

Germany

Germany is a global market leader in waste disposal and wastewater technologies, namely the biological treatment of wastewater. Access to the German market will be facilitated for Canadian companies that have niche technologies. Partnering with German firms, and attending or exhibiting at environmental trade fairs, is seen as an effective way to make business connections. More than 90% of new products and technologies are introduced at these events; they also provide an opportunity to establish contacts with potential German and European customers.

Waste Treatment: A German ordinance on municipal waste stipulates that landfilling untreated waste will not be permitted as of 2005. As the ordinance allows mechanical-biological treatment procedures for the first time, the German government has taken measures to ensure the use of high-tech mechanical-biological waste pre-treatment facilities as an alternative to incineration of household waste. Rigorous provisions with respect to the release of pollutants have been set out concerning such installations. The emphasis is however on the construction and use of biogas plants (from biomass or manure). Government incentives are available and green electricity from these plants receive a premium price when fed into the public grid. See CanadExport's next issue for further details about the German renewable energy sector.

Air Quality: Older vehicles will need to be refitted as new car exhaust regulations requiring reductions in nitrous oxide emissions for cars and trucks are being implemented. Ceilings on particulate emissions are also to be expected. Moreover, the EU has passed legislation making municipalities responsible for the quality of the air in respect to particulate and other pollutants. Innovative and inexpensive engineering or town planning solutions are needed by municipalities.

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Italy

The expansion of the Italian environmental industry is an example of growth fueled by adapting to EU directives. The value of the industry is over \$6.5 billion (2002) and provides employment to some 6,500 workers. The industry is characterized by a handful of large companies, but there are a large number of small enterprises specializing in niche products and technologies.

There is a strong demand for truly innovative products, technologies, and services for both private and public end-users. Cooperation with local agents or partners, distributors, and Italian producers who wish to complete their line of products is recommended. Moreover, the Italian environmental market is an ideal gateway towards emerging markets in Southeastern Europe, North Africa, and the Middle East.

Air Pollution Control and Renewable Sources of Energy: Electricity generation and co-generation programs will definitely accelerate. Hydroelectric and geothermic power constitutes an important share of electric power, and the latter's generation from

biomass is expected to increase from 3 to 17.8 terrawatt hours by 2012. In addition, waste-to-energy systems and related technologies are likely to represent an excellent market for air pollution control equipment. Construction of over 100 waste-to-energy plants in the next 10 years is required. Several opportunities also exist for monitoring and measuring technologies in various other fields.

Water/Wastewater Treatment: Modernization of industrial water and wastewater treatment systems, with growing emphasis on water recycling, opens the door for innovative wastewater treatment products and expertise.

Waste Management and Contaminated Soil Remediation: The market for waste management represents one of the top "best prospect" industries, especially for waste treatment and recycling equipment, and technologies and services. Land contamination is perceived as a widespread infrastructure problem. A first National Priority List (NPL), comprising 41 sites of national interest and an \$800 million budget, was finalized in 2001. Law n.179 of July 31, 2002, adds numerous new sites to those already identified in Law 426/98 of the National Priority List.

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Switzerland

Switzerland, with a population of 7.4 million, is an advanced, sophisticated and highly competitive market for environmental products and services. There are about 120 manufacturers (generally with a high export share) and 80 engineering firms, all mostly SMEs. Although Switzerland is not a member of the European Union, its environmental legislation, standards and bilateral agreements ensure a smooth exchange of goods and services with the EU and third countries. The public sector, federal/cantonal/municipal governments, are key clients. On average, Switzerland is 90% self-sufficient in environment-related goods and services (except steelwork and mechanical equipment), and clients usually prefer to buy from European suppliers.

In all sub-sectors, Swiss manufacturers and service providers have been world leaders for years, forced to respond to stringent Swiss environmental legislation with innovative solutions. The Swiss are also leaders in treating waste and in implementing recycling concepts. All this leaves challenges for Canadian exports of products and services to Switzerland. The focus of the local industry is on the Swiss domestic market, then on Europe (particularly Eastern Europe) and Asia. Some larger exporters to North America may be targeted as possible future investors

2005 Trade Fairs and Events in Italy and Germany

SUNWEEK: Exhibition of Renewable Energy, Bologna, March 16-20

IDROGENO: Exhibition and Conference on Hydrogen, Milan, April 2-6

RICH MAC AQUA: Exhibition and Conference on Technologies for Water Treatment and Distribution, Milan, October 4-7

ECOMONDO: International Trade Fair on Material and Energy Recovery and Sustainable Development, Rimini, October 26-29

IFAT: Exhibition on Waste Disposal and Environment, Munich, April 25-29

in Canada. Opportunities may exist for strategic and technology partnering between Canadian and Swiss SMEs in order to obtain easier access to large projects through achieving a 'critical mass' and proposing advanced technologies.

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Hungary

EU standards and commitments act as a major incentive in the Hungarian environmental market. Hungary has committed itself to decrease its CO₂ emissions by 6% from 2008 to 2012, in addition to doubling by 2010 its current share of renewable energy sources from 3.6% to over 7% of total energy. Under the EU's Environmental and Infrastructure Operative Programme, launched in September 2004, Hungary will receive some \$29 million in 2006 to meet EU requirements.

Alternative and Renewable Energy Resources:

Hungary's potential for renewable energy resources (biomass and geothermal) is favourable. Due to geographic conditions and location, renewable energy resources might play an important role in Hungary's future local and regional energy supply.

Reducing energy import dependency while furthering diversification is Hungary's aim. In July 2004, the incorporation of green energy into national resources has become mandatory. A major obstacle remains the price of conventional energy, which is currently 1.5 times cheaper than green energy.

Hungary, in cooperation with local governments, is currently preparing 14 environmental project proposals in the field of waste management, drinking water quality, environmental mitigation, and sewage and drainage treatment plants.

Opportunities exist in geothermal energy, biomass, biogas, solar energy (solar radiation potential can represent 40% of annual energy consumption, season and weather dependent), and solar or photovoltaic (PV) cells (preparation of semi-conductor material is undergoing a fast development).

Waste Management: The Hungarian Environmental Policy supports the use of technologies generating minimal waste with economical material and energy consumption to prevent the pile-up of waste; the use of materials producing less dangerous waste and representing lower risk; the recovery of generated waste materials and energy, and disposal of non-reusable waste in an environmentally friendly manner. Special attention is paid to EU commitments, especially the European Community's integrated waste management policy.

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Poland

Poland's commitment to the environmental market is driven by the EU Accession Treaty. Poland's negotiations in the environmental chapter have been laborious. Issues covered by the negotiations include: water quality, waste management, limiting industrial pollution, air quality, noise and vibration, and genetically modified organisms. Adjusting to EU standards for the next 10 to 15 years is estimated to lie in the order of \$56-65 billion.

The main inflow of investments will go to the construction and upgrading of over 1,000 wastewater treatment plants in 1,163 municipalities. Wastewater treatment plants will also require upgrading or extension in 253 municipalities. New treatment facilities are needed in 161 municipalities that do not have either sewage or wastewater treatment systems; the modernization and construction of municipal landfills; the modernization and closure of the oldest and most obsolete power and heat generating plants as well as heavy industrial plants—the "big polluters".

Water & Wastewater: Water purification and wastewater treatment solutions for small and large municipalities; sludge treatment technologies; trenchless technologies for monitoring and servicing of water supply and sewage pipelines.

Solid Waste: Collection and recycling of municipal waste; composting and biomass technologies (waste-to-energy solutions); industrial, hazardous and medical waste treatment and disposal, including electric, electronic and household equipment (e.g. fridges), and vehicles; soil decontamination.

Renewable/Alternative Energy Sources: biomass, hydro/wind/solar energy; bio-fuel; energy efficiency.

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Opening of a sludge dewatering installation at the Chorow/Swietochlowice Wastewater Treatment Plant in Poland. Two Canadian companies, ADI International and Fournier Industries, provided their expertise and equipment. From left: Ralph Lysyshyn/Canadian Ambassador, Marek Kopel/President of the city of Chorow, Eugeniusz Mos/President of the city of Swietochlowice and Peter Gagne/Les Industries Fournier Inc.

Czech Republic

Like its Central European neighbours, EU standards and commitments have also played a crucial role in determining the nature of the environmental market in the Czech Republic. For the 2004 to 2010 period, expenditures will shift from enhancing air and water quality to managing municipal wastewater. New projects focussing on the reconstruction of sewage systems and water treatment plants in medium and large towns are being introduced.

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