



## Environmental Consulting Services

### Industrial Opportunities

Mexico is home to 34,000 industrial, commercial and service establishments regulated by federal environmental law. Of this number, 7,510 are subject to air quality control regulations, over 28,000 produce chemical hazardous waste, 2,940 produce biological infectious waste, 5,346 are involved in highly dangerous activities (and therefore subject to stricter environmental scrutiny), and 840 render hazardous waste management services.

Industrial demand for environmental services is driven primarily by economics and to a far lesser extent, social engineering. Large multinationals operating in Mexico are in almost all instances compliant with local law, and in many cases, go beyond it by adhering to international standards such as ISO 14000, as well as internal environmental policies and norms established at the corporate level.

Some of the largest consumers of environmental consulting services are medium and large industrial enterprises, including private and state-owned companies. The industries most actively seeking environmental consulting services include:

- Automotive
- Aviation
- Cement
- Chemicals
- Electric power (CFE, LyFC, IPPs and private projects)
- Food & Beverage
- Iron & Steel
- Maquiladoras
- Oil & gas (PEMEX and its contractors)
- Pharmaceuticals
- Plastics
- Pulp & Paper
- Sugar Industry
- Textile
- Tourism and hotels

Opportunities in this niche is driven primarily by three factors: (1) federal and state environmental law; (2) mandatory compliance programs; (3) and voluntary compliance programs.

Some of the services in highest demand include:

- Diagnostic and solution-oriented environmental consulting services aimed at creating “eco-efficiencies
- Feasibility studies
- Training
- Environmental permitting
- Risk assessments
- ISO 14000 and PROFEPA certification services



- Environmental lab services
- Industrial (hazardous and non-hazardous) waste recycling technologies
- Soil remediation and site assessment
- environmental impact assessments (mandated by state and federal law)

### ***Sustainable Development of Industrial Parks***

PROFEPA, the SEMARNAT's enforcement and compliance entity, in conjunction with the Industrial Parks Association of Mexico is developing a model whereby new and existing industrial parks would procure environmental services and invest in environmental infrastructure centrally (as opposed to each tenant procuring its own services). Under the model, tenants would share in the cost of the needed services and investment in an effort to achieve an economy of scale that could make available services on a more affordable basis. Required services and infrastructure might include:

- Potable water and wastewater treatment and reuse systems
- Industrial waste collection, temporary storage, recycling and disposal
- Emissions control systems
- Consulting services to diagnose problems and improve process efficiencies and environmental compliance

Key contact:

Contact: Dr. Luis Fernando Hernández Lezama  
Position: Subprocurador de Auditoría Ambiental  
Procuraduría Federal de Protección al Ambiente  
Address: Camino al Ajusco N° 200 piso 7 Ala Sur  
Col. Jardines en la Montaña  
14210, México D.F.  
Phone: (52-55) 2615-2042, 2615-2037  
Fax: (52-55) 2615-2086  
e-mail: lhernan@correo.profepa.gob.mx

### **State & Municipal Strengthening & Decentralization Opportunities**

One of SEMARNAT's strategies to achieve sustainable development is to promote an integrated, decentralized environmental administration. To do so, the federal government is in the process of transferring responsibility, functions and resources to the state and municipal governments.

In 2002, the SEMARNAT established an "Institutional Development Environmental Program" to provide grants for the projects of each State. Under the Program, each state will develop a number of projects, which could be carried out with assistance from Canadian companies. The types of projects that will be taking place in the different states are:

- Updating state and local environmental regulations.
- Developing financial mechanisms to increase the environmental tax collection of the state.



- Developing an information system at a state level that allows the monitoring of the environment conditions.
- Preparing and administering ecological orders with indicators of potential zones of development and or high risk zones of natural resource.
- Establishing a record of emissions and environmental transfers.
- Establishing network of states for the inter-sector coordination and management of solid waste.
- Updating protected areas management plans.
- Updating the Environmental Action Plan.
- Preparing and implementing a program to strengthen state environmental enforcement agencies.
- Preparing and implementing a program to evaluate environment impact.
- Strengthening state environment information systems that allow monitoring and decision-making with respect to environmental problems, and evaluating and following-up on environmental projects.

Some of the states taking the initiative most seriously and therefore representing good potential prospects for Canadian suppliers of sustainable development consulting services include:

- Jalisco
- Aguascalientes
- Baja California
- Federal District
- Mexico State
- Zacatecas
- Queretaro
- Guanajuato

For example, Jalisco's environmental secretariat is looking for qualified environmental consultants for technical and administrative matters, including solid waste handling, water and sanitation, policymaking, planning and programming, and other matters. Companies interested in pursuing these opportunities should consult the Study and visit the offices of Roberto Acero, Director General, Environmental Policy at SEMARNAT.

## **Fixed Carbon Conservation**

### ***National Forestry Commission (CONAFOR)***

CONAFOR was created on April 4, 2001, by presidential decree. The CONAFOR's main objective is to improve the quality of life of Mexicans by increasing employment and in sustainable forest development opportunities.

CONAFOR's promotes sustainable projects that involve the participation of forest communities. To meet its goals, CONAFOR requires consulting services of specialized and experienced companies in the implementation of sustainable forest management.

The most important projects CONAFOR is pursuing are "PRODEPLAN" and "PRODEFOR".



### ***Forest Plantation Development Program (PRODEPLAN)***

PRODEPLAN, approved in 1997, directly supports sustainable commercial plantation projects and seeks to create alternative means of sustainable development and forest product diversification.

PRODEPLAN's objectives are to:

1. Support commercial forest plantations, giving direct incentives up to 65% of the unitary cost of the establishment and maintenance (7 years) of commercial forest plantations projects.
2. Concentrate fiscal incentives such as tax exemptions and immediate depreciation of equipment and machinery.
3. Provide credit support for agro business investment.

Rural communities require the aid of qualified consultants to develop PRODEPLAN initiatives.

### ***Forest Development Program (PRODEFOR)***

PRODEFOR, also approved in 1997, supports the efficient integration of productive wildlife chains on more than 7 million hectares. Through 2000, the carbon capture under PRODEFOR was estimated at 288 million tons, of which 237 million were accounted for by forests and 27 million, by vegetation in arid areas.

PRODEFOR's main objective is to promote the sustainable use of forest resources by capitalizing on natural resources and generating income and employment to benefit producers. PRODEFOR emphasizes transfer of technology and training with respect to the forestry industry and the development of non-wood products, environmental services, and ecotourism.

For more information contact Ing. Rubuan Escalante Fernandez (see Study).

### ***Sustainable Forestry Resource Conservation and Management Project (PROCYMAF)***

PROCYMAF focuses on promoting the sustainable development and conservation of indigenous forest resources across six states. The Project has covered over 116,000 hectares in sustainable forest management programs and over 13,000 hectares in the conservation program.

### ***Opportunities***

PROCYMAF requires qualified consultants to render the following services to rural, indigenous communities:

- Studies and training
- Technical and professional services
- Investment projects for alternative resource use (e.g., ecotourism)
- Institutional strengthening



To date, PROCYMAF has required the following type of studies:

- Forest management programs
- Conservation studies
- Marketing efficiency studies
- Special studies
- Territorial ordering studies
- Training courses for forest producers

Mexican authorities from PROCYMAF and CONAFOR believe that Canadian sustainable forestry development know-how is of the most advanced in the world. Specialist in the forestry field should pursue consulting services in conjunction with the programs mentioned in this section.

*i. Biodiversity Conservation Project in Indigenous Areas (COINBIO)*

COINBIO is a program financed by a GEF grant of US\$7.5 million to be disbursed over seven years (2001-2007). COINBIO is designed to promote and strengthen economically viable community conservation initiatives in biodiverse and indigenous areas of the states of Oaxaca, Michoacan and Guerrero. The financial agent for the project is NAFIN.

Consultancy services will be contracted at the local level (by community groups) but paid for by NAFIN. Local groups will present project requiring financing between US\$1,000 and US\$30,000 per project, with 50% to 80% being covered by the fund.

***NADBank Opportunities***

The North-American Development Bank (NADBank) is actively involved providing funding to Mexican municipalities in the US-Mexico border region to assist them improve the efficiency of and strengthen their environmental institutions. NADBank works primarily with local solid waste and water utilities. Some of the best prospects for NADBank-sponsored municipal consulting projects include the following cities:

- Tijuana
- Nuevo Laredo
- Juarez
- Matamoros

Companies interested in identifying NADBANK-sponsored project opportunities should review the NADBank website at [www.nadb.org](http://www.nadb.org), sign up for the NADBank newsletter, or contact Susan gallager at 210-231-8000.

**Market Entry**

Foreign environmental consulting and engineering firms looking to export services and transfer technology to Mexico are advised to establish a local office, engage an agent, or partner with a compatible Mexican environmental services firm either on a project-by-project or equity basis. Otherwise, the cost of business development and the expatriation of professionals will, in most



cases, price the firm out of the market. Problems also arise with respect to invoicing in accordance with Mexican law and potential tax and labor law issues because of the lack of a registered, fixed base in Mexico.

Moreover, when bidding on international tenders, the assistance of a local agent or professional service provider becomes even more important. Mexican bidding procedures are complex and unforgiving. And while companies with Spanish-speaking staff may monitor tender announcements and purchase bid bases directly from the government site, CompraNet at [www.compranet.gob.mx](http://www.compranet.gob.mx); pre-established relationships with the tendering agency are essential.