

GLOBAL LEADERSHIP AWARD IN SUSTAINABLE APPAREL



Please summarize your initiative in less than 300 words:

China Water Risk (CWR) is a Hong Kong based, non-profit initiative dedicated to addressing business and environmental risk arising from the country's urgent water crisis. We aim to foster efficient and responsible use of China's water resources by engaging the global investment and business communities, civil society and individuals in understanding and managing China's water risk. The rationale behind addressing business and environmental risk for investors and corporates stems from the fact that 85% of water in China is used by agriculture & industry, which are also the largest polluters of water. As such, we focus on six water intensive and water polluting sectors: Agriculture, Power, Mining, Food & Beverage, Textiles and Electronics. Join the conversation at www.chinawaterrisk.org

Why have you launched this initiative/ project? What problem are you trying to solve?

There was a lack of information regarding water risks given the magnitude of water issues in China. CWR was set up to address this. By helping corporates and investors understanding water risks (be they physical, regulatory, economic or reputational), we hoped that they will act to mitigate these risks, thereby fostering clean and efficient use of China's limited water resources. The primary point of outreach is our free-access website www.chinawaterrisk.org

In China, the water situation is critical: water scarce provinces (with per capita water resources similar to the Middle East) generate nearly half of China's GDP, almost 40% of total agricultural output value and hold over half of China's ensured coal reserves. Rampant pollution has also exacerbated water scarcity and brought about concerns over soil pollution and food safety. Today, 61% of groundwater is unfit for human touch and 19.4% of farmland polluted. On top of this, China's water resources, arable land and energy reserves are mismatched: many of the nation's large coal mines lie next to the North China Plain, the country's agricultural heartland. Many of these areas also have limited water. It is inevitable that there will be conflicting needs for limited water in the future as China strives to ensure water, energy and food security.

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It is clear that water risks in China have great social-economic impact. This is well recognized by the Chinese government and water is on top of the political agenda; multiple policies have been introduced since 2011. Indeed, experts have predicted that China's demand for water will surpass its ability to supply water by 2030 if the nation continues with 'business-as-usual'. In response, China has introduced the 'Three Red Lines' water policy and declared war on pollution. It also set aside RMB4 trillion to shore up water infrastructure and a further RMB1.9 trillion to tackle water pollution.

Meanwhile, power generation is the largest user of industrial water. In fact, 93% of power generation in China is water-reliant. In short, no water = no power and vice versa as we require power to clean, transport and distribute water. There are tough choices ahead - China's choice of power expansion in the future will also impact climate. Adding more coal-fired power plants could mean that glaciers in the Qinghai-Tibetan plateau could melt faster whilst more hydropower tapped from transboundary rivers could mean heightened geopolitical tensions with South and South-East Asia. With glaciers in the Qinghai-Tibetan Plateau shrinking 15% over the last three decades, the stakes are high. The future of China's energy mix doesn't just impact China; it has regional watershed implications and global climate ramifications.

CWR has been raising awareness of these interlinking issues across the water-energy-food-climate nexus as well as the impact and implications across the six sectors since our launch in October 2011. To ensure that solving the problem in one area does not bring unintended consequences in another, we have encouraged a comprehensive view of such water risks by furthering the conversation with global and Chinese expert views from industry leaders, scientists, investors and businesses on our free-access website www.chinawaterrisk.org. Finally where necessary, we have led the conversation with our editorials as well as collaborations with financial institutions to write ground-breaking research placing water as a financial risk across our focus sectors.

Q: Who is your target audience(s)?

Our primary target audience is the business and investment community. However, to influence them to act to mitigate water risks, they must first be aware of such risks. We strive to achieve this by being the 'go-to' resource on water risk. Today www.chinawaterrisk.org is the 'go-to' information resource on China's water crisis.

Aside from keeping our website up-to-date, we also work towards finding solutions with scientists, academia, corporates, policy makers, think tanks, environmental

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consultants, IGOs and NGOs. Holistic solutions require collaborations across multiple stakeholders & disciplines not just within China but globally. CWR currently enjoys a broad but unique engagement & outreach across these multiple stakeholder groups. In 2014 alone, CWR acted as co-convener/supporting organization/keynote speaker in 38 events held by various IGOs, NGOs, financial institutions, think tanks, universities, Chinese industry associations as well as Chinese ministries & their affiliated research institutes. CWR was also invited to deliver keynotes at two water awards last year: UNDP-Deloitte's inaugural China Corporate Water Stewardship Award and the prestigious Stockholm Water Prize Seminar during World Water Week, where we also co-convoked a seminar on "Water linkages to coal-fired power" with the Federal Institute for Geosciences & Natural Resources of Germany, the World Resources Institute, ADB and HSBC.

Separately, the global investment community forms a significant component of CWR's readership and engagement. Our utility with investors is evidenced by our year-on-year commissions to write and embed water risk in financial research as well as invitations to present at numerous investor conferences & forums and dedicated investor roadshows arranged by financial institutions to discuss water risks. In 2014, CWR wrote two financial research reports and executed four dedicated investor roadshows for two banks across Europe and Asia.

CWR's approach and target stakeholders vary from sector to sector. Due to a changing waterscape, our strategies are also evolving responding to demands from our primary audience. For example, with water risks rising in prominence globally, exposure of raw materials to water scarcity is also elevated and we find investors moving beyond reputational risks and asking for analyses of economic and regulatory risks for the F&B, Textiles and Electronic sectors. This has been accelerated by China's official declaration on the war on pollution in 2014 as well as the new 'Water Pollution Prevention & Control Action Plan' (Water Ten Plan) released in April 2015.

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What actual water improvement or potential does this initiative/project have to significantly solve water challenges in the apparel industry? Please be as specific as possible, including calculations or projections if at all possible?

Aside from efficient management of water use, water pollution forms a large part of CWR's work. To tackle pollution effectively, CWR has adopted a multi-prong approach focusing on some of China's most polluting sectors. Our strategy in this area has been either:

1. To focus on helping global/local leaders move forward in setting best practices for the industry;
2. To work with industry-wide initiatives in improving industrial water efficiency and wastewater management; and
3. To turn institutional investor attention towards regulatory & reputational risks brought on by pollution.

Textiles, apparel and footwear sector is one such top polluting sector in China. Unknown to many, the sector discharges twice as much wastewater as China's entire coal industry and is most likely the largest polluter of China's waterways if the sector's illegal discharge is taken into account. Our analysis of the sector showed that the Chinese government will act to address this and indeed the new 'Water Ten Plan' heavily focuses on the sector.

We maintain the view that:

"A business-as-usual approach will see fashion blindsided by water risks in China & India. With around 50% of cotton grown in India and China (the number one and two most water stressed countries globally), brands may have no choice but to look for new materials that require less energy & water to make, recycling of textile waste and clothes. And it's not just cotton but leather as well. Across the apparel and footwear industries, we expect to see more focus on the selection of materials at the design stage that use and pollute less water and tools developed like the MSI (Materials Sustainability Index) should help.

With increasing NGO pressure on pollution in the supply chain, we should also see more focus on the selection of water-friendly chemicals for dyeing & finishing, a bias towards 'green' manufacturers and commitment to zero-liquid discharge.

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Limited water resources will no doubt shape fashion's choice of raw materials. Brands should do well to mitigate water risks with a corporate water strategy."

Moreover, the sector is also amongst the top 5 most water-intensive sectors in China. By raising awareness regarding water risk exposure in the sector with OEMs, brands and investors in the apparel industry, we can not only address water use but also water pollution. We have been working with these stakeholders and NGOs to understand these underlying risks since our launch.

How do you define success in relation to your initiative? By when?

In the textile sector, we follow the three-prong strategy approach outline above. We define success in relation to the textile sector initiative in each of our strategy prongs for this sector as follows:

1. Helping global/local leaders move forward in setting best practices for the industry

We consider this a success if:

- We maintain interesting website content dedicated to the textile sector in order to continue to raise awareness within the sector and to keep the sector abreast of water issues in China
- We are engaged with the industry and if the industry is engaged with us through conferences, forums or closed door dialogues
- There is continual engagement with the industry and industry leaders
- Industry and industry leaders find our information useful

2. Working with industry-wide initiatives in improving industrial water efficiency and wastewater management

We consider this a success if:

- We are working with NGOs, experts and academia to highlight gaps in industrial discharge standards to be addressed by policy and regulations
- We can help the Chinese textile industry understand & mitigate water risk exposure and the implications of new government policies and regulations, thereby helping the MEP to control pollution. We do this by engaging with factories in China to improve water efficiency and wastewater treatment – even

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better to facilitate and/or work with programmes set up to improve water use along the supply chain in the textile sector.

- In the longer term, we can help shift the manufacture of textiles to a circular economy as stipulated by the Chinese government. As factories move away from China, a circular economy model would help other developing nations tackle their pollution from the textile sector.

3. Turning institutional investor attention towards regulatory & reputational risks brought on by pollution

We consider this a success if:

- We work with local NGOs to highlight their work to help investors understand reputational risks brought on by pollution.
- We manage to move the risk conversation with investors beyond reputational risk – even better if there is demand from a financial institution to place water as a financial risk for global brands rather than just an environmental risk.
- There is direct engagement with institutional investors regarding water risks in the fashion and/or textile sector alone.

What have you achieved to date? Do you have evidence supporting this?

Key milestones across the three strategies for this sector are:

1. Helping global/local leaders move forward in setting best practices for the industry

Leading the conversation in water risks in textiles in China

Water risks in the textiles sector has been a core topic of CWR. From October 2011 to May 2015 we have showcased over 80 textile & water related thought pieces and interviews either written by us or by industry experts from brands, OEMs, solution providers, industry associations, NGOs and investors. This broad engagement is reflected in opinions, analysis & reviews and interviews on www.chinawaterrisk.org from brands such as H&M, Patagonia & Esprit to solutions by Dupont & Litehide; consultants like Edelman, Trucost & IFC to NGOs including Greenpeace, Redress & IPE as well as the industry association such as Prime Asia, Cotton Connect, Sustainable Apparel Coalition and China's National Textile & Apparel Council (CNTAC).

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More on water & the textile sector can be found at:

<http://chinawaterrisk.org/resources/intelligence/textiles/>

Continued engagement with industry & industry leaders

Our engagement with the apparel industry started almost immediately after our launch in October 2011 with some of the ZDHC brands reaching out to us post Greenpeace's Dirty Laundry campaign in a bid to understand the sector's exposure to China's water risk. Some of the key industry forums we were invited to delivered keynotes since our launch were:

2012

- CSR Asia Summit, Beijing – alongside the Director of Social and Environmental Sustainability of Levi Strauss & Co as well as Ma Jun of IPE
- Textiles Exchange, Hong Kong – upon recommendation by the Sustainable Fashion Business Consortium of Hong Kong
- Sustainable Apparel Coalition (SAC), Hong Kong – upon invitation by the Director of the SAC
- Sustainable Water Group - Summit for Suppliers, Shenzhen – upon invitation by Li & Fung, hosted by BSR

2013

- Prime Source Asia, Hong Kong – delivered the special address on transforming the fashion value chain through sustainability
- Sustainable Leather Forum – upon invitation by the Better Leather Initiative to discuss water risks in the leather industry in China
- Global Footwear Sustainability Summit – upon recommendation by the Better Leather Group

2014

- The Redress Forum, Hong Kong – upon invitation by Redress to discuss “The Future of Fashion”.
- Aquatech China, Industrial Leaders Forum, Shanghai – CWR, HSBC, IFC & McKinsey co-hosted Aquatech China's inaugural Industrial Leaders Forum in Shanghai. CWR, IFC, HSBC & McKinsey were co-hosts along with Aquatech. Forum was invite-only and CWR recommended the inclusion of fashion brands and OEMs
- World Cashmere Forum, Hong Kong – presented on the water risks in China associated with the cashmere industry and more broadly the textile industry

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- Ministry of Environmental Protection (MEP) Textile Workshop, Shanghai – presented on “Water as Financial Risk in the Textile Industry” at this two day event in Shanghai co-hosted with the Stockholm International Water Institute (SIWI) and Sweden Textile Water Initiative

Aside from participating in industry conferences, seminar & workshops, CWR also facilitated speaking engagements for apparel brands in conferences hosted by Bloomberg and banks as well as industrial conferences where mitigating solutions are discussed.

Usefulness of information

Continued engagement with CWR is one of the ways we can judge the usefulness of our work to the industry. One of the brands that CWR has been engaging with is H&M since our launch. H&M officially announced its partnership with WWF on corporate water stewardship in 2013 but has continued dialogue with CWR on water risk exposure in China. As a result, our infographics are used in H&M’s internal training programme to express their water strategy in 2013. H&M has continued to invite us to deliver talks to senior management and H&M staff in both Hong Kong and Shanghai throughout 2013 and 2014 as part of this process.

In 2015, we continue to engage with the apparel & textile sector, as well as NGOs such as IPE, Greenpeace, Solidaridad, NDRC and WWF. We have just returned from the World Water Forum Korea where amongst other events, CWR participated in a WWF China’s “Water Stewardship: Share Risk, Share Opportunity – Water Risk of Foreign-Invested Companies in China”. CWR was part of the panel discussion on “Risk & Opportunity, Pressure & Response – Actions from Chinese textile industry for better water environment”.

CWR hopes that the industry and industry leaders continue to find our work useful.

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2. Working with industry-wide initiatives in improving industrial water efficiency and wastewater management

HSBC Industrial Water Programme (June 2014 – ongoing)

CWR currently acts as the supporting organization of the “HSBC Water Programme for Industrial Water Management” managed by Hong Kong Productivity Council (HKPC). The programme aims to help major water-consuming industries achieve better water management, water conservation and proper treatment & disposal in the Pearl River Delta.

As a supporting organization, we are actively involved in the programme’s activities with potential participating factories such as regional seminars. We also help to promote and facilitate that programme through delivering speech and disseminating information on our website and so on. So far in 2014, we have participated and delivered keynotes in two such workshops in Guangdong and Shenzhen and CWR sessions have been regarded as highly useful in terms of understanding the underlying water risks to their sector.

HSBC Industrial Water Programme Supporting Organisations

- Business Environment Council
- The Chartered Institute of Plumbing and Heating Engineering - Hong Kong Branch
- The Chartered Institution of Water and Environmental Management Hong Kong
- **CHINA WATER RISK**
- The Chinese General Chamber of Commerce
- The Chinese Manufacturers' Association of Hong Kong
- Federation of Hong Kong Industries
- Hong Kong Diecasting & Foundry Association
- Hong Kong Electro-Plating Merchants Association
- The Hong Kong General Chamber of Commerce
- Hong Kong Printed Circuit Association
- The Hong Kong Printers Investment Association
- The Hong Kong Research Institute of Textiles and Apparel
- Hong Kong Small & Medium Enterprises General Association
- Hong Kong Surface Finishing Society
- Sustainable Fashion Business Consortium
- Textile Council of Hong Kong
- World Green Organisation

Identifying trends, gaps in industrial standards & engagement with MEP

In February 2014, CWR predicted China’s war on pollution in our “[5 Trends for the Year of the Horse](#)” and began work to highlight paths towards balancing the economy and environment by demonstrating trade-offs between industrial wastewater discharged with value-add of industrial output of various sectors.

In the same year, we also started raising awareness regarding loopholes in industrial standards in our March newsletter titled “Fundamental Change”. In September 2014,

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we dedicated our entire newsletter to the textile industry titled “Dirty Thirsty Fashion” named after our collaborative research with CLSA titled “Dirty Thirsty Fashion – Blindsided by China’s water wars” (see below). This seminal report led to engagement with the Ministry of Environmental Protection in 2014 which continues into 2015.

In 2015, we continue to highlight how the Chinese government will use various policies to rein in pollution across industries in particular the textile sector. These efforts culminated in key editorials including: CWR’s “[5 trends for 2015](#)” and “[8 Game-Changing Policy Paths](#)” published in February 2015 newsletter “Surefooted Goat or Sacrificial Lamb”. Indeed the new Water Ten Plan tied in all the 8 game-changing policies identified and the new plan addressed loopholes previously identified. The Water Ten Plan is covered exclusively in our May newsletter. To quote from the lead article for that month “[Water Ten: Comply Or Else](#)” ... “*across China, textile, dyeing & finishing and pulp & paper industries will be hardest hit. It is clear that the textiles, dyeing and finishing sector are in State Council’s crosshairs*”. Given this, CWR’s June 2015 newsletter “Made in China 2025” will focus primarily on the textile sector,

See our newsletter archives [here](#)

Turning institutional investor attention towards regulatory & reputational risks brought on by pollution

There is much NGO work on highlighting the reputational risk of the supply chains of global fashion brands. However, we felt that there was no piece of work that highlighted the economic exposure of the industry to water related regulatory changes in China. In addition, the industry’s exposure to water risk in raw material supply such as cotton and leather are also largely unnoticed by the financial community. These ‘upstream’ risks are real when 80%-90% of yarn, cloth and chemical fibres in China are made in water scarce & stressed regions; and China accounts for half of global textiles market. Moreover, the fact that 25% of cotton is grown in the North China Plain brings to mind cotton versus food issues.

CWR worked with CLSA, one of Asia's leading and longest running independent brokerage and investment groups to write “*Dirty Thirsty Fashion: Blindsided by China’s Water Wars*”. The report, published in September 2014 was the first-of-its-kind in this sector that examines how China’s water risks could blindside the global fashion industry. The report warns whilst some industries will face minor business

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disruptions as water enforcement tightens, for the US\$1.7 trillion global fashion industry, China's *"lack of clean water poses an existential threat"*.

The report was well received by the investment community with a seven-day roadshow dedicated to the report across Europe and Asia.

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How replicable or scalable is your initiative/project? How easy is it for other actors working with the apparel industry to adopt your approach?

The initiative/project was designed to be scalable across countries. It should be easy to replicate assuming sufficient funding and the assembly of the “right team” with skill sets which straddle finance, strategic thinking, business and the environment. That said, the above only reflects CWR’s work in one sector. Whilst it is feasible for actors working with the apparel industry to replicate CWRs work in this sector, it may require more time and effort to do the same in the other five sectors we cover. Also our work in past three years has given us a considerable amount of goodwill which takes time to build.

Is your approach more effective than other initiatives that have similar goals? If so, how?

The water landscape is fast-changing in China, be it driven by regulatory policy changes, physical water scarcity or increased scrutiny by the public on cleaning up water pollution. CWR’s key strength is the leeway granted by its funders to be nimble in shifting strategic action to adapt and stay relevant in the fast-changing waterscape. Although small, CWR’s goals are always ambitious as the need for action is immediate and great. As a thought leader in the water space, CWR’s most important asset has always been its multi-disciplinary team to help it stay ahead of the curve and react strategically to China’s fast-moving regulatory waterscape. CWR hopes to continue to play a role in driving collaboration across stakeholders towards achieving our goal of fostering more efficient and responsible use of water resources for all in China.

Where can I find more information about your initiative?

CWR’s body of work in the textile sector can be accessed on our website:

www.chinawaterrisk.org

Within our site, under “Resources” we have dedicated “Intelligence by Sector” for each of the six sectors we cover. Intelligence by Sector – Textiles can be accessed at

<http://chinawaterrisk.org/resources/intelligence/textiles/>

CWR’s newsletter archives can be found at <http://chinawaterrisk.org/media-room/china-water-risk-downloads/newsletter-archives/>

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Unfortunately, the report *“Dirty Thirsty Fashion: Blindsided by China’s water wars”* for CLSA is only accessible by CLSA’s institutional clients. However, access to an overview of this report can be found [here](#).

Please do not hesitate to contact us if you have further questions:

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