PRESS RELEASE

TOWARD WATER RISK VALUATION

Investors' views on water risks & various methodologies applied to 10 energy listco's

Hong Kong, 1 September 2016 – Water risks can be material to companies and investors are naturally concerned, yet existing methodologies to value such risks remain elusive, according to a new report released by China Water Risk.

The report, *Toward Water Risk Valuation – Investor Feedback on Various Methodologies Applied to 10 Energy ListCo's*, details water risks analyses of 10 energy listed companies operating in China, listed across four exchanges from Hong Kong and Shanghai to London and New York. The report sets out three main approaches to water risk valuation for these 10 stocks and also details feedback from 70+ investment professional/asset owners from more than 50 financial institutions/funds.

Up to 90% of surveyed investors are "concerned" or "extremely concerned" by water risks and 45% of them are looking for ways to embed water risks in valuation models. *"We have moved from little to no awareness in the investment and financial community to now wanting to quantify the impact on valuations"* says Debra Tan, head of China Water Risk.

However, 61% to 90% of surveyed investors has "never heard of" the existing tools that can help quantifying water risks, be they shadow pricing, water stress mapping, disclosure or related to the management of water resources. *"Despite the level of concern, we found gaps between investors' concerns and their practices. Tools exist to value water risk but remain largely unknown"* says Hubert Thieriot who conducted the research. There were also valid concerns as to the usefulness to the tools and the various valuation methodologies.

Three main approaches are tested in the report, namely shadow pricing and impact on P&L, balance sheet exposure to water stress, as well as regulatory risks and compliance costs. According to shadow pricing tools, water risks can have a wide-ranging impact on EBITDA margins within & between sectors: -1% to -13% for the five coal companies analysed & -3% to -24% for the five power generation companies. Interestingly, while investors found this to be material, they were split as to whether this approach fairly represented water risks, saying that it was a good first step but needed complementary analysis

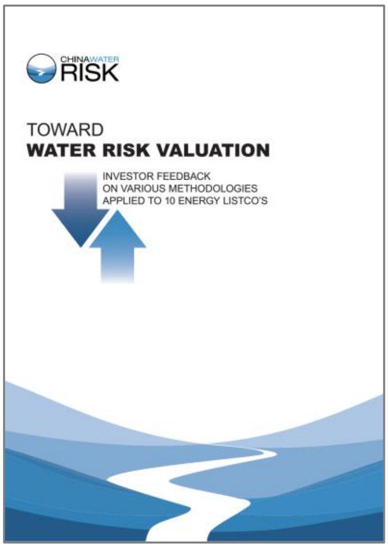
The report also shows that three of the five coal companies source >85% of their coal output from extremely high water stress areas; power generation companies in turn source 34% to 81% of their electricity from such extremely water stressed areas. These ten companies produce around 14% of China's national coal output and generate around 19% of China's thermal electricity. The reports further details how investors react to these results.

With increasing focus by the Chinese government on resolving the water-energy nexus in the parched North, the China Water Risk report also explores regulatory risks and related compliance costs. These costs can be material and may potentially be rising in a changing regulatory landscape. Water use permits, rivers clean up, mine water recycling and power plant cooling technologies are discussed.

"Water risks are diverse and hard to quantify by nature and currently, there is no consensus around methodologies; no standard way forward" Thieriot observes. On the positive side, after seeing the results, 59% of Investors indicate they may commission/conduct more research on regulatory risks compared to 41% for physical water risks.

While this is a good start, significant disclosure challenges remain and investors' desire for not more, but more decision-relevant disclosure needs to be addressed. As Tan says, *"Water risk valuation is still a nascent art*". She hopes that the report can bridge some of these gaps and urges all stakeholders, be they providers of capital, companies, IGOs/NGOs or stock exchanges *"to chart a path towards better accounting for water risk".*

Download the report
http://chinawaterrisk.org/notices/new-cwr-report-toward-water-risk-valuation/



3 main approaches have been used:

- Shadow pricing's impact on P&L;
- Balance sheet exposure to water stress; and
- Regulatory risks & compliance costs.

10 listed energy majors operating in China have been analysed: five in coal mining and five in power generation.

70+ investment professionals/asset owners across various asset types from **50+** financial institutions/funds provided feedback on the results.

About China Water Risk
China Water Risk is a not-for-profit initiative dedicated to addressing environmental and business risks arising from China's limited water resources. China Water Risk aims to foster efficient and responsible use of China's water resources by primarily engaging the global investment and business communities. Join the discussion at www.chinawaterrisk.org

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