

Water Stewardship and the Water Risk Filter

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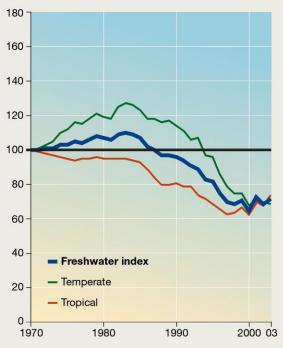


1.7 billion people are suffering from chronically high water scarcity

In 16 years the planet may meet only 60% of the global demand for water. Globally populations of

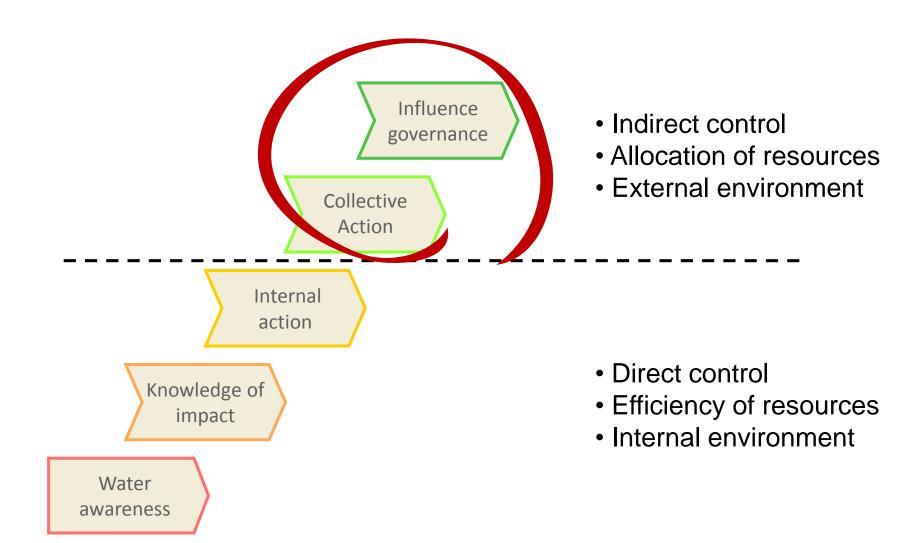
freshwater species have declined by 76% since 1970

Living planet: index 100 in 1970



Source: Living planet report, WWF, 2007.







Business Water-Related Risks



Dirty Laundry

Unravelling the corporate connections to toxic water pollution in China

Executive Summary GREENPEACE



Physical

Reputational

Regulatory

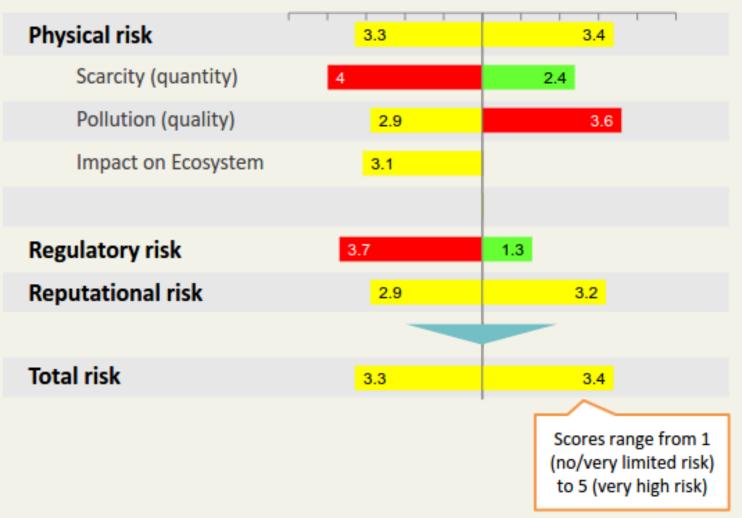
Financial Risk



The Water Risk Filter waterriskfilter.org Understand your risk, and take action



Basin related risk Commodity related risk





The Water Risk Filter covers all relevant water risk aspects that ultimately can have a financial impact

			_				
	~30 risk indicators Basin related risk				~60 risk indicators		
Physical risk				Company / Commodity related risk			
Scarcity (quantity)	 (Monthly) scarc Groundwater Climate change Floods Droughts 			water avail	drawals (not consumption!)		
Pollution (quality)	9 pollution indic	ators		averages) Treatment	y facility (incl. industry requirements asurements		
Impact on Ecosystem	 Threat to fresh Vulnerability of Access to safe Access to impro 	water ecosystems drinking water		Hydropow Soon av	specific risk questionnaire ver specific questionnaire ailable: Pulp and Paper cific questionnaire		
	Dependence or	hydropower					
Supplier's risks				 Water intensity of suppliers Water pollution by suppliers 			
Regulatory risk	 Local / national Sophistication of Enforcement of 	of water regulation		Legal com Incidents /			
Reputational risk	 Local and globa Cultural/religiou 	_	•	Stakeholde	global media coverage er engagement		

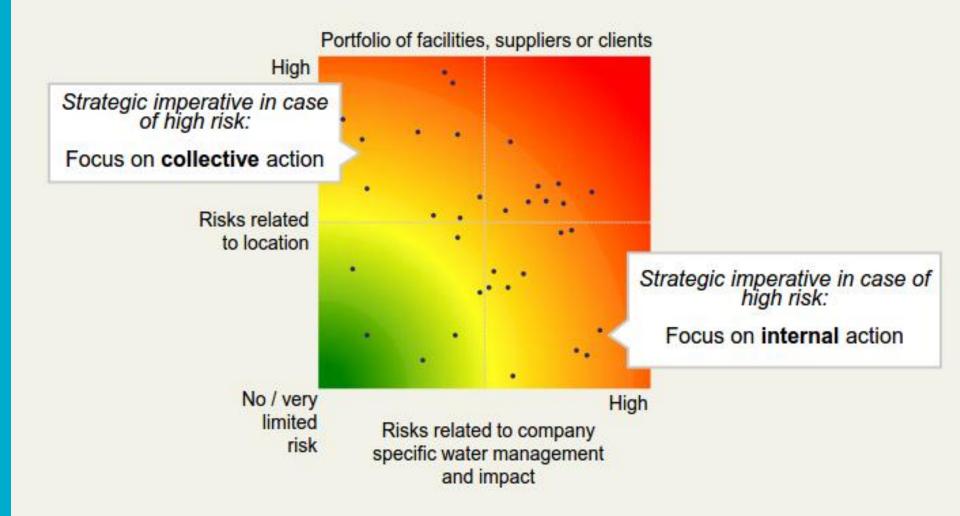
Internal governance and monitoring



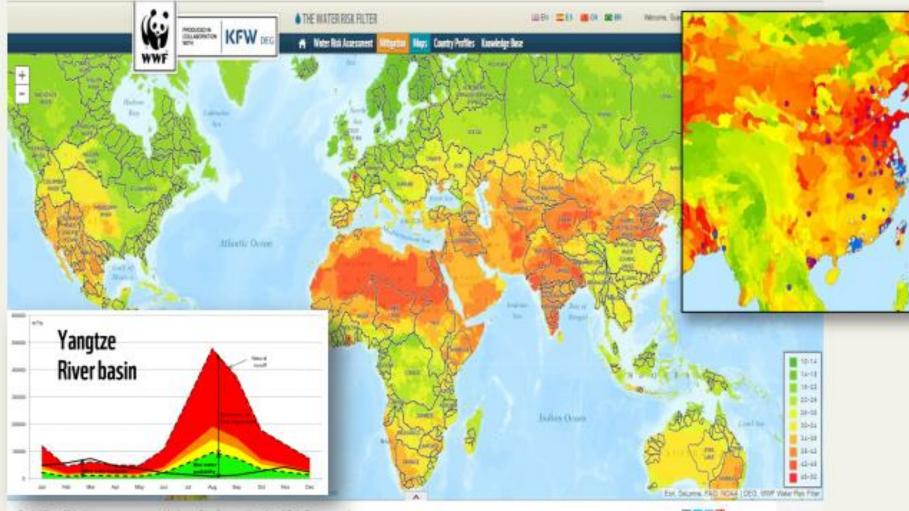
Detailed results for each indicator explain results, (links to) sources and definitions

n	npany ri	elated ri	isk							lanatio (link t	340.62		
NR	Score	Risk	Risk tem	Indicator		Answer		- 81			- 50 L		
1	3 Some rak	Physical	Scarcity (Quartity)	Importance of having sufficient amounts of clean featiwater available for the production/ operational site's operations				1	so	ources	لـر		
2	2 Limited rak			Problems the company has/had withdrawing/sibiliaring the required amount of water for its operations			ed risk			Source: Water Foo (INFIG)	rigrier) hiele	10	
	z			Sotal annual amount of Evolveder withdrawn either directly from a	Nz	Score	Fittsk	Risk dem	Indicator		monthly be		
3	Linited ank			water source or through the municipal supply (m3/yeer)	1	3 Some	Physical	Scarcity (Quantity)	Annual average month water scarcity in this v	water ocarcity value in the year. Blue water ocarcity is defined as the ratio of tike water toolprint to blue water		Mined	30 - 150%
4	3 Some nak			Percentage of the total amount of withdrawn water that is necycled a wursed (used meer than once). Maximum answer for this indicator is 100%		North North North North			Number of months per scarcity exceeding 100 river basin	availability - taken as hall environment resources a and ground	dural runoff tal flow. Elu are surface	manus e water water	
5	4 High rost		Pollation (Quality)	Typical level of water pellution caused by this industry Requirement of treatment/	3	5 Very high risk			Bue water acarcity in t in which blue water aca highest in this new has	entity is the	Q 54		100%
6	5 Very high mult	Very high perfection	perfication of the water the company withdraws bofore use in operations	4	2 Limited risk			Forecasted impact of cl change			drverabilit mited imp	y Index: 2 of 4 sect	
					5	2 Limited risk			Estimated occurrence of drought		<10% of the country affected by a severe drought in the last 3 years		
					6	3 Some nsk			Estimated occurrence i	of Boods	Moderate risk of flooding		sk of flooding
					7	4 High rak		Pollution (Quality)	General situation of wat pollution around the fac			gh risk d ritaminat	ion

The Water Risk Filter framework: Basin and Company/Commodity related risks







Facility filter: All facilities +

Map layer: Dierall water risk - Diverall Risk - Severage producers -

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Downtool-

Linking risk to basin strategies



Improving water management internally can have a limited impact. This strategy will ultimately need to be enhanced with focused external action.

WWF

Working with stakeholders in direct surroundings of facility to enhance social license to operate. High likelihood that collective action misses key stakeholders in the wider basin. Working with stakeholders at basin or sub-basin level, to support sustainable water management. Focus on longterm risk reduction, policy objectives and governance. Jiangsu province, Yangtze, China Company Physical water quality risk: 4,4 Level of water pollution by sites: 5

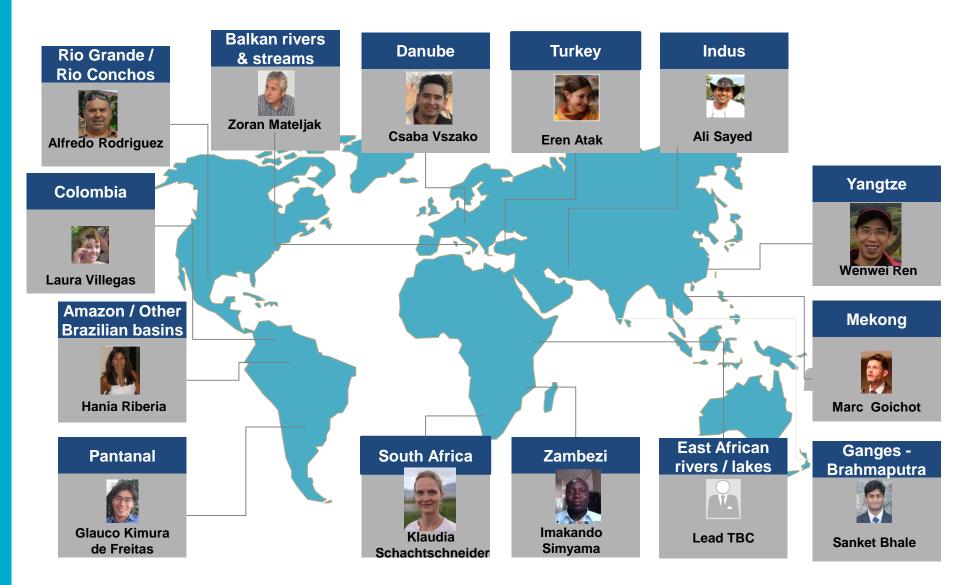


IP recruitment: Changzhou IP, Jiangsu province





Who will be doing it? Our Basin Team Leads





Our existing partnerships and projects ...





WWF are not alone



The CEO Water Mandate



CDP Water Report 2014 found that:

68% water poses a substantive risk to their business (40% increase since 2011)

22% report water could limit growth of business (1/3 expecting constraint in next 12 months)

Only 38% of respondents have conducted a risk assessment that includes operations and supply chains



Only 28% had conducted a risk assessment that takes into account the river basin





Thank you

panda.org



+100

WWF is in over 100 countries, on 6 continents

1961

WWF was founded In 1961



+5,000

WWF has over 5,000 staff worldwide

+5M

WWF has over 5 million supporters