Your Single Source for Solar Photovoltaic Construction & Maintenance



A Tradition of Quality ... since 1921



Solar Energy

A Proud Heritage A Solid Foundation

Black & McDonald's "Code of Business" is based upon the core values of its founder, William John McDonald, who established the company in 1921. In August, 1991, in his 104th year, he reiterated these beliefs.

They have stood the test of time...

- · Do the job right regardless
- Talk to the customer regularly, Confirm his / her satisfaction
- Make the price fair and reasonable
- A deal is a good one, only when it is good for both parties
- Live up to your promises
- Treat employees with respect
- · Complete jobs promptly
- Invoice promptly, fairly, and in detail

We honour and respect these beliefs.

The company has followed a planned course of diversification and expansion, combining growth and financial stability with ongoing investment in our people, and a willingness to pioneer new business opportunities and directions. Today, with over 3,000 employees working out of a network of more than 20 offices, Black & McDonald remains a privately owned Canadian company, an integrated, multi-trade prime contractor serving government, institutions, industry and commerce.

Ontario Leader in Renewable Energy

With more than 500MW of Solar and Wind Energy construction experience, Black & McDonald is the leader in deployment of Ontario's renewable energy.

Black & McDonald self performs on mechanical, electrical, utility, civil and asset management services. This has uniquely aligned our core competencies with energy construction and maintenance requirements including Solar, Wind, Thermal, Cogeneration, Hydro and Nuclear (#1 nationally).

Our knowledge, experience, multi-trade capabilities and trusted resources allow Developers to focus their efforts on development and delivery of electricity to the grid. And Owners can focus on their core businesses with peace of mind.







Single Source Solar Construction

For developers and those just starting their investigations into the possibilities of utilizing solar energy in their enterprises, Black & McDonald is the right partner to work with throughout the process.

For ground mounted systems and roof mounted systems alike, Black & McDonald's process assistance and installation expertise are unsurpassable. Our industrial, commercial, institutional and power generation clients rely on us for mission critical systems installations. They know that our highly-trained skilled resources keep safety, quality and performance always top of mind.

At 80MW, Black & McDonald has successfully completed the civil and electrical installations of one of **the largest photovoltaic solar farms in the world.**



Electrical and Utility

- Turnkey installation of all AC/DC components
- Panels, combiner boxes, inverters
- Transformers, switchgear, substations
- SCADA
- Testing, commissioning & start-up

Civil

- Site preparation: drainage, grading and excavation
- Access roads
- Underground trenching and cabling
- Foundation, forming and pouring
- Posts, tilt brackets and racking installation







Project Management

- Project Implementation
- Site supervision
- Obtaining approvals and permits
- Equipment procurement
- Occupational Health & Safety
- Environmental compliances

Power Delivery

- Value added engineering
- Technical liaison with electrical utilities & power systems operators
- Fulfillment of system operator and grid requirements
- Electrical grid integration and connection

Solar Asset Maintenance and Monitoring

Maximizing your return on investment requires peak performance of major hardware over the duration of your "FIT" contract.

Black & McDonald is one of the largest integrated construction and maintenance companies in Canada. Our extensive experience and over 85 years of lessons-learned, provide assurance to our solar customers that their assets are in good hands.

Black & McDonald service hubs are located in major centres throughout Ontario.





Planned Solar Services

Electrical Systems

 Panels, inverters, system disconnects, couplings, combiners, junction boxes, wiring, etc.

Metering and Monitoring Systems

 General infrastructure, specific monitoring devices, special components, weather station.

Technical Infrastructure

 Racking, module mounting, inverter shade structure, inverter pad, etc.

Site Maintenance

 Roads and grounds, snow removal, fencing & security, etc.

Reporting

 For high level management requirements, Black & McDonald provides capital asset management reporting.

Emergency Response









People Our Strength, Our Future

Our customers see us go beyond a "Can-do" attitude, and a "Will-do" promise. At Black & McDonald, we let them know that it's done, right the first time, on-time, and on-budget.

As new technologies emerge, we will work to define, install and improve value added systems.

We are committed to Canada's green energy future.



The "Black & McDonald Way"

The Black & McDonald Way is our way of doing business. It is an internal initiative, designed to ensure our company's mission, vision and values are kept fresh in the minds of every employee, so our service levels remain exceptionally high for our customers. It spearheads the focus of our continuous improvement process, and it adds value to our work through continued use of our Founder's Code of Business.

Our Measures of Success:

- Health, Safety and Environmental Responsibility
- Planned Growth and Profitability
- Customer Satisfaction and Loyalty
- Continuous Improvement Culture
- Employee Satisfaction and Loyalty
- Community Responsibility

What they mean to you:

- Peace of mind when we provide services at your site
- We'll be there to serve you tomorrow
- Continuous efforts to deserve your trust
- Working with you for a better future
- Happy people are proud to serve you
- We support the communities we serve

We will remain a reliable, flexible, innovative leader in our evolving markets proud of our past,
advanced in our capabilities,
driven to deserve our reputation.

For Solar Energy Construction and Maintenance Solutions in Ontario, call Black & McDonald Limited.

Hamilton (905) 560 3100 Toronto (416) 366-2541 Ottawa (613) 526-1226

www.blackandmcdonald.com/solar

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