



ELECTRICITY SECTOR IN CANADA NEEDS 28,000 WORKERS BY 2028

Electricity Human Resources Canada (EHRC) forecasts the labour supply and demand trends impacting the electricity and renewable energy sector workforce to 2028 in new report

October 25, 2023. TORONTO – Electricity Human Resources Canada ([EHRC](#)) released its five-year **Electricity in Demand: Labour Market Insights 2023-2028 report** today at a national launch event in Toronto at Ontario Power Generation (OPG) with attendance by industry executives, labour representatives, educators and sector stakeholders. New evidence projected to 2028 highlights emerging human resource issues affecting Canada's electricity sector. The study sets forth a road map and recommended strategies to harness the sector's full potential and maximize its role in helping Canada achieve its carbon reduction objectives related to climate change impact.

The objectives of this report are threefold:

- To reveal the challenges, opportunities, trends, and key workforce issues confronting Canada's electricity sector;
- To provide labour market data, intelligence, and projections that enable stakeholders to make evidence-based workforce-related decisions;
- To identify human resources solutions that augment the electricity sector's ability to attract, develop, and retain the talent needed to support its goals and initiatives.

"The report identifies emerging demands for newly trained and specialized workers in the electricity sector's labour force", states **Michelle Branigan, CEO, EHRC**. "It offers recommendations to enable both industry and government to make evidence-based, workforce-related decisions and to develop human resources solutions to attract, develop, and retain the talent needed to support Canada's net zero ambitions."

Cynthia Domjancic, Senior Vice President, Human Resources at OPG adds, "With a mission is to build a sustainable future powered by our electricity, ideas and people, OPG and its family of companies are leading the development of new clean technologies, refurbishment of existing assets, and electrification initiatives to power the growing demand of a clean economy. This highly anticipated LMI report will inform hiring and skills development to ensure we meet those expectations."

As of 2022, just over 110,600 individuals were employed in the electricity sector across a wide range of occupations.¹ Developing a pool of trained and experienced workers is critical to building long-term, future-readiness of Canada's electricity supply.

Significant capital investments are anticipated in the Canadian electricity sector to increase its ability to generate clean and affordable power. These investments align with the country's ambitious goals of achieving a net-zero electricity grid and net-zero greenhouse gas emissions. However, at the same time, projections suggest that



Canada's electricity consumption could more than double between 2023 and 2050. This significant increase in demand is going to lead to a greater reliance on non-carbon emitting generation resources, such as hydro, nuclear, wind and solar. Simply put, to meet demand we will require more power generation which will necessitate a substantial increase in the electricity sector's labour force.

Building upon EHRC's 2018 *Workers in Motion* report, today's release of the **Labour Market Intelligence (LMI) Study** provides current and updated information as well as five-year projections of the labour outlook for the Canadian electricity sector to 2028.

Key findings include:

Rapid growth leads to labour demand

- Total employment in the sector has increased by over 12% in the past five years – equivalent to an average annual growth rate of 2.3%. Most of this growth is concentrated in the renewable energy space.
- Close to 28,000 new employees will be needed by 2028, equivalent to 25% of the current labour force – 57% to replace retiring employees, 43% to meet expansion demand.

Electricity sector urgently needs a comprehensive human resource strategy

- For the sector to achieve its economic and environmental objectives, the report offers a three-pronged human resources strategy and action plan that focuses on:
 - attracting and retaining workers to the sector (quantity of labour);
 - safeguarding full-time employment and ensuring workers have the right training and skills (quality of labour); and
 - matching workers with opportunities in the labour market (workforce partnerships).

What occupations are facing skills shortages, and will be most difficult to fill in 2028?

- Nearly half of the sector's 34 core occupations will face labour shortages at the economy-wide level.
- Each of the four groups of occupations considered in the analysis, albeit to varying degrees, will be impacted: Managers & supervisors, Engineers & engineering technologists, Trades, and Information and Communications Technology (ICT).

New training programs for the sector are urgently needed

- Technological advancements in the sector require updated and new courses and academic programs for workers. However, the development time required can be too long.
- There is considerable scope for increased collaboration and coordination between educators and employers to ensure the provision of in-demand skills and improvement of training programs.



Labour Market Intelligence (LMI) Study 2023 -2028: Is available for digital download here. **National Launch Event Webcast:** Please click [here](#).

About Electricity Human Resources Canada ([EHRC](#))

Electricity Human Resources Canada (EHRC) is Canada's trusted provider of national labour market business intelligence, HR programs, and tools for the electricity sector.

We strengthen the electricity workforce to be safety-focused, innovative, and inclusive by delivering critical business intelligence to inform labour market decision-making; by forging partnerships that enable the industry to adapt, upskill, and innovate; by leading the industry in creating and sustaining a skilled and inclusive workforce; and by inspiring our workforce to build a low-carbon economy – now and for future generations.

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