



PEOPLE • EXCELLENCE • INNOVATION • GROWTH

Electric Avenues

Our **Teshmont** colleagues are setting industry standards and advancing electric power transmission technology, directly benefiting our quality of life.

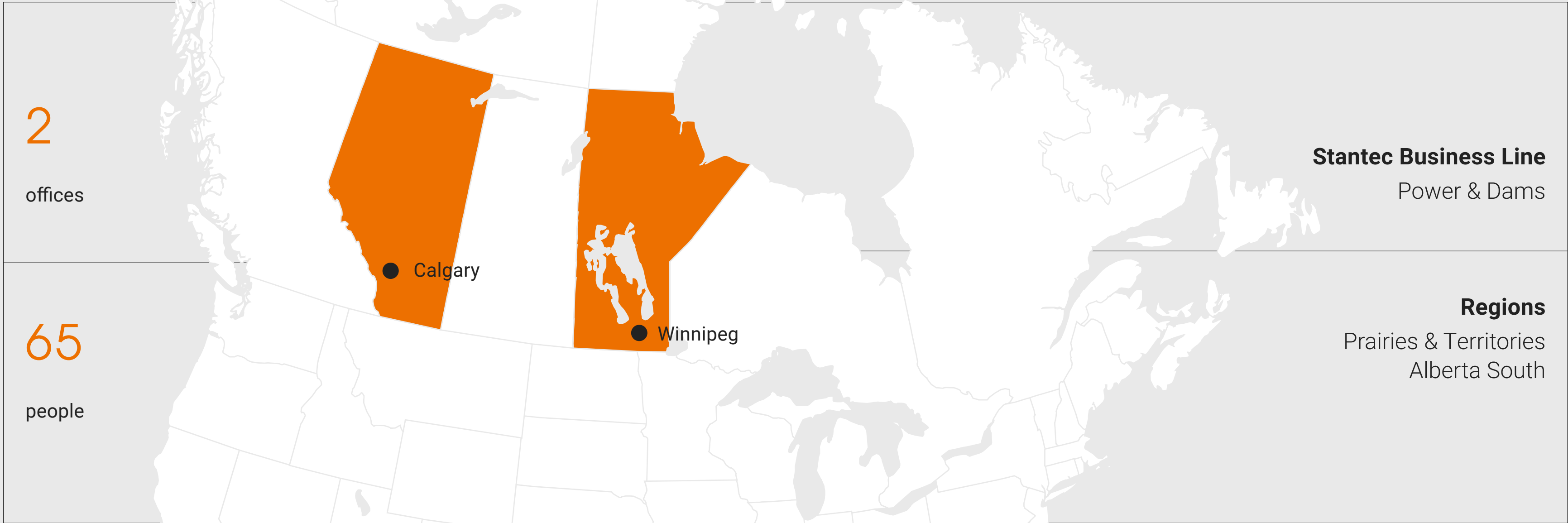


Electricity is the lifeblood of modern society. It touches all aspects of our daily lives and is vital to our economic prosperity, healthcare, education, security, our general well-being, and overall quality of life. Bulk transmission of electricity is a challenge that communities face all around the globe.

Since 1966, Teshmont has worked on projects worldwide totaling over 80,000 MW of planned or installed HVDC transmission and has supplied engineering services on some of the largest high voltage transmission systems in the world. Their engineering consulting services encompass the complete implementation of power transmission system projects, from the initial feasibility studies to the final commissioning of completed systems.

As world leaders in advanced electric power delivery engineering specializing in the study and design of high voltage AC and HVDC transmission systems, Teshmont is committed to providing advanced engineering solutions that are innovative, reliable, efficient, safe, and environmentally respectful.

High Voltage Direct Current (HVDC) and Extra High Voltage Alternating Current (EHVAC) technologies are used to efficiently deliver electric power over long distances, allowing connectivity between regions, improving system reliability, and providing flexibility.



The Value of Diversity

Teshmont is proudly founded on decades of experience in a collaborative and diverse atmosphere.

2017

Awarded the "Diversity Employer Award" from Engineers Geoscientists Manitoba

30%

Female

50%

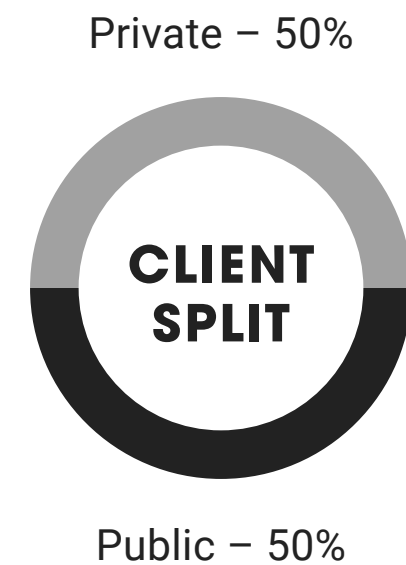
Minority

23+

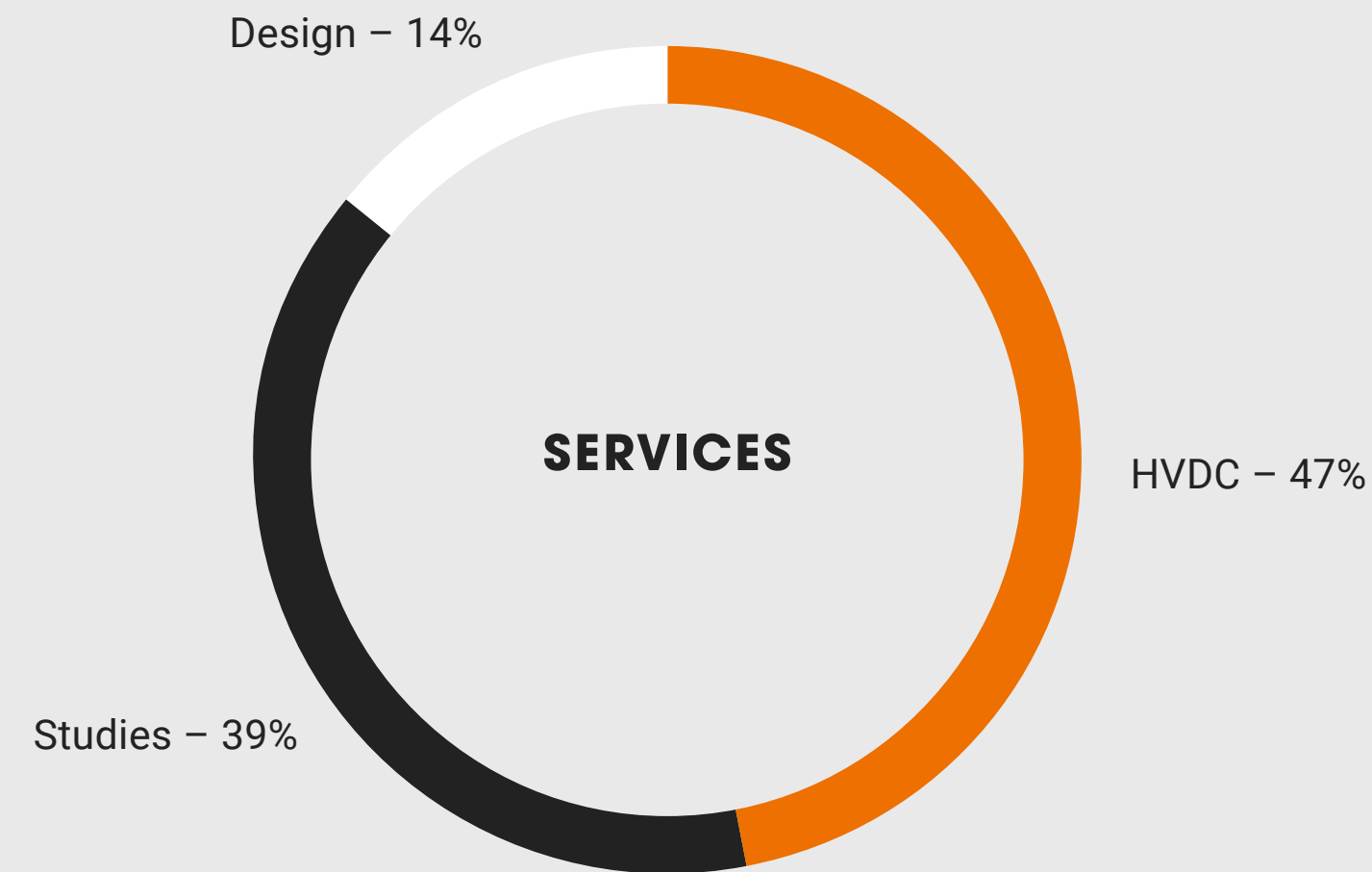
Languages spoken by our employees

20+

Countries represented by employed staff



Teshmont has supplied engineering services to over 300 clients in more than 40 countries



TOP CLIENTS

- Manitoba Hydro, Canada
- Alberta Electric System Operator (AESO), Canada
- Intermountain Power Authority, USA
- Great River Energy, USA
- Adani Electricity Mumbai Infra Limited (AEMIL), India
- Moldelectrica, Moldova
- EuroAsia, Cyprus
- Salt River Project, USA



Ralph Kurth
PEng PMP
President & CEO
Teshmont Consultants LP

Joining Stantec provides Teshmont with a much wider range of in-house skills and resources that we can now offer to our global clients as a "one-stop shop." For over 50 years, we have provided HVDC and EHVAC power transmission study and design services to clients all around the world. Now, as Stantec, we can offer additional civil, mechanical, environmental, and other services to meet client needs as they integrate ever-increasing amounts of renewable energy, manage their aging assets, and increase society's access to clean, affordable and reliable electricity.



David Bernier
Senior Vice President
Power & Dams
Stantec

I'm excited to welcome Teshmont to the Stantec team. Our collaborative and successful history working together on various major energy projects provides us an excellent framework for how our teams will work as one entity moving forward. We will benefit from their expertise in HVDC, detailed systems studies, and design, management, and installation of transmission systems in North America and around the world. Combining their focused knowledge with Stantec's extensive client network and global presence positions both teams to capitalize on the opportunities created during this unprecedented time of change in global power markets.



ADELAIDE DISTRIBUTION STATION

LOCATION: Manitoba, Canada

CLIENT: Manitoba Hydro,
Teshmont was subconsultant to GE Grid

COMPLETE OR ONGOING:

In-service 2017

The 66/12 kV GIS Adelaide substation delivers reliable power to customers in and around downtown Winnipeg.

- [Engineering Design](#)
- Design, implementation and testing of state-of-the-art station protection, automation, and control system
- Station service system design
- Station grounding studies



OFFSHORE WIND PROJECT - SPECIALIST POWER SYSTEM STUDIES

LOCATION: Scotland

CLIENT: Scottish and Southern Energy (SSE), Teshmont was a subconsultant to Wood Group PLC

COMPLETE OR ONGOING:

Studies completed 2019

Viability assessment of a 1200 MW offshore wind farm project HVAC connection that forms part of an offshore wind generation project in Europe.

- [Power System Studies](#)
- Power system models and studies associated with control, configuration, and operation
- Power flow analysis
- Harmonic assessment
- Insulation coordination studies



EUROASIA INTERCONNECTOR

LOCATION: Cyprus

CLIENT: EuroAsia Interconnector Limited

COMPLETE OR ONGOING:

Estimated in-service 2023

The EuroAsia Interconnector will ultimately link the electrical systems of Israel, Cyprus, Crete, and Greece using over 1864 miles (3000 km) of submarine cables, in-water depths of up to 9843 feet (3000 m), with HVDC VSC converter stations at each connection point.

- [HVDC and FACTS](#)
- HVDC Owner's Engineer
- HVDC converter stations and electrodes
- HVDC submarine and underground cables



LOSS FACTOR METHODOLOGY

LOCATION: Alberta, Canada

CLIENT: Alberta Electric System Operator (AESO)

COMPLETE OR ONGOING:

Estimated Completion 2020

In any power system, there is a disparity between the amount of power that is generated or imported, and the amount of power that is used by loads or exported. The difference is accounted for primarily by transmission loss.

- [Power System Studies](#)
- Loss factor studies and processes



AWARD

ACEC-Manitoba
Keystone Award of
Excellence, 2019

Nelson River HVDC Transmission System Bipole III

LOCATION: Manitoba, Canada

CLIENT: Manitoba Hydro, Stantec was a subconsultant to Teshmont

COMPLETE OR ONGOING: In-service 2018

During construction, the Manitoba Hydro Bipole III project was one of the largest and most technologically complex energy projects in North America.

- [HVDC and FACTS](#)
- HVDC Owner's Engineer
- Feasibility studies and conceptual design
- Technical specification development

- Bid evaluation and contract negotiation
- Design reviews
- Witnessing Factory Acceptance Tests (FATs)
- On-site construction monitoring
- Commissioning assistance
- HVDC converter stations
- Ground electrodes
- AC stations
- Synchronous condensers