Opportunities in Cuba
Introduction to Cuba

On December 17, 2014, U.S. President Barack Obama announced the normalization of diplomatic relations between Cuba and the U.S. Although the details of this policy change were not immediately clear, the implications for the professional services industry were profound. Over the last two years, the Cuban government has expressed a high level of interest in partnering with U.S. businesses and has modified its laws to facilitate foreign investment.

There are many opportunities for U.S.-Cuban business partnerships and investment in a country that has a solid tradition of engineering practice on the one hand, and faces the challenges of aging infrastructure on the other. Areas of immediate need in the country include the power and energy sector, the country’s water and wastewater collection and treatment systems, and Cuba’s transportation infrastructure.

Cuba’s power infrastructure, from refineries to electric-power generators, are currently working under capacity, and will require significant investment and modernization to reach its full output potential.

For instance, Cuba’s seven existing thermoelectric plants need an estimated $3 billion in investment of update and repair in order to perform up to their design capacity. Beyond its existing power and energy infrastructure, the Cuban government is also actively looking for energy solutions for its rural areas, which may include alternative energy sources, such as wind, solar, biomass and others.

Energy Needs

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Energy Snapshot

3,200 MW of 4,900 MW total power production capacity is being used (or only 65%)

$3 billion investment needed for Cuba’s seven existing thermoelectric plants to reach capacity
Cuba’s potable water and wastewater infrastructure faces a number of challenges. As an island, Cuba has limited fresh water resources. As a result, water demand in the country is reaching the maximum “safe yield” (e.g. how much can be used each year without exhausting the hydraulic resources in the long term). As a consequence, some underground aquifers near the coasts are suffering from salt intrusion, leading to a degradation of the water quality.

In addition, Cuba’s wastewater treatment system only serves a small portion of the overall need. An increase in wastewater treatment capacity and a much needed sewage system expansion will only be possible through direct investment and by strengthening and expanding the country’s physical water distribution network.

Increased tourism, business and trade in post-sanction Cuba will place more stress on the country’s existing aviation, maritime, road and rail infrastructure – which, in turn, will require more modernization and repair.

**Aviation.** According to the Cuban Civil Aeronautical Institute, there are 25 commercial airports in Cuba, of which six are handling international air traffic. As the country prepares for an increase in U.S. tourist numbers, expansion of airport services and capacity will be high on the country’s agenda.

**Ports.** Cuba’s existing ports will also see increased use and traffic, both by tourists and as part of a larger network of business and trade. Historically, Cuba has not been closely connected to the distribution and logistics network of the main international maritime carriers. This dynamic is expected to change with the normalization of U.S.–Cuban relations.

**Roads.** Investment will similarly be needed to support the country’s 60,000 kilometer road network. Only about 30% of Cuba’s road system was paved as of 2007, and much of the country’s road infrastructure lacks shoulders, signals and road markings.

**Rail.** Cuba was one of the first countries in the world to have a railroad, and it is still the only island in the Caribbean with an extensive rail network. The railroad connects cities and villages across the island and is a prominent method of travel and transportation. Cuba is putting significant effort and investment in developing and improving the island’s rail network.

The gap in transportation efficiency is an opportunity to develop partnerships with Cuban com Cuban-U.S. partnerships to support the necessary renovations and redevelopments.
Conclusion

Cuba represents a significant market for U.S. infrastructure and development firms. But it also offers opportunities for genuine engagement and knowledge exchange at the policymaker and technical levels. If priority sectors — power and energy, water and wastewater, and transportation — are approached in a spirit of partnership between the two countries, there is significant potential for lasting social, economic and diplomatic benefits.

Experts

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