



Topic

High-Technology

Overview

This Fact Sheet provides an overview of Coquitlam’s high-technology sector. Based on City of Coquitlam data, this sheet provides an understanding of this sector’s overall economic significance, associated local land use characteristics, sector trends and related land use policy focus.

What it includes:

- > Sustainable Technologies Cluster
- > Biotechnology/Life Sciences Cluster
- > Information and Communications Technology (ICT) Cluster
- > Wireless Cluster
- > New Media Cluster
- > Energy Technologies Cluster

Related Publications

Citywide Official Community Plan; Zoning Bylaw 3000, 1996

Overall Economic Significance

British Columbia	Coquitlam
<p>British Columbia’s high-technology industry contributes high paying jobs and growing revenues to the BC economy. It comprises 2.1% of the total jobs in BC and employed 45,000 people in 2004. It is a small but significant part of the BC economy.</p> <p>The Greater Vancouver area is home to internationally recognized innovative companies such as Electronic Arts, the world’s largest publisher of electronic games; PMC Sierra, a NASDAQ 100 supplier of networking components and software; Ballard Power Systems, the world’s largest developer of fuel cell technology; QLT, one of only 19 profitable public biotech companies in the world; and Sierra Wireless, a global leader in wireless technology.</p>	<p>There are 1,315 employees in the high-technology sector in Coquitlam, with the three largest high-technology companies in Coquitlam located within the biotech cluster.</p> <p>The high-technology sector holds long term promise as a growing industry that can provide high-paying, stable jobs; as a result, many communities vie to attract these businesses. Coquitlam’s success in developing this sector will depend on appropriate positioning and the fostering of unique market specializations.</p>
<p><i>Source: Leading Edge BC</i></p>	<p><i>Source: Coquitlam’s Business License Database 2005</i></p>

For further information please call the Planning and Development Department at 604.927.3430, or visit www.coquitlam.ca.

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High-Technology Companies and Local Land Use Characteristics

As is typical of this sector where small businesses predominate, there are only three high-technology companies with more than 100 employees in Coquitlam and they specialize in biotech manufacturing (health products/medical devices). Seventy-percent (70%) of employees in the high-technology sector are located in Coquitlam's industrial lands which are located south of the TransCanada Highway.

Trends in Technology

The following five clusters have the potential for sustained employment and revenue growth in BC, as identified by Leading Edge BC in partnership with the Provincial Government, and provide the framework for Coquitlam's high-technology to position itself:

Wireless Cluster

The wireless cluster includes those businesses that are involved in providing the equipment, networks, software and services to enable the transition to wireless. With over 220 companies, British Columbia's wireless cluster ranks among North America's largest and most innovative wireless clusters. Spanning the entire wireless value chain, it is a diversified cluster with a complete range of engineering services, carrier and enterprise class solutions and consumer product/service offerings, all of which have been locally developed. The strengths of BC's wireless cluster lies in its deep pool of skilled talent and expertise, an entrepreneurial culture of innovation and easy access to global markets.

New Media Cluster

The New Media focus in BC has a strong focus on the development of content & enabling software. Primary applications are: Animation & Digital Film, E-Commerce, E-Learning, Games Development/Publishing, Streaming Media, Internet & Other, Visual Effects & Post-Production, Web Development & Design. The new media cluster in BC benefits from being part of a film and television production region which is the third-largest in North America: companies in this cluster have global competence in digital animation, visual effects and post-production services. With over 700 companies, BC's new media industry provides full-time employment to approximately 14,000 people.

Biotech Cluster

Companies in this cluster operate across a broad range of biotechnology activities including therapeutics, diagnostics, pharmaceuticals, medical devices, agriculture, marine, forestry, and environmental. However the cluster is dominated by firms in the health care sector, with approximately 60% of BC's biotech companies developing biopharmaceutical and biomedical applications. In BC, there is a growing base of non-health biotechnology companies and medical device companies. BC's biotechnology cluster comprises over 90 private sector firms as well as a number of research centres, many of which are partnerships among government agencies, universities, teaching hospitals, and technical colleges.

Trends in Technology (cont'd)

Energy Technologies Cluster

Building on a leading global competence in fuel cells, hydrogen and natural gas vehicle technologies, BC's energy technologies cluster now offers exciting opportunities for a range of technologies in: biofuels & biodiesel, biomass, waste-to-energy, solar, wind, geothermal, wave, tidal, smart energy and energy management systems. Research and development expenditures totaled \$175 million for 2002 and employed approximately 3,000 people.

Sustainability Technologies Cluster

BC's sustainability technologies cluster is diverse and innovative, offering numerous investment and market development opportunities. It supplies a broad cross-section of industries (forestry, mining, construction, transportation) across many stages of the manufacturing value chain. BC's Sustainability Technologies Cluster develops innovative applications in: wastewater treatment technologies, power technologies (especially fuel cells and smart energy applications), GIS for forestry and mining, site remediation technologies (including acid rock drainage), environmental instrumentation technologies, waste to energy technologies (linked to renewable energy capabilities).

Information and Communications Technology (ICT) Cluster

BC's ICT cluster spans various sectors, from hardware, telecommunications and electronics to software and services. BC's ICT anchor companies are successful global businesses, with Creo, MacDonald, Dettwiler & Associates, Sierra Systems and PMC-Sierra ranking in the top 5 biggest BC-based high-tech companies. In addition, excellence in innovation and commercialization in the ICT sector continuously positions BC companies to capitalize on information technology trends and outperform the ICT sector as a whole.

Coquitlam Policy Initiatives

Coquitlam's land use policies recommend identifying any existing or emerging high-technology specializations and creating the appropriate preconditions through land use and servicing provisions to attract these businesses. Policies related to this sector also focus on developing strategies that foster unique market specializations. Strategies to achieve this goal include encouraging collaborations between Simon Fraser University (SFU), Douglas College and the local business community.

Conclusion

Among the high-technology clusters that Coquitlam may be well positioned to develop, the biotech sector shows promise as Coquitlam is home to a few prominent biotechnology companies. Coquitlam's attractiveness as a locational favorite for the film and television production industry may also act as a catalyst in the future for the New Media cluster. To facilitate growth in the high-technology sector, Coquitlam's land use and servicing policies work towards strategies to respond to the specialized requirements of these companies.