\$5,000	Mounting hardware \$1,500–\$3,000	Electrical work (disconnect, breaker, wiring)	\$1,000–\$2,500
TSANB permit \$100–\$250	NB Power meter upgrade \$0 (NB Power covers)	Total installed (10 kW) \$20,000–\$32,000 	

Federal incentive: The **Canada Greener Homes Grant** has offered up to \$5,000 for solar panel installation (check current program availability).

Payback period: At current NB Power rates, a 10 kW system offsetting 10,000–12,000 kWh annually saves approximately **\$1,200–\$1,700 per year**. Simple payback: **12–20 years** depending on system cost and electricity rate increases.

Note: NB Power rates have been increasing approximately **2–3% annually**. If this trend continues, the payback period shortens as the value of your solar generation increases each year.

Battery Storage Considerations

NB Power's net metering program currently provides credits at full retail rate, which means the grid effectively acts as a free battery — you export during the day and import at night without losing value. This makes **battery storage less financially attractive** in NB compared to jurisdictions with lower export rates.

However, batteries provide **backup power during outages** — valuable in NB where extended outages occur. A battery system (like Tesla Powerwall or Enphase IQ Battery) adds **\$10,000–\$20,000** to the installation cost. For

most NB homeowners, the economics currently favor grid-tied solar without batteries, unless outage resilience is a priority.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- [A+ Solar Solutions ?](#)
- [BCB Electric ?](#)
- [A&S Electric Ltd. ?](#)

[View all electrical contractors ?](#)

How do I find a qualified electrician I can trust in rural New Brunswick?

Finding a reliable electrician in rural New Brunswick — whether you're in Sussex, Woodstock, Grand Falls, Caraquet, or anywhere between — presents unique challenges compared to urban centres. Fewer contractors serve these areas, wait times can be longer, and travel charges add to costs. Here's how to find and vet the right electrician for your project.

Start With TSANB Verification

The most important step is confirming any electrician you're considering is **licensed and in good standing with TSANB (Technical Safety Authority of New Brunswick)**. Unlike Ontario's ESA, New Brunswick doesn't have a public online lookup database for individual electrician licenses. Instead:

- Ask the electrician directly for their **licence number and classification** (Construction Electrician, Industrial Electrician, etc.)
- Call TSANB to verify their licence status if you have any doubts
- Confirm they carry **liability insurance** (minimum \$2 million is standard in the industry) and **WorkSafeNB coverage** for their employees

Any electrician who hesitates to provide this information is a red flag. Licensed professionals are proud of their credentials and carry proof.

Where to Search

Word of mouth: In rural New Brunswick communities, this remains the most reliable method. Ask neighbours, local hardware store staff (particularly at locally-owned Home Hardware locations rather than big box stores), and community Facebook groups. Groups like "Sussex Buy and Sell," "Grand Falls Area Community," or "Miramichi Trading Post" often have threads recommending local tradespeople.

Local contractor directories: The New Brunswick Construction Network directory at newbrunswickconstructionnetwork.com lists verified electricians serving communities across the province, with reviews, service areas, and contact information.

NB Power referrals: If your project involves a service upgrade or new connection, NB Power's local office can sometimes suggest licensed electricians who regularly work in your area and are familiar with their requirements.

Municipal building inspectors: Your local building inspector processes electrical permits regularly and knows which electricians are active in your area. They can't officially recommend anyone, but they can tell you who pulls permits consistently — a sign of a legitimate, code-compliant contractor.

Questions to Ask Before Hiring

Once you have 2–3 candidates, ask these questions:

- **Are you licensed with TSANB?** — Non-negotiable. Unlicensed electrical work is illegal in New Brunswick and voids insurance coverage.
- **Do you carry liability insurance and WorkSafeNB coverage?** — Ask for a certificate of insurance. If a worker is injured on your property without WorkSafeNB coverage, you could be liable.
- **Do you charge travel time?** — This is critical for rural projects. Many electricians based in Moncton, Saint John, or Fredericton charge **\$0.50–\$1.00 per kilometre** for travel beyond their base area, or a flat trip charge of **\$50–\$150**. An electrician based closer to you (even if slightly more expensive per hour) may cost less overall.
- **What's your availability?** — Rural electricians are often booked 2–6 weeks out. For non-emergency work, plan ahead. For emergencies (no power, burning smell, exposed wiring), ask about their emergency response — many rural electricians prioritize emergencies for existing customers.
- **Will you pull the TSANB permit?** — A licensed electrician should handle the permit application as part of the job. If someone suggests skipping the permit "to save money," walk away.
- **Can you provide references from nearby projects?** — Local references are particularly valuable in rural areas because you can often drive past the work or know the people involved.

Pricing Expectations for Rural NB

Electrician rates vary across the province:

Area	Hourly Rate	Travel Charge
Moncton/Fredericton/Saint John (urban)	\$85–\$120/hr	Minimal or none
Suburban (Riverview, Quispamsis, Oromocto)	\$85–\$120/hr	\$0–\$50
Small towns (Sussex, Woodstock, Miramichi)	\$80–\$110/hr	\$50–\$100
Remote rural (Campbellton, Edmundston, Caraquet)	\$80–\$110/hr	\$75–\$200+

The hourly rate itself is often similar regardless of location — it's the **travel charge and minimum call-out fee** that increases the total cost for rural customers. Most electricians have a **minimum charge of \$150–\$250** regardless of how small the job is, to cover their travel time.

Red Flags to Watch For

- **No licence number provided:** Unlicensed "handyman electricians" are unfortunately common in rural NB, especially for cash jobs. The savings aren't worth the risk.
- **No written quote:** Always get a written estimate, even for small jobs. This protects both parties.
- **Demands full payment upfront:** A deposit of 25–50% for materials is reasonable for larger jobs. Full payment before work is completed is not.
- **No vehicle signage or business presence:** While not all legitimate electricians have wrapped vans, a complete lack of business identity (no website, no Google listing, no business cards) combined with cash-only pricing is a warning sign.
- **Suggests skipping permits or inspections:** This is illegal and puts your property and insurance at risk.

Tips for Working With Rural Electricians

Batch your projects: If you're paying a travel charge, maximize the value of each visit. Instead of calling an electrician for one outlet, save up several small jobs (add an outlet, fix a flickering light, install a bathroom fan) and have them done in one trip. Most electricians appreciate this approach and may reduce or waive the travel charge for a full day of work.

Be flexible on scheduling: Rural electricians often organize their work geographically — doing all their Miramichi-area jobs on Tuesdays, Woodstock-area on Thursdays, etc. Being flexible on your timing can get you a faster appointment and possibly a reduced travel charge if the electrician is already in your area.

Materials preparation: Ask your electrician what materials they'll need and whether you should purchase them locally or if they prefer to supply their own (often at contractor pricing from electrical supply houses). For rural locations, having materials on-site before the electrician arrives prevents delays caused by supply runs to distant towns.

Build a relationship: Once you find a good electrician who serves your area, treat them well — pay promptly, be ready when they arrive, and offer a fair price. Good rural electricians have loyal customers because they're hard to replace, and they prioritize repeat clients for scheduling and emergency calls.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A+ Solar Solutions ?
- A&S Electric Ltd. ?
- BCB Electric ?

[View all electrical contractors ?](#)

Q5

How do I plan the electrical layout for a home renovation in New Brunswick?

Planning Electrical Layout for a Home Renovation in NB

Electrical planning is one of the most overlooked aspects of home renovations — and one of the most expensive to fix after the fact. Getting the layout right before any walls go up saves thousands in change orders and rework.

Start with a Floor Plan

Before talking to an electrician, draw or obtain a floor plan of the renovated space showing:

- Room dimensions and door/window locations
- Planned furniture placement (this determines outlet locations)
- Kitchen cabinet layout with appliance positions
- Bathroom fixture locations (vanity, shower, tub)
- Any built-in features (bookshelves, entertainment centres, office desks)

This doesn't need to be architect-quality — a hand-drawn plan with measurements is fine.

Room-by-Room Electrical Planning

Kitchen:

- 2 dedicated 20A counter circuits (CEC minimum)
- Dedicated circuits for: dishwasher, refrigerator (recommended), microwave (if over 1,000W), garbage disposal
- Stove/range: 50A, 240V dedicated circuit
- Under-cabinet lighting: separate circuit or shared with general lighting
- Counter outlets: every 900mm along the countertop, no point more than 900mm from an outlet
- Island outlets: at least one duplex outlet, GFCI-protected

- Consider: USB outlets at charging stations, outlet inside pantry for charging devices

Bathroom:

- Dedicated 20A circuit for receptacles (GFCI-protected)
- Exhaust fan (on bathroom circuit or dedicated)
- Lighting (can share a circuit with hallway lighting)
- In-floor heating: dedicated 240V circuit if applicable
- Towel warmer: dedicated outlet or hardwired
- Consider: outlet inside vanity cabinet for electric toothbrush, outlet near mirror for hairdryer at comfortable height

Bedroom:

- Outlets on both sides of the bed location (for lamps and phone charging)
- Outlet for TV if wall-mounted (consider a recessed outlet behind the TV)
- Closet light with door switch or motion sensor
- Overhead light on a dimmer
- All circuits AFCI-protected (CEC requirement for new work)
- Consider: USB outlets at bedside, switched outlet for a lamp if no overhead light

Living room / family room:

- Outlets at all seating areas and along walls per CEC spacing
- TV wall: 2 duplex outlets + coaxial + ethernet behind the TV location
- Fireplace: outlet for electric fireplace insert or mantle lighting
- Recessed floor outlet for centre-of-room furniture if applicable
- Overhead lighting on dimmer(s)
- Consider: outlets at picture-hanging height for art lighting

Home office:

- Dedicated 20A circuit for computer equipment
- Multiple outlets at desk height (3–4 duplex outlets behind desk area)
- Outlet for printer/scanner
- Ethernet drops (2–4) if wired networking desired
- Overhead and task lighting on separate switches
- Consider: USB-C outlet for laptop charging, dedicated circuit for a space heater if the room runs cold

Laundry:

- 20A receptacle circuit (GFCI if near sink)
- 30A, 240V for electric dryer
- Outlet for iron/steamer
- Overhead lighting
- Consider: outlet at counter height for folding station devices

Switch Planning

Switches are often an afterthought — until you're living with the result. Plan for:

- **Every room entrance needs a switch** — no walking across a dark room to reach a lamp
- **Three-way switches** for rooms with multiple entrances and all stairways
- **Dimmer switches** on overhead lights in living rooms, dining rooms, bedrooms, and kitchens
- **Switch height:** Standard is 1,200mm from floor. Consider 900mm if anyone in the household has mobility issues.
- **Switch grouping:** Multiple switches for one room (overhead light, fan, accent lighting) should be in one multi-gang box at the room entrance, not scattered across different walls

Working with Your Electrician

When to bring them in: As early as possible — ideally during the design phase, before framing starts. The electrician needs to:

- Assess your panel capacity (upgrade may be needed)
- Plan circuit layouts efficiently (minimize wire runs and costs)
- Identify where rough-in inspections are needed
- Coordinate with plumbing and HVAC routes (they share wall and ceiling space)

What to provide them:

- Floor plan with furniture and appliance locations
- List of any special equipment (EV charger, hot tub, workshop tools, server rack)
- Your priorities (what matters most — abundant outlets, smart home features, accent lighting, etc.)
- Budget range for the electrical portion

What they'll provide:

- A circuit layout plan
- An estimate broken down by circuit, fixture, and labour
- Permit application and inspection coordination
- Timeline aligned with your renovation schedule

Costs for Renovation Electrical in NB

| Renovation Scope | Electrical Cost | |-----|-----| | Single room refresh (kitchen or bathroom) | \$2,000–\$6,000 | | Main floor renovation (kitchen + living + dining) | \$5,000–\$15,000 | | Full home renovation (all rooms, new panel) | \$15,000–\$35,000 | | Basement finish (rec room + bedroom + bathroom) | \$5,000–\$15,000 | | Addition (new room built onto existing home) | \$3,000–\$10,000 |

Electrical typically represents 10–15% of a total renovation budget.

The Most Expensive Mistake

The most costly error in renovation electrical is **not planning enough outlets and circuits upfront**. Adding an outlet after drywall is installed costs 2–3x more than during rough-in (the electrician has to cut drywall, fish wire, patch, and paint). Adding a circuit after the panel is inspected and closed means re-opening the permit.

The rule of thumb: **plan for 20% more outlets than you think you need**. The incremental cost of one more outlet during rough-in is \$30–\$80 in materials and 15–30 minutes of labour. After the walls are closed, that same outlet costs \$250–\$500.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A+ Solar Solutions ?
- A&S Electric Ltd. ?
- BCB Electric ?

[View all electrical contractors ?](#)

What is the NB Power time-of-use rate and should I care about it?

NB Power Time-of-Use Rates: What New Brunswick Homeowners Need to Know

Time-of-use (TOU) electricity pricing charges different rates depending on when you use electricity. NB Power has explored TOU concepts, and understanding the topic helps you prepare — whether TOU arrives soon or you simply want to optimize your current electricity use.

How NB Power Currently Charges

As of 2025–2026, NB Power uses an **inclining block rate** — not time-of-use:

- **Block 1:** ~\$0.1112/kWh for the first ~1,400 kWh per billing period
- **Block 2:** ~\$0.1374/kWh for all usage above 1,400 kWh
- **Monthly service charge:** ~\$22.47

This means you pay the same rate whether you run your dryer at 2 PM (peak demand) or 2 AM (off-peak). The rate goes up only when you exceed the first block threshold — which most NB homes with electric heat blow past by mid-winter.

What Time-of-Use Would Look Like

If NB Power adopted TOU pricing (as Ontario and some other provinces have), rates would vary by time of day:

Typical TOU structure:

| Period | Hours | Rate (example) | |-----|-----|-----| | Off-peak | 11 PM – 7 AM | \$0.08–\$0.10/kWh | | Mid-peak | 7 AM – 11 AM, 5 PM – 11 PM | \$0.12–\$0.14/kWh | | On-peak | 11 AM – 5 PM (winter: 7 AM – 9 AM, 4 PM – 8 PM) | \$0.16–\$0.22/kWh |

The goal is to incentivize shifting electricity use away from peak demand periods, which reduces the need for expensive peaking generation.

Why TOU Matters for NB

New Brunswick's electricity demand peaks on cold winter mornings (6–9 AM when everyone turns up heat and gets ready for work) and cold winter evenings (4–7 PM when people return home). NB Power must maintain enough generation capacity to meet these peaks — expensive capacity that sits idle most of the year.

Shifting even 10–15% of peak demand to off-peak hours could defer millions in generation infrastructure costs. TOU pricing is the market mechanism to achieve this.

How to Prepare (Whether or Not TOU Arrives)

Shifting energy use to off-peak hours saves money under both TOU pricing AND the current inclining block rate (by reducing your total consumption during expensive second-block months).

Easy shifts:

- Run your dishwasher overnight instead of after dinner
- Run your clothes washer and dryer in the evening or early morning
- Charge your EV overnight (set a charging schedule in the car or charger app)
- Use a timer on your electric hot water tank to heat water at night (costs \$30–\$60 for the timer, electrician installation \$100–\$200)

Smart home automation:

- Smart baseboard thermostats (Mysa, Sinopé) can pre-heat rooms during off-peak hours and coast through peak periods
- Smart EV chargers schedule charging for lowest-rate windows
- Smart plugs (\$15–\$30) can schedule any device on a timer

Thermal storage:

- Pre-heating your home slightly above your comfort temperature during off-peak hours, then letting it coast down during peak hours. A well-insulated NB home can coast 2–3°C over several hours.
- Heating your hot water tank to maximum (60°C) during off-peak, then relying on stored hot water during peak. This works particularly well with larger tanks (60+ gallons).

Who Benefits Most from TOU

Winners:

- Homes with EV chargers (shift 100% of charging to overnight)
- Homes with smart thermostats that can schedule heating
- Homes with electric hot water tanks on timers
- People who work from home and can run appliances at flexible times
- Homes with battery storage or solar+battery systems

Potential losers:

- Homes where occupants can't shift usage (shift workers, families with rigid schedules)
- Homes with electric baseboard heating and no smart controls (heat demand driven by weather, not schedule)

- Small apartments where cooking, bathing, and heating align with peak hours

The EV Charger Opportunity

EV charging is the single largest controllable electrical load in homes that have one. A Level 2 charger drawing 7.2 kW for 4 hours uses 28.8 kWh per session. Under TOU pricing:

- Charging at on-peak (\$0.20/kWh): \$5.76 per session
- Charging at off-peak (\$0.09/kWh): \$2.59 per session
- **Annual savings (charging 250 days): ~\$790**

Every major EV and Level 2 charger supports scheduled charging. Set it once and forget it.

Bottom Line

Whether NB Power adopts formal TOU pricing or not, the principle is sound: electricity is cheapest to produce at night when demand is low. Smart thermostats, EV charging schedules, and appliance timers reduce your costs today and position you well for any future rate structure changes. The investment in smart controls (\$500–\$2,000 depending on scope) pays for itself through optimized energy use regardless of rate structure.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A+ Solar Solutions ?
- A&S Electric Ltd. ?
- BCB Electric ?

[View all electrical contractors ?](#)

Is it worth installing solar panels on my house in New Brunswick?

Solar Panels for New Brunswick Homes: Is It Worth It?

Solar energy in New Brunswick is more viable than many residents think, but the economics are different from sunnier provinces. Here's an honest look at costs, production, and payback.

Solar Production in NB

New Brunswick receives **3.2–4.0 peak sun hours per day** on average annually — less than Alberta (4.5–5.0) or Ontario (3.8–4.5), but still enough for meaningful solar production.

Typical production by system size:

System Size	Annual Production	% of Average NB Home Use
5 kW (15–18 panels)	5,500–6,500 kWh/year	40–55%
8 kW (22–26 panels)	8,800–10,400 kWh/year	65–85%
10 kW (28–32 panels)	11,000–13,000 kWh/year	80–100%+

Production is heavily seasonal: a 10 kW system might generate 1,500+ kWh in June but only 400–500 kWh in December. Snow cover further reduces winter output, though panels mounted at 30°+ degrees shed most snow within a day or two.

Installation Costs in NB

Solar panel costs have dropped significantly, but NB's market is smaller than Ontario or Alberta, meaning fewer installers and slightly higher prices:

System Size	Installed Cost (before incentives)
5 kW	\$12,000–\$17,000
8 kW	\$18,000–\$26,000
10 kW	\$22,000–\$32,000

Costs include panels, inverter(s), racking, wiring, permits, and installation. Prices vary by installer, roof complexity, and equipment quality.

NB Power Net Metering

New Brunswick offers **net metering** through NB Power, which is the key to making solar work financially:

- Excess power your panels generate flows back to the grid
- You receive a credit on your bill at the retail rate (~\$0.11–\$0.14/kWh)
- Credits roll forward month to month

- At the end of your annual billing cycle, excess credits may be paid out or zeroed depending on current program rules
 - System size is capped (currently 100 kW for residential, far above what any home needs)
- Net metering means your summer overproduction offsets your winter underproduction. You effectively use NB Power as a free battery.

Payback Period

With NB Power's rates and current installation costs:

Scenario	Estimated Payback
8 kW system, all-electric home, good south-facing roof	12–16 years
8 kW system, partial offset, average roof orientation	15–20 years
With federal Greener Homes Grant (if available)	10–14 years

Solar panels typically last 25–30 years with minimal degradation (manufacturers guarantee 80–85% production at 25 years), so you get 10–18 years of near-free electricity after payback.

Electrical Requirements

Solar panel installation requires significant electrical work:

- **Inverter installation** — converts DC from panels to AC for your home. String inverters (\$1,500–\$3,000) or microinverters (\$200–\$300 per panel)
- **Dedicated breaker** in your panel for the solar feed-in
- **Production meter** — NB Power requires a bidirectional meter (they install this at no charge for net metering customers)
- **Rapid shutdown device** — CEC requirement for firefighter safety, allows quick de-energization of roof-mounted panels
- **TSANB electrical permit** — required for all grid-connected solar installations
- **NB Power interconnection agreement** — must be approved before connecting to the grid

The electrical portion of a solar installation typically runs \$2,000–\$4,000, included in the total installed cost above.

Panel Capacity Considerations

Your electrical panel must have space for a solar breaker (typically 20–40A, 2-pole). The CEC's **120% rule** limits how much solar you can backfeed through your panel:

- 200A panel with 200A main breaker: solar breaker can be up to 40A ($200 \times 1.2 = 240$, minus 200 = 40A) ? supports up to ~7.6 kW of solar
- To install a larger system, you may need a panel upgrade or a line-side connection (more complex but allows bigger systems)

Is It Worth It in NB?

Good candidates for solar:

- South-facing roof with minimal shading
- All-electric home (high electricity consumption = faster payback)
- Plan to stay in the home 10+ years
- Current electricity bill over \$200/month
- Motivated by energy independence as much as financial return

Poor candidates for solar:

- Heavily shaded roof (trees, neighbouring buildings)
- North-facing or low-pitch roof
- Plan to move within 5 years (though solar does increase home value)
- Very low electricity consumption (small bills mean small savings)

Bottom Line

Solar in New Brunswick won't pay back as fast as in sunnier provinces, but with 25+ year panel life, net metering, and rising electricity rates (NB Power has increased rates most years), the long-term economics are positive for the right home. Get quotes from 2–3 NB solar installers, verify they handle the TSANB permit and NB Power interconnection paperwork, and ask for a site-specific production estimate based on your roof's orientation and shading.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A+ Solar Solutions ?
- A&S Electric Ltd. ?

- BCB Electric ?

View all electrical contractors ?

Q8

What should I look for when hiring an electrician in New Brunswick?

How to Find and Hire a Good Electrician in New Brunswick

Hiring the right electrician protects your home, your family, and your wallet. Here's what to look for and what to watch out for when hiring in NB.

Verify Their License

In New Brunswick, electricians must be licensed through the TSANB (Technical Safety Authority of New Brunswick). There are different license levels:

- **Journeyman electrician** — completed a 4-year apprenticeship and passed the interprovincial Red Seal exam. This is the standard qualification for residential work.
- **Master electrician** — additional experience and examination beyond journeyman. Required to pull permits and operate an electrical contracting business in NB.
- **Apprentice** — in training, must work under supervision of a journeyman or master electrician.

Ask for their license number and verify it's current. Unlike Ontario's ESA, New Brunswick doesn't have a public online lookup for electrician licenses, so you may need to contact TSANB directly at (506) 658-3400 to verify.

What to Ask Before Hiring

1. **"Are you licensed and insured?"** Beyond the TSANB license, they should carry:

- **General liability insurance** (\$2 million minimum) — covers damage to your property during the work
- **WorkSafeNB coverage** — workers' compensation insurance. If an uninsured worker is injured on your property, you could be liable.

Ask for proof of insurance. Legitimate electricians provide certificates of insurance without hesitation.

2. **"Will you pull the permit?"** Any electrician who suggests skipping the TSANB permit is a red flag. Permits protect you — they ensure the work is inspected by an independent authority. If an electrician says "we don't

need a permit for this," get a second opinion.

3. "Can I get a written quote?" A professional electrician provides a written estimate that includes:

- Scope of work (what exactly they'll do)
- Materials (with specifics — wire gauge, panel brand, fixture models)
- Labour cost
- Permit fees
- Timeline
- Payment terms
- Warranty on workmanship

Verbal quotes are meaningless if there's a dispute later.

4. "Do you have references or reviews?" Check Google Reviews, Facebook, and ask for 2–3 recent customer references in your area. A busy electrician in Moncton, Saint John, or Fredericton should have plenty of reviewable work.

5. "What's your warranty?" Most reputable electricians offer a 1-year workmanship warranty minimum. Some offer longer. This covers their labour — if a connection fails or a fixture stops working due to installation error, they fix it at no charge.

Red Flags

- **No written quote** — only verbal estimates
- **Demands full payment upfront** — standard is a deposit (10–30%), with the balance on completion. Never pay 100% before work starts.
- **No permit** — suggests working without one to save you money (saves them time, puts you at risk)
- **Can't show license or insurance** — excuses like "it's at the office" or "I'm between renewals"
- **Unusually low price** — if one quote is 40–50% below others, they're cutting corners on materials, skipping permits, or not carrying insurance
- **Pressure to decide immediately** — "this price is only good today" is a sales tactic, not a professional practice
- **Shows up in an unmarked vehicle with no company identification** — not necessarily disqualifying, but combined with other red flags, it suggests a fly-by-night operation

Typical Rates in New Brunswick (2025–2026)

| Rate Type | Range | |-----|-----| | Hourly rate (journeyperson) | \$75–\$120/hour | | Service call / diagnostic fee | \$80–\$150 | | Apprentice rate | \$45–\$75/hour | | After-hours / emergency | \$120–\$200/hour |

Most residential work is quoted as a flat fee per job rather than hourly. Flat-fee quotes protect you from slow work inflating the bill.

Getting Multiple Quotes

For any job over \$500, get 2–3 quotes. This gives you a realistic price range and lets you compare scope — sometimes the cheapest quote excludes items the others include. When comparing:

- Ensure all quotes cover the same scope of work
- Check whether permits and inspections are included
- Ask about materials — premium brands cost more but last longer
- Ask about timeline — a cheaper quote with a 6-week wait may not serve your renovation schedule

Where to Find Electricians in NB

- **Word of mouth** — ask neighbours, family, and coworkers. In smaller NB communities like Sussex, Oromocto, Shediac, and Woodstock, reputation is everything.
- **Google search** — "licensed electrician near me" plus your city
- **NB Construction Network directory** — verified local electricians across the province
- **Your general contractor** — if you're doing a renovation, your GC likely has electricians they work with regularly
- **TSANB** — can confirm a contractor is licensed, though they don't provide recommendations

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A+ Solar Solutions ?
- BCB Electric ?
- Blue Energy Ltd ?

[View all electrical contractors ?](#)

How do I safely reset a tripped breaker in my New Brunswick home?

How to Safely Reset a Tripped Circuit Breaker

A tripped breaker is your electrical system doing its job — it detected an overcurrent condition and shut off the circuit to prevent overheating and fire. Here's how to handle it safely.

Identifying a Tripped Breaker

Open your electrical panel door and look at the breaker switches. Most breakers have three positions:

- **ON** — fully pushed to one side
- **OFF** — fully pushed to the other side
- **TRIPPED** — sitting in the middle, between ON and OFF

The tripped breaker may also show an orange or red indicator window. In some panels, the tripped position looks almost like ON — look carefully for the one that isn't fully aligned with the others.

Step-by-Step Reset Process

- **Identify what's on the circuit** — check which lights, outlets, or appliances lost power
- **Unplug or turn off devices** on the affected circuit, especially any that were running when the breaker tripped (space heaters, hair dryers, vacuums, power tools)
- **Stand to the side of the panel** — not directly in front of it. In rare cases of a serious fault, breakers can arc when reset
- **Push the breaker firmly to the full OFF position first** — you must go fully OFF before going to ON
- **Then push it firmly to the ON position** — you should feel it click into place
- **Reconnect devices one at a time** — this helps identify which device caused the trip

If the Breaker Trips Again Immediately

If the breaker trips again as soon as you reset it (or within seconds), **do not keep resetting it**. This indicates:

- **A short circuit** — a hot wire is touching a neutral, ground, or metal surface somewhere on the circuit. This could be in the wiring, an outlet, a switch, or an appliance.

- **A ground fault** — current is leaking to ground through an unintended path, possibly through water or a damaged appliance
- **A failing breaker** — breakers do wear out and can trip prematurely, though this is less common
Leave the breaker off and call a TSANB-licensed electrician. Repeatedly forcing a breaker back on against a fault is dangerous — you're overriding the safety device that's protecting your home from fire.

If the Breaker Trips Intermittently

A breaker that trips every few days or weeks, especially under heavy use, is likely **overloaded**. Common scenarios in NB homes:

- Running a space heater (1,500W) and a hair dryer (1,200W) on the same 15-amp circuit (1,800W capacity)
- Kitchen circuits serving a toaster, kettle, and microwave simultaneously
- Basement circuits serving a dehumidifier, freezer, and workshop tools

The solution is either reducing the load on that circuit or having an electrician add a new circuit to distribute the load. Adding a dedicated circuit runs \$300–\$600 in most NB communities.

Special Breaker Types

GFCI breakers (with a TEST button on the breaker) trip from ground faults — often caused by moisture in outdoor outlets, bathroom circuits, or basement receptacles. Reset the same way, but also check for water intrusion at outlets on that circuit.

AFCI breakers trip from arc faults — they're more sensitive than standard breakers. If an AFCI trips, it may be detecting a real problem like a damaged cord, loose connection, or wire pinched by a nail. Have an electrician investigate if it trips repeatedly.

When to Call an Electrician

- Breaker trips immediately upon reset
- Breaker trips repeatedly (more than 2–3 times in a month)
- Breaker won't stay in the ON position
- You see scorch marks, smell burning, or the breaker/panel feels warm
- You can't identify which breaker has tripped
- Multiple breakers trip at the same time
- The main breaker trips (affecting your entire house)

A diagnostic visit from a licensed electrician in Moncton, Saint John, Fredericton, or other NB communities typically runs \$80–\$150. It's a small price compared to the risk of ignoring a persistent electrical fault.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- [A+ Solar Solutions ?](#)
- [BCB Electric ?](#)
- [A&S Electric Ltd. ?](#)

[View all electrical contractors ?](#)

How does NB Power's billing work and why is my electric bill so high?

Understanding NB Power Bills and High Electricity Costs

New Brunswick has some of the highest electricity rates in Canada, and many residents are surprised by their bills — especially in winter. Understanding how NB Power's billing works helps you identify what's driving your costs.

NB Power Rate Structure (2025–2026)

NB Power uses an inclining block rate for residential customers:

- **First block:** ~\$0.1112/kWh for the first ~1,400 kWh per billing period
- **Second block:** ~\$0.1374/kWh for everything above 1,400 kWh
- **Monthly service charge:** ~\$22.47/month (fixed, regardless of usage)

This means the more electricity you use, the more expensive each additional kilowatt-hour becomes. A home using 3,000 kWh in a winter month is paying the higher rate on nearly half their consumption.

Average NB Electricity Bills

Season	Typical Monthly kWh	Approximate Cost
Summer (no electric heat)	600–1,000 kWh	\$90–\$135
Shoulder (spring/fall)	1,000–2,000 kWh	\$135–\$255
Winter (electric heat)	2,500–5,000+ kWh	\$305–\$650+

Homes with electric baseboard heating — still the most common heating type in NB — see dramatic winter bill increases because electric resistance heating is the least efficient way to heat.

Top Electricity Consumers in a Typical NB Home

- **Electric baseboard heaters:** 40–70% of total consumption in winter. A single 1,500W baseboard running 12 hours/day uses ~540 kWh/month (\$60–\$75/month just for ONE heater). Most homes have 6–12 baseboards.
- **Electric hot water tank:** 300–500 kWh/month (\$35–\$60/month). This is the second-largest consumer year-round.
- **Electric dryer:** 50–100 kWh/month (\$6–\$14/month) depending on usage.
- **Refrigerator/freezer:** 30–60 kWh/month each (\$4–\$8/month). Older models use significantly more.
- **Dehumidifier:** 40–80 kWh/month if running continuously in a damp basement.

- **Pool pump, hot tub, EV charger:** 200–700 kWh/month each if applicable.

Why Your Bill Might Be Unusually High

Poorly insulated home: Many older NB homes — especially those in Moncton, Saint John, and rural areas built before 1980 — have minimal insulation. Heat escapes through walls, attics, and windows, forcing electric heaters to run constantly. Adding attic insulation from R-20 to R-60 can reduce heating consumption by 20–30%.

Drafty windows and doors: Single-pane or older double-pane windows lose heat rapidly. Storm windows or replacement windows with low-E glass make a noticeable difference.

Thermostat habits: Every degree above 20°C increases heating cost by roughly 3–5%. Lowering thermostats to 17°C when sleeping or away saves \$150–\$400/year in a typical all-electric NB home.

Phantom loads: Electronics, chargers, and standby devices draw power 24/7. A home with a lot of electronics can waste 50–100 kWh/month (\$6–\$14) on phantom loads alone.

Malfunctioning equipment: A hot water tank with a failing element runs continuously. An old fridge with worn seals cycles too often. A baseboard heater with a stuck thermostat runs at full power regardless of room temperature.

What You Can Do

Free and low-cost:

- Lower thermostats 2–3°C (especially overnight and when away)
- Use programmable or smart thermostats (\$100–\$250 per zone)
- Seal drafts around windows, doors, and electrical outlets with weatherstripping and foam gaskets (\$20–\$50 in materials)
- Switch to LED bulbs throughout the house (saves 50–100 kWh/year per bulb replaced)

Moderate investment:

- Add attic insulation (\$1,500–\$3,500 for a typical home)
- Install a heat pump (\$3,500–\$7,000 after NB Power rebates) — reduces heating electricity by 50–60%
- Replace electric hot water tank with a heat pump water heater (\$2,000–\$3,500 installed, saves \$300–\$500/year)
- Upgrade to Energy Star appliances as old ones fail

NB Power programs:

- **Total Home Energy Savings Program** — rebates for insulation, heat pumps, and other efficiency upgrades. Check NB Power's website for current offerings.
- **Home Energy Assessment** — NB Power partners offer assessments that identify your biggest efficiency opportunities. Cost is typically \$100–\$300, often partially rebated.

Reading Your Bill

Your NB Power bill shows your daily consumption in kWh. Compare month-to-month and year-over-year to spot trends. A sudden jump without explanation (no new appliances, similar weather) suggests a malfunctioning appliance or wiring issue. An electrician can use a clamp meter on individual circuits to identify which circuit is drawing excessive power.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A+ Solar Solutions ?
- A&S Electric Ltd. ?
- Blue Energy Ltd ?

[View all electrical contractors ?](#)

Q11

What are the most common electrical problems found during home inspections in New Brunswick?

Most Common Electrical Problems Found in New Brunswick Home Inspections

Whether you're buying, selling, or just want to understand the condition of your home's electrical system, knowing what inspectors and electricians commonly find in New Brunswick homes helps you anticipate issues and budget for repairs. These findings are drawn from the most frequent deficiencies reported across the province's housing stock — a mix of century-old heritage homes, mid-century builds, and modern construction.

1. Undersized Electrical Service (Found in ~40% of Pre-1990 Homes)

The problem: Homes with 60-amp or 100-amp electrical services that can't safely support modern electrical loads. When these homes were built, total household draw was a fraction of what it is today — no heat pumps, no EV chargers, no home offices full of electronics.

Where it's most common: Pre-1970 homes in downtown Moncton, uptown Saint John, and older Fredericton neighbourhoods almost universally have 60-100 amp services. Even homes built in the 1980s and early 1990s in suburban areas like Riverview, Quispamsis, and Oromocto often have 100-amp panels that are now maxed out.

Impact on sale: Buyers expect 200-amp service in any home they're purchasing. An undersized panel typically results in a \$3,000-\$5,000 negotiation credit or a conditional offer requiring upgrade before closing.

Fix cost: \$2,500-\$4,500 for a full service upgrade to 200 amps.

2. Missing GFCI Protection (Found in ~60% of Pre-2000 Homes)

The problem: Bathrooms, kitchens, outdoor outlets, and garage receptacles without GFCI (Ground Fault Circuit Interrupter) protection. GFCI outlets prevent electrocution by detecting current leakage and tripping in milliseconds.

CEC requirements:

- Bathrooms: GFCI required on all receptacles
- Kitchen: GFCI required within 1.5 metres of a sink
- Outdoor: GFCI required on all outdoor receptacles
- Garage: GFCI required on all receptacles
- Unfinished basement: GFCI required

Where it's most common: Any New Brunswick home built before the GFCI requirements were added to the CEC. Homes from the 1970s and 1980s are the most commonly deficient — they have grounded outlets but no GFCI protection.

Fix cost: \$25-\$40 per GFCI outlet (DIY) or \$100-\$200 per location professionally installed. A whole-home GFCI upgrade typically runs \$500-\$1,500.

3. Ungrounded Outlets — 2-Prong (Found in ~30% of Pre-1965 Homes)

The problem: Two-prong outlets with no ground wire providing no protection against short circuits to metal appliance housings. These are found in New Brunswick homes built before the mid-1960s when grounding became standard in the CEC.

The risk: Without grounding, a fault in an appliance energizes its metal case. You become the path to ground when you touch it. GFCI outlets can be installed as a code-compliant workaround (they must be labelled "No

Equipment Ground"), but proper grounding is the better long-term solution.

Where it's most common: Heritage homes in Saint John's uptown and south end, older Moncton downtown properties, and pre-war Fredericton homes.

Fix cost: GFCI upgrade on ungrounded circuits: \$100-\$200 per outlet. Full rewiring with ground: \$8,000-\$25,000 depending on home size.

4. Double-Tapped Breakers (Found in ~25% of All Homes)

The problem: Two wires connected to a single breaker terminal designed for only one wire. This creates a loose connection that generates heat and can cause arcing. Double taps happen when homeowners or handymen add circuits without adding breaker spaces.

Where it's most common: Any home that's had DIY electrical work or additions over the years. Particularly common in New Brunswick homes where a finished basement, workshop, or hot tub circuit was added without a proper panel upgrade.

Fix cost: \$75-\$200 per occurrence (install proper tandem breaker or add circuit space).

5. Aluminum Branch Circuit Wiring (Found in ~15% of 1965-1978 Homes)

The problem: Aluminum wiring on 15 and 20-amp branch circuits (outlets and lights) was used extensively from the mid-1960s through the mid-1970s across New Brunswick. Aluminum expands and contracts more than copper, loosening connections over time. Oxidation at connection points increases resistance and generates heat. Homes with aluminum wiring have a statistically higher fire risk.

Where it's most common: Subdivisions built during this era in every New Brunswick city — parts of Riverview, Dieppe, Oromocto, Fredericton's north side, and suburban Saint John developments.

What inspectors look for: Silver-coloured wire at the panel, outlets, and switches. Scorch marks at connections. Improper use of standard copper-only devices on aluminum wire.

Fix options:

- **COPALUM or AlumiConn connectors** at every outlet, switch, and junction: \$50-\$100 per connection point, \$3,000-\$6,000 for a typical home
- **Complete copper rewire:** \$12,000-\$25,000
- **Anti-oxidant compound + CO/ALR devices** (minimum standard): \$2,000-\$4,000

6. Open Junction Boxes and Exposed Splices (Found in ~35% of Homes)

The problem: Wire connections (splices) made outside of a proper junction box, or junction boxes with missing covers. Every wire connection in a home must be enclosed in an accessible junction box with a cover. Exposed splices are fire hazards — if a connection fails and arcs, there's no containment.

Where it's most common: Basements, attics, and crawl spaces in homes of all ages. Typically the result of handyman repairs, homeowner additions, or lazy renovation work. Also common behind finished walls where a previous renovation left junction boxes buried and inaccessible (a code violation).

Fix cost: \$25-\$75 per junction box to properly enclose and cover.

7. Improper or Missing Bathroom Exhaust Fan Wiring (Found in ~20% of Homes)

The problem: Bathroom exhaust fans wired to the same switch as the vanity light (no independent control), fans with no dedicated circuit, or bathrooms with no exhaust fan at all. The NB building code requires mechanical ventilation in bathrooms without operable windows.

The moisture issue: New Brunswick's Maritime humidity makes bathroom ventilation critical. Inadequate exhaust leads to mold, rot, and moisture damage to electrical connections within the bathroom.

Fix cost: \$200-\$500 to add a proper exhaust fan with independent switching on a dedicated circuit.

8. Obsolete or Recalled Panels (Found in ~10% of Homes)

The problem: Federal Pacific "Stab-Lok" panels and Zinsco panels are known fire hazards — breakers fail to trip during overcurrent conditions. These panels were installed in thousands of New Brunswick homes during the 1960s through 1980s.

How to identify:

- Federal Pacific: Look for "Federal Pacific Electric" or "FPE" on the panel door. Breakers have coloured handles (red, blue) and are narrower than standard breakers.
- Zinsco: Look for "Zinsco" or "GTE Sylvania" branding. Bus bar connections degrade over time.

Fix cost: \$2,500-\$4,500 for complete panel replacement. Most New Brunswick insurance companies require immediate replacement if identified.

9. Missing Smoke Detector or CO Detector Compliance (Found in ~45% of Homes)

The problem: Missing, non-functional, or improperly placed smoke and carbon monoxide detectors. The NB building code requires hardwired, interconnected smoke detectors on every floor and outside every sleeping area, plus CO detectors outside sleeping areas in homes with fuel-burning appliances.

What inspectors find: Battery-only detectors where hardwired are required, missing detectors in required locations, expired detectors (they have a 10-year lifespan), and non-interconnected detectors (when one sounds, all should sound).

Fix cost: \$300-\$800 for a complete hardwired smoke and CO detector upgrade.

10. Overcrowded or Improperly Organized Panel (Found in ~30% of Homes)

The problem: Breakers not properly labelled, wires poorly organized inside the panel, missing panel cover screws (creating openings to live components), and general evidence of amateur electrical work.

Why it matters: An unlabelled panel is dangerous during an emergency — you can't quickly shut off the right circuit. It's also a sign that previous electrical work may not have been permitted or inspected.

Fix cost: \$150-\$300 for a professional panel cleanup, re-labelling, and inspection.

What Happens After Inspection Findings

In New Brunswick real estate transactions, electrical deficiencies are among the most commonly negotiated items. Buyers typically request either:

- **A credit** equal to the estimated repair cost
- **Repairs completed** by a licensed TSANB-certified electrician before closing, with inspection certificates provided
- **A conditional clause** requiring specific upgrades within a defined period

If you're selling a New Brunswick home, having a pre-listing electrical inspection (\$200-\$400) and addressing major issues beforehand avoids surprises during negotiation and demonstrates to buyers that the home has been properly maintained.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A+ Solar Solutions ?
- A&S Electric Ltd. ?
- BCB Electric ?

[View all electrical contractors ?](#)

How do I find a reliable electrician in rural New Brunswick where there aren't many options?

Finding a Reliable Electrician in Rural New Brunswick

If you live outside the Moncton-Saint John-Fredericton triangle — in communities like Sussex, Woodstock, Grand Falls, Campbellton, Miramichi, or the dozens of smaller towns scattered across the province — finding a qualified electrician can be genuinely challenging. Rural New Brunswick has fewer electrical contractors per capita than urban centres, longer wait times, and often higher costs due to travel charges. But there are practical strategies to find reliable help.

Why Rural Areas Have Fewer Options

New Brunswick's population is heavily concentrated in the three major cities. The entire province has roughly 800,000 people, and about half live in or near Moncton, Saint John, or Fredericton. That means the other half — spread across a province roughly the size of Scotland — shares a much smaller pool of licensed electricians. Many TSANB-licensed electricians base their operations in the urban centres where the volume of work is higher and travel costs are lower.

Strategies That Work

1. Ask your local hardware store

In rural New Brunswick, the local Home Hardware, Kent Building Supplies, or independent hardware store is often the community hub for contractor referrals. Staff regularly interact with local electricians who buy supplies there and can tell you who's active, reliable, and properly licensed. The Kent stores in Miramichi, Woodstock, Campbellton, and Edmundston are particularly good sources for local trade contacts.

2. Contact TSANB directly

The Technical Safety Authority of New Brunswick maintains records of licensed electrical contractors. While they don't publish a public searchable directory like Ontario's ESA, you can contact their office to verify that a specific electrician holds a valid licence. Phone: 1-800-999-0336. This is especially important in rural areas where unlicensed individuals sometimes offer electrical services.

3. Check with your municipality

Many New Brunswick municipalities — even smaller ones — maintain informal lists of approved or recommended contractors. The building inspector's office is a good starting point. They see inspection results regularly and know

which electricians consistently produce code-compliant work.

4. Ask neighbours and community Facebook groups

Rural New Brunswick communities are tight-knit. Facebook groups like "Miramichi Buy and Sell," "Upper Saint John River Valley Community," or "Sussex and Area" frequently have contractor recommendation threads. Ask specifically for licensed electricians — and verify the TSANB licence yourself before hiring.

5. Consider electricians who travel from nearby towns

Many licensed electricians based in mid-size towns like Bathurst, Edmundston, Sussex, or Oromocto serve a wide rural catchment area. They're accustomed to driving 30-60 minutes to job sites. Expect a travel charge of \$50-\$150 depending on distance, but this is often worth it for a properly licensed professional.

6. Contact electrical supply houses

Electrical supply wholesalers like Rexel, Nedco, or Guillevin in the regional centres know every active electrician in their territory. They can often point you to contractors who serve your area.

What to Expect Cost-Wise in Rural NB

Rural electrical work typically costs **15-30% more** than the same work in Moncton or Fredericton due to:

- **Travel charges:** \$50-\$150 per trip, sometimes waived for larger projects
 - **Minimum call-out fees:** \$200-\$350 (vs. \$150-\$250 in urban areas) because the electrician needs to justify the travel time
 - **Material markup:** Rural electricians may charge slightly more for materials since they can't easily run to a supplier mid-job
 - **Longer scheduling:** Rural electricians are often booked 3-6 weeks out vs. 1-3 weeks in cities
- Hourly rates themselves are usually comparable: \$85-\$140/hour in rural areas vs. \$85-\$150 in Moncton or Fredericton.

Red Flags Specific to Rural Areas

The risk of encountering unlicensed electrical workers is higher in rural New Brunswick simply because the demand exceeds the supply of licensed professionals. Watch for:

- **"Handyman" electrical work** — A general handyman who offers to do your wiring "on the side" is almost certainly not TSANB-licensed. This is illegal in New Brunswick and dangerous.

- **No permit discussion** — A legitimate electrician will mention permits and TSANB inspections. If the person you're hiring says permits aren't needed for the work (and it's anything beyond a simple fixture swap), that's a red flag.
- **Cash-only, no receipt** — Licensed contractors provide invoices and receipts. Cash-only, no-paperwork arrangements typically indicate unlicensed work.
- **No insurance** — Ask for proof of liability insurance and WorkSafeNB coverage. Without these, you're personally liable for any injuries or damages.

The Homeowner DIY Option

New Brunswick allows homeowners to perform electrical work on their own primary residence with a TSANB permit. For rural homeowners who genuinely cannot find an available electrician for smaller jobs, this is a legal option — but you must:

- Obtain the TSANB permit yourself (\$50-\$100)
- Follow the Canadian Electrical Code exactly
- Have the work inspected by TSANB before use
- Only work on your own home, not rental properties or for others

This is practical for straightforward tasks like adding outlets, replacing panels (if you're experienced), or running circuits to a garage. For complex work — service upgrades, wiring for heat pumps, or anything involving the utility connection — always hire a licensed professional, even if it means waiting a few extra weeks.

Planning Ahead

The best strategy for rural New Brunswick homeowners is to **build a relationship with a local electrician before you need emergency work**. Have them do routine maintenance, a panel inspection, or a small upgrade. When an emergency happens — and in rural NB with ice storms and power issues, it eventually will — you'll have a trusted professional who knows your home and will prioritize your call.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A&S Electric Ltd. ?

- [Blue Energy Ltd ?](#)
- [BCB Electric ?](#)

[View all electrical contractors ?](#)

What questions should I ask before hiring an electrician in New Brunswick?

Key Questions to Ask Before Hiring a New Brunswick Electrician

Hiring the right electrician in New Brunswick starts with asking the right questions before any work begins. Whether you're in Moncton, Saint John, or Fredericton, taking 15 minutes to interview potential electricians can save you thousands of dollars and prevent serious safety issues down the road.

Licensing and Insurance Questions

The most important question is "**Are you licensed through the Technical Safety Authority of New Brunswick (TSANB)?**" Every electrician working in the province must hold a valid TSANB certification. Unlike Ontario, New Brunswick doesn't have a public online database where you can verify this yourself, so ask to see their actual licence card or certificate. A legitimate electrician will have no problem showing you proof.

Follow up with these essential questions:

- **Do you carry liability insurance?** Ask for a minimum of \$2 million in general liability coverage. Request a certificate of insurance — your homeowner's insurance may require this before electrical work begins.
- **Do you have WorkSafeNB coverage?** This protects you from liability if a worker is injured on your property. Without it, you could be held personally responsible for workplace injuries.
- **Will you pull the necessary permits?** In New Brunswick, electrical permits are required for most work beyond basic fixture swaps. The permit costs typically range from \$50 to \$200 depending on the scope of work, and the electrician should handle the application process.

Experience and Specialization Questions

- **How many years have you been working in New Brunswick?** Local experience matters because Maritime homes have unique challenges — older Moncton and Saint John homes often have 60-amp services, knob-and-tube wiring, or aluminum branch circuits from the 1960s and 1970s that require specific expertise.
- **Have you done this type of work before?** A residential electrician may not be the best choice for commercial work, and vice versa. Ask for 2-3 references from similar projects completed in the last 12 months.
- **Are you familiar with the current Canadian Electrical Code requirements?** New Brunswick follows the CEC with provincial amendments. The 2024 code cycle introduced changes to AFCI requirements, EV charger installations, and outdoor receptacle spacing that affect residential work.

Project-Specific Questions

- **Can you provide a detailed written estimate?** Get itemized quotes from at least 3 electricians. In New Brunswick, a typical residential service call ranges from \$85 to \$150 per hour, with most projects requiring a minimum 2-hour charge. The estimate should break down labour, materials, permit fees, and HST (15% in New Brunswick).
- **What is your timeline for completion?** Electrical contractors in the Moncton-Dieppe area are often booked 2-4 weeks out. Fredericton and Saint John typically have similar wait times, while rural areas may have longer lead times due to fewer available electricians.
- **Do you offer a warranty on your work?** Most reputable New Brunswick electricians provide a 1-year warranty on labour. Materials typically carry the manufacturer's warranty separately.
- **Will the work require a TSANB inspection?** Most permitted electrical work in New Brunswick requires a follow-up inspection. Your electrician should coordinate this — the inspection fee is usually included in the permit cost.

Red Flags to Watch For

Be cautious if an electrician refuses to show their TSANB licence, won't provide a written estimate, asks for full payment upfront (a 10-25% deposit is reasonable), or significantly undercuts other quotes. In New Brunswick, unlicensed electrical work can void your home insurance and create serious liability issues if a fire occurs.

Always get everything in writing before work begins, including the scope of work, total cost, payment schedule, and expected completion date.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A+ Solar Solutions ?
- Blue Energy Ltd ?
- A&S Electric Ltd. ?

[View all electrical contractors ?](#)

What electrical work is needed to convert oil heat to electric heat pump in New Brunswick?

Electrical Work for Converting Oil Heat to Electric Heat Pump in New Brunswick

Converting from oil to electric heat pump heating is one of the most popular home renovations in New Brunswick right now, driven by volatile oil prices (which hit over \$1.80/litre in recent years), available government rebates, and the proven performance of modern cold-climate heat pumps in Maritime winters. The electrical side of this conversion involves more than just plugging in a new unit — your entire electrical system may need upgrading to handle the new load.

Electrical Requirements for Heat Pump Systems

Mini-split (ductless) heat pumps are the most common choice in New Brunswick. Each outdoor unit requires a dedicated electrical circuit:

Unit Size	Circuit Requirement	Breaker Size	Wire Gauge
9,000 BTU (small room)	240V, 15A dedicated	15A double-pole	14/2 NMD90
12,000 BTU (standard room)	240V, 15A dedicated	15A double-pole	14/2 NMD90
18,000 BTU (large room/zone)	240V, 20A dedicated	20A double-pole	12/2 NMD90
24,000 BTU (multi-zone outdoor)	240V, 30A dedicated	30A double-pole	10/2 NMD90
36,000 BTU (whole home)	240V, 40A dedicated	40A double-pole	8/3 NMD90

Each indoor head unit also needs a standard 120V outlet nearby (within 1 metre) for the control board, though many models include this in the line set wiring.

Ducted central heat pumps require a 240V, 40-60A dedicated circuit depending on the unit capacity. If you're replacing an oil furnace but keeping the existing ductwork, the new air handler replaces the furnace and needs its own high-amperage circuit.

Panel Capacity — The Most Common Obstacle

This is where most New Brunswick oil-to-heat-pump conversions run into their first major electrical cost. Many homes that were heated with oil have **100-amp electrical services** because the oil furnace only needed a small circuit for the blower motor and ignition system. The rest of the home's electrical load (lights, outlets, appliances) fit comfortably within 100 amps when heating wasn't drawing from the panel.

Adding heat pump circuits changes the math dramatically:

- A single 24,000 BTU mini-split draws 30 amps at 240V
- A whole-home multi-zone system with 3 outdoor units can require 60-90 amps of panel capacity
- Add an electric backup heating strip (10-15 kW, required for -25°C and below days) and you need another 40-60 amps

For most conversions, a 200-amp service upgrade is necessary. Cost in New Brunswick: **\$2,500-\$4,500**, which includes:

- New 200-amp meter base and weather head (NB Power coordinates the disconnect/reconnect)
- New 200-amp main breaker panel (40-42 circuit spaces)
- Moving circuits from old panel to new panel
- TSANB permit and inspection
- NB Power reconnection scheduling (typically 3-5 business day wait)

Complete Electrical Cost Breakdown

Scenario 1: Single-zone mini-split (1 outdoor + 1 indoor unit) This covers one main living area — common as a supplementary system keeping baseboard or oil for the rest of the house.

- Dedicated 240V circuit run (30-50 feet typical): \$300-\$500
- 120V outlet for indoor unit (if not existing): \$150-\$250
- Disconnect box at outdoor unit (CEC requirement): \$150-\$250
- Permit and inspection: \$75-\$100
- **Total electrical cost: \$675-\$1,100**

Scenario 2: Multi-zone mini-split (1 outdoor + 3-4 indoor units) Covers most of the living space — typical for a 1,200-1,800 sq ft New Brunswick bungalow or split-level.

- Panel upgrade to 200A (if currently 100A): \$2,500-\$4,500
- Dedicated 240V circuit for outdoor unit: \$300-\$500
- Disconnect box: \$150-\$250
- Permit and inspection: \$100-\$150
- **Total electrical cost: \$3,050-\$5,400**

Scenario 3: Whole-home ducted heat pump replacing oil furnace Complete elimination of the oil heating system.

- Panel upgrade to 200A: \$2,500-\$4,500
- 240V, 50-60A circuit for outdoor compressor: \$400-\$700
- 240V circuit for backup electric heating strips: \$300-\$500
- Disconnect box: \$150-\$250
- Removal of oil furnace electrical connections: \$100-\$200
- Removal of oil tank electrical (pump, alarm): \$75-\$150
- Permit and inspection: \$100-\$150
- **Total electrical cost: \$3,625-\$6,450**

Government Rebates and Incentives

New Brunswick homeowners converting from oil to heat pump may qualify for significant rebates that help offset both the HVAC and electrical costs:

- **Canada Greener Homes Grant** — Up to \$5,000 for qualifying heat pump installations (requires pre and post energy audits at approximately \$600 total)
- **NB Power Total Home Energy Savings Program** — Additional rebates for qualifying heat pump installations, amounts vary by program year
- **Oil to Heat Pump Affordability Program (OHPA)** — Federal program specifically for oil-heated homes, providing up to \$10,000-\$15,000 for qualifying households

These rebates typically cover the heat pump equipment and installation but may not directly cover the electrical service upgrade. However, the electrical work is a necessary part of the project and some programs allow it as an eligible expense — ask your energy advisor during the pre-retrofit audit.

Timeline and Coordination

A typical oil-to-heat-pump conversion in New Brunswick follows this sequence:

- **Energy audit** (required for most rebate programs): 1-2 weeks to schedule
- **Electrical service upgrade** (if needed): 1-2 days of work, plus 3-5 business days for NB Power to schedule the disconnect/reconnect. **Schedule this first** — the HVAC installer can't commission the heat pump without power.
- **Heat pump installation**: 1-2 days for mini-splits, 2-3 days for ducted systems
- **TSANB electrical inspection**: Schedule within 5-10 business days of completion
- **Post-retrofit energy audit**: Required to finalize rebate claims

The entire process from first call to fully operational heat pump typically takes 4-8 weeks in New Brunswick, with electrical work being the longest lead time due to NB Power scheduling.

Keeping Your Oil System as Backup

Many New Brunswick homeowners choose to keep their oil furnace connected as backup for extreme cold snaps below -25°C, when heat pump efficiency drops significantly. In this case, the electrical work is simpler — you're adding circuits for the heat pump without removing the oil system's electrical connections. Just ensure your electrician labels all circuits clearly in the panel so you (and future owners) know which systems are which.

Find a Electrical Contractor

New Brunswick Electrical connects you with experienced contractors through the <https://newbrunswickconstructionnetwork.com>:

- A+ Solar Solutions ?
- A&S Electric Ltd. ?
- Blue Energy Ltd ?

[View all electrical contractors ?](#)

Disclaimer: This guide is provided for informational purposes only by New Brunswick Electrical. It does not constitute professional advice. Always consult qualified, licensed contractors and your local building authority before starting any construction or renovation project. Information is current as of March 22, 2026 and may change. Visit newbrunswickelectrical.com for the latest answers.