An Environmental Road Map for Entering Emerging Market!

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As new market economies around the world take off, their environmental performance continues to lag far behind environmental leaders in North America, western Europe, and the Asia Pacific region. Even so, foreign companies and investors that have pioneered business ventures in these markets have learned that environmental issues can help make or break a project's success.

Today's emerging market economies include all of central and eastern Europe, many of the republics of the former Soviet Union, Asian countries such as Vietnam and China, and most of Latin America. Hindered in the past by inefficient governments and central economic planning, they differ from „developing" countries in that they already possess significant economic assets, including a trained and educated work force, extensive infrastructure, capable officials, and, in some cases, abundant natural resources. With these assets in hand, countries with emerging markets are poised for economic growth – and for rapid change in their environmental expectations and requirements. They are also ready to ask foreign investors to meet high environmental standards in projects and operations.

The Environmental Road Map

To ensure that environmental issues do not sidetrack ventures in emerging markets, investors need a road map that charts possible obstacles, defines potential costs, identifies decision points, and helps manage risks. Working closely with pioneering foreign investment ventures in many emerging markets, Arthur D. Little has found that the following four steps are essential components of the pathway to success:

• Work with in-country stakeholders

• Assess environmental liabilities

• Understand and address new and evolving standards

• Obtain environmental approvals and permits

Work with in-country stakeholders. Strong educational systems and established bureaucracies provide many emerging market economies with highly qualified in-country professionals and technical and scientific experts. As a result, foreign investors can anticipate dealing with stakeholders who are prepared to engage them seriously and intensively on environmental issues.

Environmental stakeholder groups are similar in all emerging markets. They include:

• Federal, state and provincial, and local regulators

• Local magistrates or prosecutors (especially in Brazil and other Latin American countries)

• Non-governmental organizations (NGOs)

• The public, including individual activists

Companies clearly recognize the need to understand formal federal and provincial regulations and work with regulators. But they should not overlook the growing importance of local authorities or of advocacy groups in emerging economies. Especially in Latin America, local prosecutors and magistrates are showing an increasing willingness to prosecute those who cause environmental infractions, rather than waiting for provincial or federal support. The magistrates receive support from local groups that possess the education and technical skills to make a strong case and to network with NGOs. In former communist countries, home-grown environmental advocacy tends to predominate, while in Latin America, international NGOs have effectively supported local people as they challenge projects on environmental grounds.

In Bolivia, for example, an oil company conducting a seismic survey in the Amazon Basin halted the work when indigenous groups questioned the conduct of an environmental impact study for the project. The oil company then completed the environmental studies required by Bolivian regulations and met with representatives of the indigenous group to discuss concerns. After agreeing to support an independent investigation of the operations, the company was allowed to proceed after a delay of only two weeks. The company's swift recognition of the local people's concerns and its willingness to work with them kept the Bolivian project on track and established goodwill with the inhabitants of the exploration area.

Investors should be prepared not only to answer well-founded and reasonable concerns with sound technological and scientific information, but also to play a partnership role in communities. In the case of a joint venture in northern Russia, a western oil company built goodwill by contracting extensively with local professionals and service providers for project tasks and in the company's contributions to local infrastructure projects. From the local perspective, the cost of contributions like these – whether they be wastewater treatment plants, roads,

hospitals, or parks – are justified by the substantial returns investors can expect from the exploitation of natural resources.

Assess environmental liabilities. Investing in an emerging market involves either constructing new facilities – with their attendant environmental impacts – or inheriting existing environmental problems at active and probably outdated facilities or dormant industrial properties.

When considering a greenfields or brownfields site, investors need to acquire accurate knowledge about existing environmental conditions (the „environmental baseline“) and understand who and what in the surrounding environment could be affected by business activities. The baseline helps guide realistic environmental standards for operation and provides documentation that could be essential years down the road in disputes about environmental impacts and liabilities.

One North American telecommunications company has gone a step beyond measuring an environmental baseline. It now systematizes its analysis of environmental liabilities in new operations and anticipates environmental issues and optimal performance levels. The company worked with Arthur D. Little to create a method and computer model that helps project managers and decision makers prudently set up new manufacturing facilities in emerging markets. The model focuses on environmental factors such as operating expenses, compliance costs, and potential liabilities from environmental impacts. It uses Arthur D. Little's four-tier framework (see Exhibit 1) for ranking national environmental requirements and performance and accounts for a range of environmental and ecological sensitivities, waste streams, and manufacturing operations. This expert system enables managers to input the characteristics of a proposed facility and obtain a cost rating and a recommendation for the facility's environmental performance.

Extreme caution is the watchword for investing in existing operations, which can pose significant environmental problems. Environmental due diligence assessments, conducted following international best practices and procedures, are now commonplace among investors in emerging markets.

This was the case in Hungary and what was Czechoslovakia: in the tremendous rush of enthusiasm for privatization that followed the collapse of communism, state officials knew that environmental liabilities could be a barrier to foreign investments. The officials made substantial price reductions to offset future expenditure on remediation or technology upgrades. These dis counts helped kickstart the privatization process. But state officials have since gained a better understanding of how to analyze – and manage – environmental liabilities. Investors are now encouraged to participate in a five-step process to foster investor confidence and ensure that risks will be properly managed:

• Identify and understand the nature of liabilities

• Quantify liabilities and incorporate them into management plans

• Anticipate future changes in environmental regulations and enforcement

• Ensure adequate funding for remediation and technology upgrades

• Secure appropriate environmental guarantees and indemnification from state agencies and indemnification from state agencies

Technically advanced assessment methods that provide easily understood results can play an important role in successful negotiations. On a property badly contaminated with petroleum hydrocarbons, Arthur D. Little provided a state privatization agency with advanced chemical fingerprinting techniques to characterize contamination and to differentiate sources. We attributed a portion of the contamination to old processes, for which the state then accepted liability. The remainder was attributable to the existing site operations, and the investors accepted the associated liability on the basis of our technical evidence. As a result, the project went forward and both negotiating parties had a clear, agreed-upon understanding of their financial and cleanup responsibilities.

Understand and address new and evolving standards. Governments in many emerging economies see the privatization of former state industry, and the entry of foreign investment capital into new ventures, as prime opportunities to address longstanding environmental deficiencies and demonstrate that they can enforce strong environmental standards. In their view, western investors have the deep pockets and the know-how to deliver first-class environmental performance. They may be eager to ask investors to comply with environmental requirements that are rarely applied with the same rigor to domestic firms.

Exhibit 1

Ranking Environmental Regulation Worldwide (Emerging Economies in Bold)

	Environmental Regulations	Country	Feature
Tier 1	Highly developed	Germany, Japan, Netherlands, United States	Well-defined and comprehensive laws and regulations at a national level, with formal enforcement programs; focus on sustainable economic development and high-performance environmental management
Tier 2	Developed	Australia, Brazil, France, Singapore	Mature regulatory requirements at the national, provincial, and local levels (and enforcement of same), following the lead of Tier 1 countries
Tier 3	Developing	**Argentina, Bolivia, Chile, Colombia, Czech Republic, Ecuador,** Hong Kong, Hungary, Ireland, Italy, **Kazakhstan,** Mexico, Peru, **Russia,** South Korea, Spain, Taiwan, Venezuela	Embryonic regulatory frameworks with lagging implementation and enforcement
Tier 4	Undeveloped	Angola, **China,** Egypt, Guatemala, **Indonesia, Malaysia, Thailand,** Trinidad and Tobago, **Vietnam**	Some basic laws and EIA requirements may be in place, but are rarely enforced; administrative infrastructure is rarely developed

Responding to officials' environmental expectations, investors should be prepared to use risk-based approaches to negotiate standards and goals and to help present evidence clearly. Keeping the focus on solutions based on sound risk analysis can enable investors to influence their regulatory destiny and maintain control over the environmental cost of conducting business.

In several countries in Latin America, investors will encounter cooperative approaches to environmental enforcement. These approaches couple strict regulatory regimes that set environmental performance standards with „industry self-enforcement," through effective environmental, health, and safety management programs, including auditing. Typically, the government, industry, and local stakeholders cooperate to establish these standards. In countries of the former Soviet Union, in contrast, command and control approaches are the norm and will be in place for years to come because of deeply ingrained social customs.

Obtain environmental approvals and permits.

If an investor has fully addressed earlier steps in the process, obtaining approvals and permits should go smoothly. Most approval and permit processes require an environmental impact assessment (EIA). Many frameworks exist for structuring an EIA that will meet requirements in emerging economies, including those of the World Bank, the United States, and the European Union. Some projects require two EIAs: one to satisfy an international lender such as the International Finance Corporation, the Asian Development Bank, or the European Bank for Reconstruction and Development, and one to satisfy local regulators and other in-country stakeholders.

Pursuing as much local involvement as possible will help investors ensure that no relevant information is overlooked. Thorough preparations should be made for possible public hearings, which are becoming part of the approval process in many emerging markets. In contrast to western-style public hearings that focus mainly on reviewing the EIA and protecting the environment, the local public process in emerging economies may focus

more on economic factors and the payment of compensation for impacts.

The first major environmental impact assessment prepared by a joint venture in the energy sector in Kazakhstan provides an outstanding example of how to gain maximum benefit from this process. The project required an assessment (conducted by Arthur D. Little) of the potential impact of oil drilling operations in an environmentally sensitive area of the Caspian Sea. This involved intensive stakeholder participation, including unprecedented public meetings for environmental groups, concerned citizens, and the media on project designs and environmental protection measures.

The joint venture received its permit within a year, helped build the government's capabilities for working with foreign ventures, and helped establish an environmental permitting process – now used by the Kazakh Ministry of Ecology and Bioresources and its regional departments – that other investors in the Kazahkstan energy sector can follow.

Managing for Long-Term Performance

As the assessment and permitting process goes forward, investors need to be alert to opportunities to smooth the environmental path for their investments well into the future. They can do this by working with in-country stakeholders to help shape future standards for environmental performance. And they should be prepared to measure and manage the environmental performance of their investment project over time, as environmental requirements and expectations in the host country evolve.

Shaping future environmental standards. The environmental infrastructure of most emerging economies and the regulations that frame it are in an early evolutionary stage. By sharing their corporate best practices and technological know-how, investors can help shape future environmental compliance and management standards in emerging economies. Investors should be aware, however, that while western-style standards are a convenient starting place for many countries, they do not always fit local environmental and socioeconomic conditions. Nonetheless, by joining in opportunities to educate and train scientists, managers, and regulators, western companies can contribute to the creation of stable, predictable environmental requirements and expectations.

Managing for performance. To manage investment performance over time, investors should be prepared for the following: to recognize the ongoing significance of their ventures within the local fabric of emerging economies; to sustain effective communication with in-country stakeholders, especially as environmental requirements and expectations evolve; and to evaluate systematically the environmental performance of their investment in light of changing local and global standards and expectations. Through measures such as these, investors will be well positioned to retain the value of their investments in emerging economies and – as guests who remain welcome – to expand their opportunities within these promising markets.

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