

## Ryerson Master Adding Adaptation Focus to GHG Emissions Practice

*Agencies and power utilities respond to the concept of adaptation*

**R**yerson Master Associates (RMA, Santa Barbara) is a small California firm that has built a large reputation for helping public sector agencies and power utilities verify their greenhouse gas (GHG) emissions and design climate action programs. This business has grown sharply in the last few years, driven by California's first-in-the-nation GHG reduction law. Vice President Ivor John and Director of Climate Strategies Ann Hewitt told CCBJ they believe a new wave of business will be propelled by the imperative to adapt to climate change.

"We see climate change adaptation really becoming a fairly major part of our business in a year or two," said John. "The demand will be there, and the needs fit very well with our skill sets. I think we'd also want to complement our skills with additional expertise or establish relationships with foresters for example and other land-use planning specialists. ... We can't force the market but we want to be ready for it when the market says it needs us."

"A lot of different clients, especially cities and local government agencies, are now talking about adaptation, and we're just beginning to work with them on a contract basis," said John. "Most of our work in the last few years has been with cities and counties, mostly in California, to assess their operational emissions and the emissions in their communities. We're now working with a few on climate action plans, focusing on what they can control

and mitigate. We're finding now that the conversation is starting to change. Climate adaptation is getting on their radar now. In cases where we're still driving or leading that conversation, clients are becoming much more responsive."

### Local Governments and States Shoulder the Early Burden

According to Hewitt, local governments are increasingly being approached by businesses seeking information about potential climate change impacts on their business properties and operations.

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"Governments are being asked to assess what the risks are, and what changes businesses in their communities will have to adapt to." Hewitt notes that the California Natural Resources Agency's August 2009 draft Adaptation Strategy Discussion Draft has raised the level of concern and awareness by many in local governments. "The report built on other State reports that have assessed the potential impacts. This one is more about what sectors will be affected and how."

"As an example, public health will be a major area of impact because of the extreme weather conditions that are projected," she said. "If you grew up on the coast in California, you may not know what to do when it gets hot. Many seniors who don't have air conditioners may not know that they're actually at risk of dying

in extreme heat events." She says local governments in coastal regions may have to consider programs to promote energy-efficient air conditioners or set up cooling centers, while inland towns and cities may have to expand existing facilities where seniors and other vulnerable people without air conditioning can go on extremely hot days.

Coastal California will also face multiple challenges from the sea level rise (SLR) associated with climate change, according to Hewitt. On the one hand, habitats of threatened and endangered animals and plants may be pushed inland, affecting future coastal development. "Then you also have the impacts of rising sea levels on water infrastructure, and transportation infrastructure."

With California's epic budget shortfalls, towns, cities and counties have little money to begin planning for these challenges. John advocates federal emergency stimulus funding similar to what water system operators received after September 11, 2001. "EPA gave approximately \$100,000 to each city to look at the security risks in their water systems. Something like that would encourage every community to start looking at their vulnerabilities," he said. "Local governments are going to need some help with this because they don't have the funds to do what they need to do."

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## Insurance Industry Up Next

Hewitt says that she expects insurers to begin requiring climate change vulnerability assessments from large business policyholders. "This is happening more slowly than I thought it would, with a few exceptions like Travelers and Swiss Re. But we're starting to hear talk from the insurance industry about requiring adaptation plans for more vulnerable customers." (For more on what's happening in the insurance industry, see AER Q&A on facing page.) She also noted that the Climate Disclosure Project, which asks large corporations to report their GHG emissions and reduction plans, has begun asking about adaptation as well.

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With clients in the electric power sector, RMA is very aware of just how sensitive hydropower resources are to climate change. "With renewable energy requirements, utilities that have hydro resources have been smiling because they have lower emissions," said John. "But they're also getting really nervous because the snowpack in California is already melting earlier, affecting their ability to deliver renewable power when and where it's needed."

"Others are looking at hydro as a response strategy to mitigate their climate change impacts, but a full-on shift to hydro only sounds good initially until they look at it and see that the hydro resource itself is vulnerable to climate change. We see those discussions happening now. Climate science is still not precise enough to give them really strong data to plan around. It's a challenging time for people

who have to make those big investment decisions."

In January 2009, RMA was acquired by **Lloyd's Register Americas**, a member of the Lloyd's Register Group of entities. According to the RMA website, the 250-year-old Lloyd's Register Group provides independent assurance to companies operating high-risk, capital-intensive assets in energy, marine and transportation to enhance the safety of life, property, and the environment, thereby helping its clients ensure safe, responsible, and sustainable supply chains.

With Lloyd's Register's maritime experience, John says that RMA may collaborate with its new parent organization to work specifically with ports on climate change adaptation. "Lloyd's Register has surveyors, naval architects and engineers, people who understand ships and port environments very well," he said. "Since we have a strong focus on the electric power sector, we may well bring in Lloyd's Register's geological and engineering expertise to help us with hydropower water management issues. We think that would be a very interesting and appropriate area for us to focus on." ⚙

## CLIMATE CHANGE BUSINESS JOURNAL®

### Climate Change Adaptation

*Policy makers have rightfully focused on greenhouse gas emission reductions, but even under the most favorable mitigation scenarios, the impacts of climate change will force communities, governments and businesses to adapt. The U.S. climate change adaptation industry is just emerging, led by consulting & engineering firms doing assessment and planning work. CCBJ estimates that adaptation will grow to a billion-dollar industry in the United States by 2015, followed by exponential growth once design and construction of adaptation measures begin in earnest. November 2009*

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