OUTRUNNING THE STORM

Manitoba: Oil Shock Response Briefing

Sections 2 (case study), 5, and Manitoba-specific analysis, Outrunning the Storm

LSCM Inc. | Dougald Lamont | May 26, 2026

Manitoba is the report's most detailed case study. 97% hydroelectric grid = strongest electrification platform in Canada. But: 263,000 Centra Gas customers, ~30 remote First Nations communities, and the province at the centre of every Prairie supply chain.

STRUCTURAL POSITION

Metric	$90/bbl	$150/bbl	$200/bbl
Cost of inaction (annual, MB)	$0.5–0.9B	$1.5–2.5B	$4–8B
Programme investment required	~$0.8B (T1+2)	~$2B (T1+T2+T3)	~$4B (full)
Net benefit of acting (annual)	$0.4–0.7B/yr saved	$1.2–2B/yr saved	$3.5–7B/yr saved
Jobs created (direct + indirect)	12,000–20,000 job-yrs	20,000–35,000 job-yrs	32,000–55,000 job-yrs

KEY BOTTLENECKS

Bottleneck	Why It Breaks	Consequence
Propane supply for grain drying	Spot-market propane; limited MB storage; price shock causes hoarding	Grain cannot be dried; quality losses, export rejection, farm bankruptcies
Nitrogen fertiliser supply chain	Most urea imported or produced in gas-intensive AB plants; price shock = reduced orders	Farmers cut N applications; yields fall 15–35%; food price inflation
Northern community diesel supply	Churchill/Nelson House/Norway House etc. served by truck, barge, or air; no redundancy	Heating & power failure risk in winter; humanitarian crisis
Trucking industry solvency	Owner-operators run thin margins; $150+ diesel = operating losses without rapid rate increases	Supply chain collapse for food, retail, construction materials
Skilled trades for energy alternatives	Heat pump installers, solar technicians, EV technicians in short supply	Demand for alternatives cannot be met even with funding; 12–24 month lag
Grid capacity for electrification	MB Hydro grid ~6,400 MW installed; mass EV/heat pump	Grid investment must precede mass electrification; 3–7 year timeline

Bottleneck	Why It Breaks	Consequence
	adoption creates new peak demand	
Capital access for farmers	High input costs at planting + low operating margins = credit crunch risk	Acreage fallout; reduced food production

RAPID DEPLOYMENT OPPORTUNITIES (0–18 MONTHS)

The following have short lead times, existing supply chains, and high impact-per-dollar:

- Cold-climate air-source heat pumps (Mitsubishi Zuba, Bosch, Daikin) — MB Hydro can expedite rebate processing
- Solar PV on farm buildings and remote community rooftops — MB has strong summer irradiance; Heliene (Thunder Bay) manufactures in Canada
- Electric grain dryers (Vertec, OPICO models) — MB Hydro industrial rate makes this economic at $150+ propane
- EV buses (New Flyer — Winnipeg manufacturer) — accelerate provincial/city procurement; support local jobs simultaneously
- Biogas digesters on large hog/dairy operations — MB has 8.6 million hogs; digestate replaces purchased fertilizer
- Precision agriculture (variable-rate fertilizer) — GPS-guided spreaders, soil sampling; reduces N use 15–25% with no yield penalty
- Fuel efficiency programmes — trucking industry driver training, aerodynamic retrofits, route optimisation; 10–20% diesel savings near-zero cost
- Emergency propane storage expansion — government-backed reserve tank installations at elevators; prevents drying crisis

MAJOR TRANSFORMATIVE INVESTMENTS

6.1 Green Ammonia & Fertilizer Sovereignty

MB Hydro's surplus low-cost electricity (~$0.07/kWh) is ideal for electrolytic hydrogen production. A green ammonia plant (electrolysis + Haber-Bosch) at Brandon or Portage la Prairie would:

- Produce nitrogen fertilizer independent of natural gas prices
- Create 200–400 permanent skilled jobs
- Supply MB and SK farmers with domestic, price-stable fertilizer
- Position MB as a green fertilizer exporter to the US Midwest

Estimated Investment: $800M–2B. Timeline: 5–8 years to full operation.

6.2 Manitoba Hydrogen Hub

- Fuel hydrogen trucks along Winnipeg–Calgary and Winnipeg–Thunder Bay corridors
- Provide zero-carbon fuel for CN/CP rail (Ballard fuel cells — Canadian technology)
- Export hydrogen via pipeline or ammonia tanker to Ontario and global markets

- Power remote community microgrids (H_2 + fuel cells replace diesel generators)

Estimated Investment: $500M–1.5B. Timeline: Phase 1 (trucking corridors): 3–5 years.

6.3 MB Hydro Grid Expansion

- Keeyask Generating Station (695 MW, partially online) — accelerate commissioning
- Northern ring road expansion: extend grid to 30 additional First Nations communities ($1.8–2.8B, 5–10 years)
- Smart grid investment prerequisite for mass electrification of heating, transport, and agriculture

6.4 Inland Grain Drying & Storage Revolution

- Electric grain dryer rollout at all major Prairie elevators (MB share $12M immediate; full rollout $450–600M national over 3–5 years)
- CentrePort Canada intermodal expansion: triple container lift capacity ($800M–1.2B, 5 years)
- Brady Road landfill gas-to-RNG: highest MB priority waste-to-energy project

6.5 Northern Manitoba Energy Sovereignty

- Solar + battery microgrids for all 30 remote First Nations communities: payback under 5 years at $150/bbl
- Winter road budget increase 40%: MB share $18M/yr
- Emergency diesel pre-positioning via summer barge before season closes

RESPONSE PRIORITY MATRIX

Priority	Action	Timeline	Est. MB Cost
CRITICAL — No alternatives	Pre-purchase fuel supply for all remote communities at current prices	Before April (barge window)	$35M
CRITICAL — No alternatives	Churchill line full rehabilitation (Arctic Gateway Group)	2025–2027 URGENT	$1.5–2.5B
HIGH — Prevents cascade	FCC emergency credit + MASC farm finance loans (MB $420M)	Immediately	$420M
HIGH — Prevents cascade	Propane reserve at all major elevators (MB $40M)	Before September harvest	$40M
HIGH — Prevents cascade	STARS fuel guarantee (MB $6M/yr additional)	Before break-even threshold	$6M/yr
HIGH	Electric grain dryer procurement (MB share $12M)	3–6 month lead	$12M
HIGH	Manitoba Hydro MISO export maximisation	Weeks (zero cost)	$0 (generates $50–80M)
MEDIUM — Strategic	Green ammonia plant Brandon/Portage la Prairie	5–8 year build	$800M–2B

Priority	Action	Timeline	Est. MB Cost
MEDIUM	New Flyer electric bus procurement (500–1,000 units)	Immediate–3 years	$500M+ (revenue generating)
MEDIUM	Winnipeg commuter rail (3 corridors, 150 km)	2027–2030	$300–600M

Source: Sections 2 (detailed case study), 3 (national projects), 4 (urgent actions), 5 (provincial summary), and Manitoba-specific analysis, Outrunning the Storm. May 26, 2026.