CIMA+

Engineering
for **people**

IEC 61850 SOLUTION

cima.ca

A LEADER IN CONSULTING ENGINEERING

With more than 30 years of industry experience, CIMA+ is the consulting engineering firm of choice across Canada. Our interdisciplinary team works hand-in-hand with clients to deliver exceptional results on projects large and small.

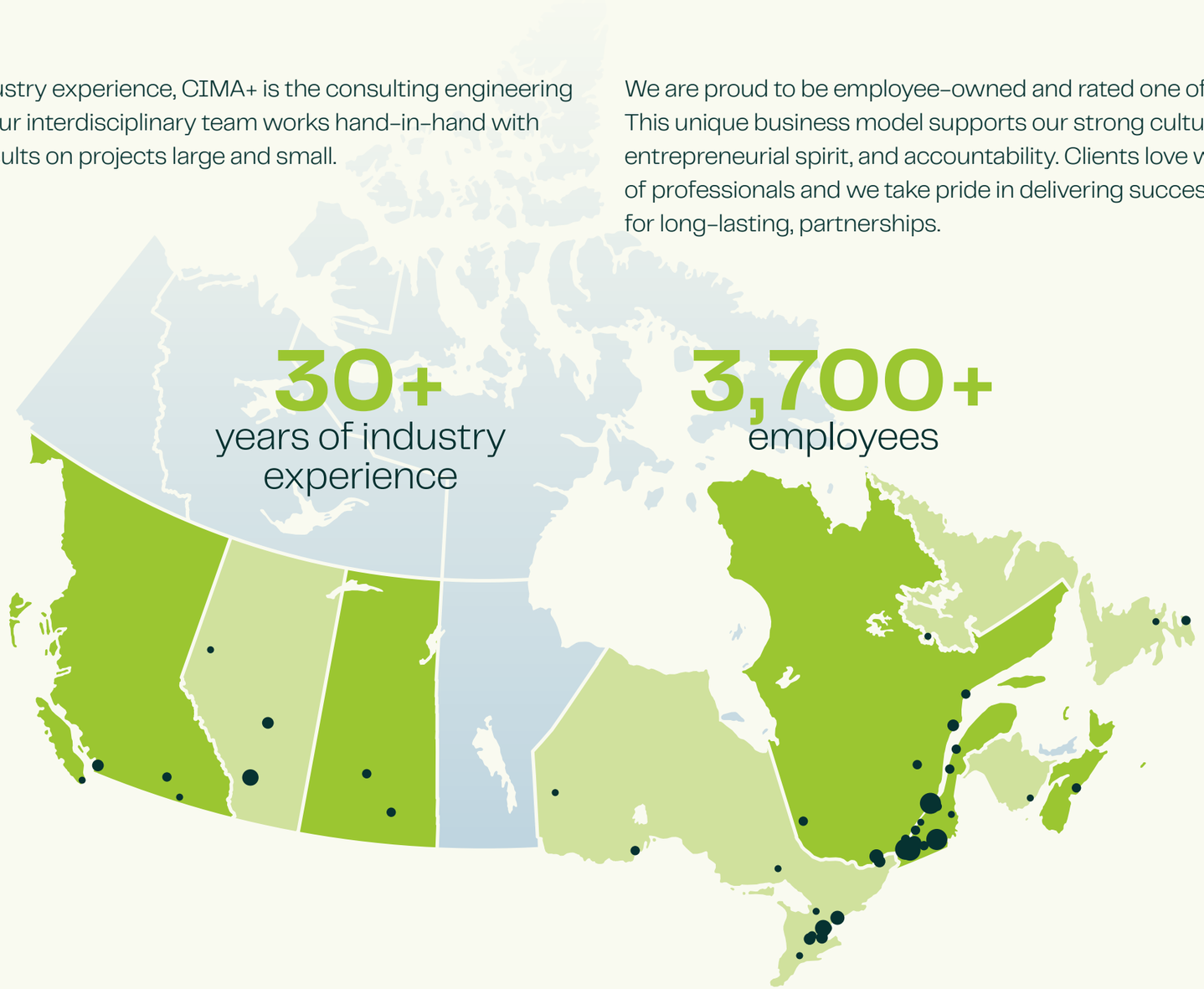
EMPLOYEE-OWNED AND CLIENT FOCUSED

We are proud to be employee-owned and rated one of Canada's best employers. This unique business model supports our strong culture of excellence, entrepreneurial spirit, and accountability. Clients love working with our talented roster of professionals and we take pride in delivering successful projects that set the stage for long-lasting, partnerships.

45+
offices across Canada

30+
years of industry experience

3,700+
employees



> **"We wish to make a difference with our employees, clients, and business partners to shape an inclusive, fair and carbon neutral world. We must work towards this ideal that is not contrary but rather complementary to the sustained growth we are aiming to achieve."**
>
> **Denis Thivierge,** P. Eng.
> President and Chief Executive Officer

CIMA+

KINCENTRIC
Best Employer
CANADA 2023

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At CIMA+, we have more than 30 years of expertise in the design and construction of electrical substations for utility companies, private developers, contractors, manufacturers, and industrial clients.

Through our team's know-how and involvement in hundreds of energy and industrial installations in Canada and abroad, our experts have contributed to the successful completion of projects such as:

- Electricity transmission, distribution, and production substations
- AC-DC converters
- Static compensators
- And in the field of renewable energy sources

We offer complete, multidisciplinary services to our clients and provide a one-stop shop for the implementation of your projects.

IEC 61850 SOLUTION

CIMA+'s IEC 61850 solution was developed to meet our customers' growing needs for agility in equipment operation and maintenance, to help reduce project costs and schedules, to make installations more adaptable, and finally, to facilitate information sharing.

The concept of this solution is governed by IEC 61850 standards and consists of the installation of a merging unit in the substation, outside the control building, which receives all current, voltage, state, alarm, trip and lock-out signals from the equipment. This unit then generates digital equivalents which are transmitted via fibre optics to the various protection relays present in the control building. This new feature greatly improves the productivity of the engineering, implementation, testing, and maintenance phases of projects. The digitization of electrical substations allows for better management of electricity demand and supply as well as maintenance, all by incorporating modern communication, supervision, control, and valuable information storage equipment. It supports real-time decision-making with up-to-date and accurate information.

ADVANTAGES AND BENEFITS

- Safe working environment by eliminating current and voltage signals inside the control building
- Reduction of the space required in the control building
- Reduction in the number of cables, trenches, cable trays, and point-to-point wiring
- Adaptability and flexibility of design through programming
- Reduced risk of errors
- Reduction of power down time at the construction site by simulating operation before commissioning
- Facilitation of maintenance and functionality verification
- Interoperability between relays of different IEC compliant types and manufacturers
- Standardization of protection modelling equipment processes

OUR WIDE RANGE OF COMPREHENSIVE SERVICES INCLUDE:

- Requirements development
- Project management
- Design of the complete protection and control, and SCADA solution
- Laboratory testing and simulation
- Panel fabrication
- Field-testing
- Support and training
- Remote assistance

FOR MORE INFORMATION, CONTACT US:

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CIMA+ HEAD OFFICE

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WE HAVE A LOCAL PRESENCE FROM COAST TO COAST, ALL ACROSS CANADA.

Baie-Comeau Beauce Bécancour Barrie Bowmanville Burlington Calgary – Airport Calgary – Downtown
Clarenville Edmonton – Downtown Edmonton – West Gatineau Granby Grande Prairie Guelph Halifax
Kelowna Kitchener Labrador City Laval Lévis London Longueuil Mississauga Montréal Oakville
Ottawa Québec City Red Lake Regina Rimouski Rivière-du-Loup Rouyn-Noranda Saguenay
Saint John, NB Saskatoon Sept-Îles Sherbrooke Sorel-Tracy St John's, NL Sudbury
Terrebonne Thunder Bay Toronto Vancouver Victoria West Kootenays

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