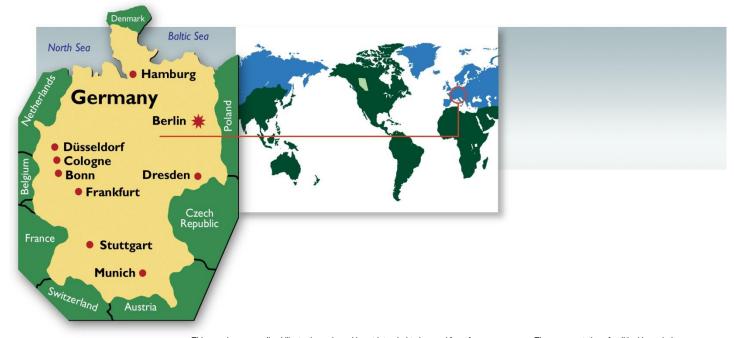
Germany - Alberta Relations





This map is a generalized illustration only and is not intended to be used for reference purposes. The representation of political boundaries does not necessarily reflect the position of the Government of Alberta on international issues of recognition, sovereignty or jurisdiction.

PROFILE

Capital: Berlin

Population: 82.8 million (2016)

Language: German

Government: Federal Republic

Head of State: President Frank-Walter Steinmeier (elected March 2017)

Head of Government: Chancellor Angela Merkel (re-elected to a third term in September 2013)

Currency: Euro, CAD \$1.00 = €0.67, €1.00 =

CAD \$1.49 (June 2017)

GDP: USD \$3.47 trillion (2016)

GDP (PPP): \$4.03 trillion current international

dollars (2016)

GDP per Capita (PPP): 48,730 current

international dollars (2016)

GDP Growth Rate: 1.9 per cent (2016) **Inflation:** 1.04 per cent (2012-2016 avg.)

Unemployment: 4.1 per cent (2016)

Key Industry Sectors: Machinery and transport equipment, chemicals and related products, food and drinks.

na arinks.

Sources.

Bank of Canada, Economist Intelligence Unit

DID YOU KNOW?

- As Europe's largest economy and most populous region, Germany is a key player in the continent's economic, political and defense organizations.
- Germany is a founding member of the European Union (EU) and Eurozone.
- In addition to a large number of multinational enterprises (MNE), Germany has over 3.6 million small and medium sized enterprises (Mittelstand).
- Alberta and Germany have recognized each other's driver's licenses since 1996.

RELATIONSHIP OVERVIEW

 The City and County of Leduc has been twinned with Grimma since 2005.

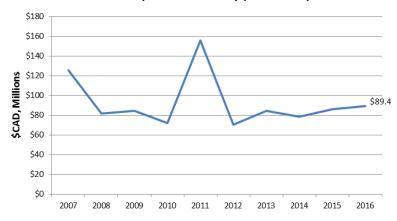
TRADE AND INVESTMENT

- Under the Canada EU Comprehensive Economic and Trade Agreement (CETA), tariff elimination and other provisions will enhance the competitiveness of Canadian exports to Germany.
- Between 2012 and 2016, Alberta's goods exports to Germany averaged CAD \$81.8 million per year. Top exports included machinery (\$18.0 million), grains, seeds and fruit (\$9.0 million), electrical machinery (\$5.3 million) and vehicles (\$5.3 million). The export figures do not include trade in services (e.g. tourism, architecture and engineering, or IT services).

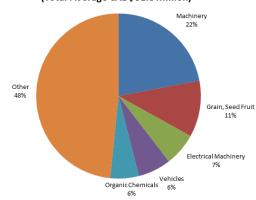
- During the same period, Alberta's direct imports from Germany averaged CAD \$636.5 million per year. Top imports included machinery (\$261.2 million), medical, photographic and other measuring instruments (\$86.2 million), electrical machinery (\$77.5 million) and iron or steel products (\$35.9 million). This figure does not include goods sold in Alberta that have arrived via distribution hubs in other provinces.
- The stock of Canadian direct investment in Germany totaled \$15.56 billion in 2016. During the same time the stock of German direct investment in Canada totaled \$12.36 billion.
- There are at least 25 German subsidiaries operating in Alberta, including: Siemens (multisectoral), Evonik Industries (chemicals), Refratechnik/Baymag (minerals), Heidelberg Cement/Lehigh Inland (construction), Daimler, BASF, ThyssenKrupp and Bayer CropScience.
- The Government of Alberta supports the Alberta-Germany Collaboration Fund for Product Development and Commercialization. The Program is delivered by the German-Canadian Centre for Innovation and Research in Edmonton. 20 projects have been funded and over \$4.09 million has been distributed to Alberta SME's through the fund.

August 2017 | Input provided by Alberta Ministries of: Economic Development and Trade, Agriculture & Forestry, Advanced Education, Tourism, Education and Labour

Alberta's Exports to Germany (2007-2016)



Alberta's Merchandise Exports to Germany 2012-2016 (Total Average CAD\$81.8 Million)



ENERGY

- Germany is the 10th largest oil consumer and the 7th largest natural gas consumer (2016) in the world. In 2016, Germany consumed 2.4 million barrels per day (bbl/d) of refined petroleum products and 91 billion cubic meters (bcm) of natural gas.
- Net natural gas imports accounted for 90 per cent of total natural gas consumption in Germany. Russia supplied approximately 39 per cent of Germany's natural gas imports in 2013.
- Germany is a world leader in renewable energy production. In 2016, 29 per cent of generated electricity came from renewable source. On April 30, 2017, a record 85 per cent of electricity consumed was from renewable sources.
- Renewable energy capacity has grown dramatically since the 2000's. Onshore wind capacity grew from 22.1 GW in 2007 to 47.1 GW in 2017. During the same period, solar energy capacity grew from 4.2 GW to 41.7 GW.
- In June 2016, the Government of Alberta and German-based Siemens signed an MOU, building upon an existing agreement from 2013. This reaffirms the commitment from both parties for continued collaboration with Alberta's industrial community, innovation system and research community. Key areas of focus include energy, economy, environment and education projects.
- Siemens was awarded a CAD \$100 million contract from TransCanada Pipelines Ltd. to supply the Keystone Pipeline project with electrical equipment, electrical power supply and pumping equipment.
- The electric shovels of Shell's Muskeg River Mine use Siemens-manufactured automation systems and electrical equipment.

- Siemens' Corporate Technology division is researching the use of Electromagnetic Gravity Drainage for in-situ extraction of bitumen. Siemens estimates that the method has the potential to extract 20 per cent more bitumen when combined with conventional steam injection.
- The Western Alberta Transmission Line (WATL) is Alberta's first in-service direct current line, transmitting electricity on the provincial power grid. WATL utilizes Siemens converter stations.
- Central European Petroleum Ltd., registered in Alberta, Canada in 2006, and its wholly-owned affiliate, CEP Central European Petroleum GmbH, registered in Germany in 2008 were set up to pursue petroleum exploration opportunities in the European Union, initially focusing on Germany.
- CEP has acquired over 3.6 million acres of onshore and offshore exploration licenses in the German states of Mecklenburg-Vorpommern and Brandenburg.

EMERGING OPPORTUNITIES

- Germany is the largest information and communication technology market in Europe with excellent opportunities in areas such as enterprise solutions, Internet of Things (IoT), big data, cloud computing, IT security, eenergy and smart grids.
- Representing Europe's most populous country, Germany offers the largest market for healthcare and life sciences products. Key areas include digital health, biotechnology and medical devices. Germany is one of Europe's leading pharmaceutical research and production hubs.
- Germany is the leading "Silver Market" in Europe. The aging population and escalating costs for healthcare will provide opportunities for new innovative products and services in healthcare delivery, including products for

diagnostics, remote monitoring, wellness, homecare, and rehabilitation.

- Germany is the 5th largest aerospace and defense industry in the world and this sector ranks as one of the most important for trade between Germany and Canada. Opportunities exist for Alberta firms offering specialized and innovative technologies, products or services for manufacturing, maintenance, repair and overhaul, unmanned vehicle systems (UVS), defense in the 21st century (C3 capabilities: command, control, communication) and the EU's areen initiatives (reduced emissions/noise, green operations and ecodesign).
- Germany is world leader in machinery and equipment at USD \$257 billion and expected to maintain its position in the foreseeable future, which provides excellent opportunities for Alberta technologies in instrumentation, SCADA, robotics, photonics, nanotechnology, sensors and test/scientific equipment in verticals such as automotive, medical equipment, electronics and other manufacturing.

AGRICULTURE

- Germany is the world's second largest importer of agricultural products, with the majority supplied by other EU countries.
 Products must meet strict German/EU food laws, packaging and labeling requirements.
- In 2016, Alberta's agri-food exports to Germany totaled \$33.3 million. Alberta's top agri-food exports to Germany were canola seed (\$13 million), prepared animal feeds (\$5.3 million) and wheat (\$4.9 million).

FORESTRY

- Alberta forest product exports to Germany in 2016 reached CAD \$6.3 million, consisting mainly of wood pulp.
- Sawmills in Germany have some of the highest domestic wood costs in Europe, and

are increasingly sourcing softwood logs from • neighboring countries. Germany is the second largest importer of softwood logs in the world.

EDUCATION

- Total number of German international students studying in Alberta has remained relatively consistent over past five years, with 184 German students registered in Campus Alberta institutions (excluding Athabasca University) during the 2014-15 academic year. Approximately 50 per cent, or 90 students, were studying in masters or doctoral programs at the University of Lethbridge (U of L), University of Calgary (U of C) and University of Alberta (U of A).
- From May 4-5, 2015, a delegation from the Deutscher Akademischer Austausch Dienst (German Academic Exchange Service) visited Alberta to discuss global talent development.
- Since 2004, the Zentralstelle für das Auslandsschulwesen (ZfA) has assigned a German language advisor to Alberta Education to enhance cultural ties, support curriculum development, and promote German language and culture. The posting is one of only two German advisors in Canada.
- Alberta Education cooperates in both teacher and secondary student exchange programs with Hesse, Bavaria and Saxony.
- Three Alberta high schools, Lindsay Thurber (Red Deer), Harry Ainlay (Edmonton), and Onoway High School have active twinnings with Gymnasien (high schools) in Hesse.
- Five Alberta high schools, Canmore Collegiate High School (Canmore), Lindsay Thurber Comprehensive High School (Red Deer), Harry Ainlay High School (Edmonton), Strathcona High School (Edmonton), and West Central High School (Rocky Mountain House), have partnerships with schools in Germany.
- Alberta Innovation and Advanced Education approved funding in January 2010 for the Alberta-Saxony Intercultural Internship Alliance, a co-operative venture with the State of Saxony to exchange students in industry and research placements.
- Six Alberta post-secondary institutions are active partners of the Alberta-Saxony Internship Program and have agreements with ten institutions in Germany.
- The U of A, U of C, U of L, Concordia University College, Athabasca University, Olds College and MacEwan University all have numerous agreements with German universities in areas such as dentistry, technology, science, engineering. business.

- The Humboldt Foundation Liaison Office of IMMIGRATION Canada at the U of A promotes academic cooperation between scientists and scholars from abroad and from Germany. The U of A has more Humboldt fellows than any other university in Canada.
- Funded by the Government of Alberta and Helmholtz Association, the Helmholtz-Alberta Initiative aims to develop solutions to key challenges in fields such as energy and the environment, ecosystem and resource informatics and health.
- All six universities in Alberta offer credit programming in the German language.
- In 2012-13, 830 students were enrolled in the K - 12 German bilingual program offered in four school authorities. Close to 3000 students were enrolled in German language and culture courses offered in 20 school authorities in the province.

CULTURE AND TOURISM

- Approximately 679,700 Albertans (20 per cent of Albertans) are of German ancestry, forming the second-largest ethnic group in Alberta after British.
- The German-Canadian Association of Alberta (GCAA), which encompasses 29 Germanspeaking clubs and organizations from Medicine Hat to Grande Prairie, aims to share German culture with Alberta society as a whole.
- The GCAA organizes the German Culture . Festival every year since 1986.
- The German Canadian Cultural Association's Library, located in Edmonton, has an excellent selection of German books and videos.
- The Children's German Community Library, which was created in April 2002, is accessible to more than 700 German-learning students in the greater Edmonton area.
- From 2013-16, the Government of Alberta's Community Grants program provided approximately \$54,500 to German cultural organizations in Alberta including the German-Canadian Cultural Association and the German Malechoir Lierkranz of Edmonton.
- Approximately 117,000 overnight person visits were made by German visitors to Alberta in 2015, resulting in tourism expenditures of approximately \$122 million.
- Germany is Alberta's second largest European travel market. Destination Canada's Global Tourism Watch research indicates there are approximately five million German travelers reporting an interest in visiting Canada.

- Between 2012 and 2016, 1,254 immigrants from Germany chose Alberta as their destination. Approximately 74 per cent were economic immigrants. This includes principal applicants and their dependents.
- From 2012-16, 683 foreign workers from Germany were issued a permit to work in Alberta, and were mainly employed as university professors and lecturers, information systems analysts and consultants, and transport truck drivers.
- During the same time period, 685 foreign students from Germany were issued a permit to study in Alberta.

RECENT VISITS

- .lune 2016: The Bavarian Parliament Committee on Environment and Consumer Protection conducted a fact-finding mission in Banff and Calgary. Topics discussed included park and ecosystem management, veterinary medicine, climate change and energy policy.
- April 2016: Germany's Ambassador to Canada met with Government of Alberta officials and business leaders in Edmonton to talk about renewable energy, environment and climate change.
- May 2014: The Alberta Minister of Treasury Board and Finance met with financial officials and investors in Germany, Switzerland, the Netherlands and England.
- May 2014: The Minister of Innovation and Advanced Education visited Germany to collaboration support technology and investment attraction.
- June 2013: Alberta's Deputy Premier and Minister of Advanced Education led a mission to Germany, including the renewal of the Alberta-Bavaria Memorandum of Understanding on science, research and education cooperation.
- April 2013: Visit of Mr. Harald Leibrecht, MP to the German Bundestag.
- January 2013: Alberta's Minister of Economic Development and Trade led a mission to Bayaria to further the relationship between Alberta and Germany.
- December 2012: His Excellency Werner Wnendt, German Ambassador to Canada made his official visit to Alberta.
- September 2012: The Minister of International and Intergovernmental Relations led a mission to Saxony.
- March 2011: Bavaria's Vice Minister of Economic Affairs, Katja Hessel, and a delegation of 25 Bavarian politicians, business people, academics and government officials visited Alberta.

DIPLOMATIC REPRESENTATION

- The German Ambassador to Canada is Her Excellency Sabine Sparwasser.
- Mr. Stéphane Dion is the Ambassador of Canada to Germany and Special Envoy to the EU and Europe.
- Mr. Andrew Haswell is the Canadian Consul based in Munich.
- Ms. Marthe Lemay is the Canadian Consul based in Duesseldorf.
- The Honorary Consul of Germany in Edmonton is Mr. Harald Kuckertz.
- The Honourary Consul of Germany in Calgary is Mr. Hubertus Liebrecht.

