

*ExxonMobil Corp.'s Sarnia oil refinery complex is one of the most integrated petrochemicals operations in the world. The chemical plant at this facility has an annual capacity of more than one million tonnes, making it one of the largest chemicals plants in the world. The facility currently employs about 1,030 workers.*



2008, the Top 3 North American mould producers were Canadian companies. And in 2009, Pennsylvania-based **Associated Packaging Technologies (APT)**, a global leader in plastic food tray production, announced an expansion of its Cambridge, Ontario, plant. This investment will increase the company's capacity for polypropylene thermoforming and advanced multi-layer trays.

### Petrochemicals

Most of Canada's 18 major petrochemical plants are owned by foreign multinationals. Alberta's energy boom is attracting multi-billion-dollar investments in the province's oil and gas sector. In 2009, for example, Texas-based oilfield services giant **Baker Hughes Inc.** announced greenfield investments in two facilities in the province: an oilfield chemicals plant in Leduc and an operations centre in Fort McMurray. Alberta also has extensive R&D facilities that are on the very cutting edge of petrochemicals research.

### Synthetic Resins

In 2008, Canada's \$9-billion synthetic resins industry was concentrated in Alberta, Ontario and Quebec. In 2009, Abu Dhabi's **International Petroleum Investment Co. (IPIC)** invested US\$499 million, to become the largest synthetic resin producer in Canada. **AOC**, North America's largest maker of synthetic resins, also has a plant in Guelph, Ontario, which is one of the largest plants of its kind in North America.

### Agricultural Chemicals

Western Canada has an abundant supply of natural gas, a key fertilizer feedstock—at North America's lowest prices. Fertilizer manufacturers also like the region because of its proximity to both the large North American and Asia-Pacific agricultural markets. An example of the confidence that investors have in Canada's agricultural chemicals sector was demonstrated in 2008, when Minnesota-based crop nutrient producer **The Mosaic Company** announced that it will invest US\$3.15 billion to expand its potash capacity in Saskatchewan. Saskatchewan is also a major producer of potash, with the world's largest potash company, **Potash-Corp.**, headquartered there.

### Environmental Opportunities

Canada's carbon-free hydropower, expertise in bio-based chemicals and leadership in environmental technologies such as fuel cells and photovoltaics are boosting its chemicals sector. In 2010, Norway's **Renewable Energy Corp. (REC)** begins construction of a US\$1.2-billion complex in Bécancour, Quebec that will make polysilicon for solar panels. Recent legislation in the United States, encouraging the use of alternative energy sources, will result in increased demand for solar panels, and Canada offers investors some compelling value propositions in this segment.

#### KEY VALUE-CHAIN STRENGTHS

- **Research and development:** Polymers, bio-based chemicals, advanced coatings, thermoplastics, nanotechnology
- **Product development:** Synthetic resins, adhesives and sealants, paints and coatings, thermoforming machinery, blown-film extrusion systems, injection and blow moulds, fuel cells, soy-based plastics
- **Marketing and sales:** Proximity to large customers in the U.S. market and firmed-up supply chains

#### KEY SEGMENT STRENGTHS

- Automotive parts
- Plastic bags, bottles, films and sheets
- Pipes, fittings and plumbing fixtures
- Windows and doors
- Polystyrene foam products
- Urethane and other foams
- Laminated materials
- Petrochemicals, organic chemicals and polymers
- Inorganic chemicals and gases
- Fertilizers and other agricultural chemicals