

Ferramenta de Gestão de Água

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Votorantim Cimentos

Ferramenta de Gestão de Água

- ▶ Global Water Tool
Ferramenta free desenvolvida em 2007
- ▶ CSI – Cement Sustainability Initiative
Grupos de trabalho
- ▶ CSI - GWT
Customização da ferramenta



Global



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Global



for the Cement Sector



Global Water Tool



Uma ferramenta para ajudar as empresas de cimento a entender e gerenciar seus riscos e apoiar a tomada de decisão na gestão da água



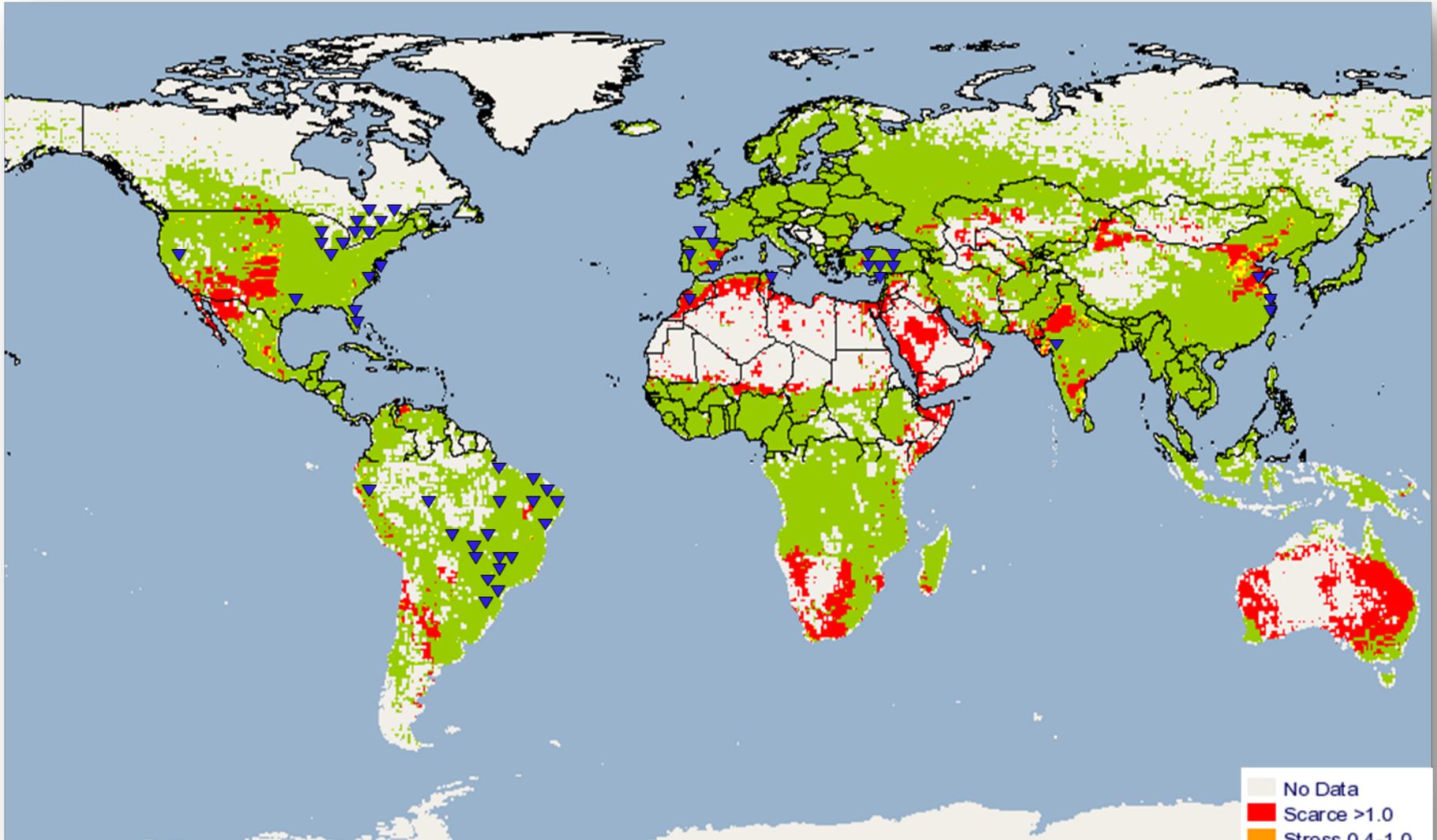
A ferramenta customizada contempla:
operações de cimento e mina
operações de agregados
argamassa, concreto
outras operações

Global Water Tool

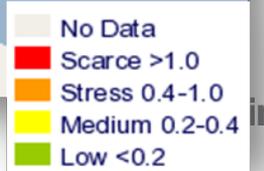
- q Permite comparar o uso de água da empresa com histórico, dados companhias de saneamento e disponibilidade de dados da população;
- q Permite cálculo de indicadores GRI e CSI de água;
- q Estabelece riscos relativo de água de maneira a priorizar a ação;
- q Cria visão geográfica global, possibilitando gestão que destaque o risco e as métricas de desempenho sustentável
- q Permite uma comunicação eficaz com as partes interessadas internas e externas sobre as questões da água na empresa.



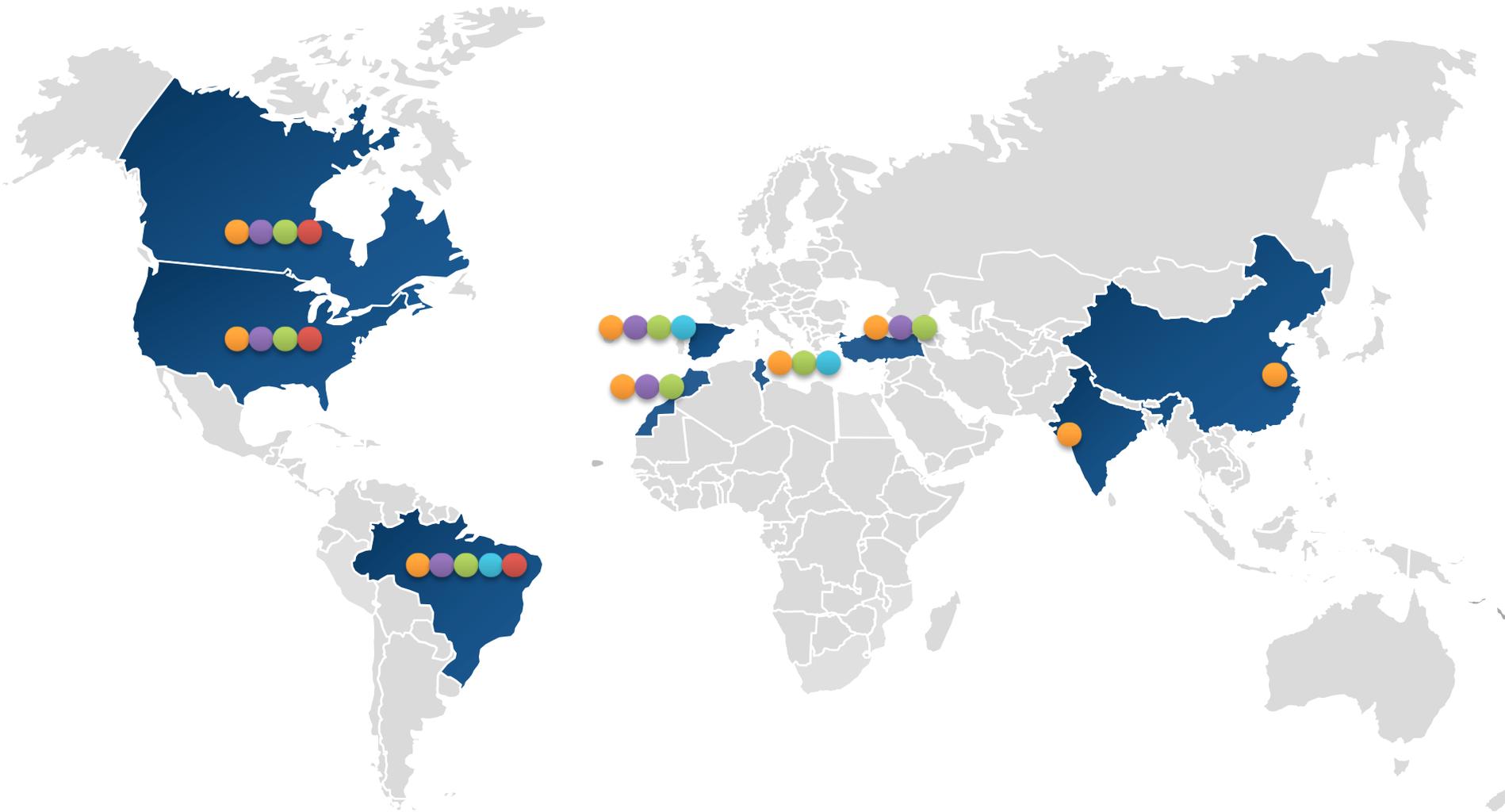
Global Water Tool



Water Stress Index



Visão Estratégica A Votorantim Cimentos Global



● Cimento (54) ● Concreto (324) ● Agregados (73) ● Complem. (10) ● Logística (53)

[Print Map](#)

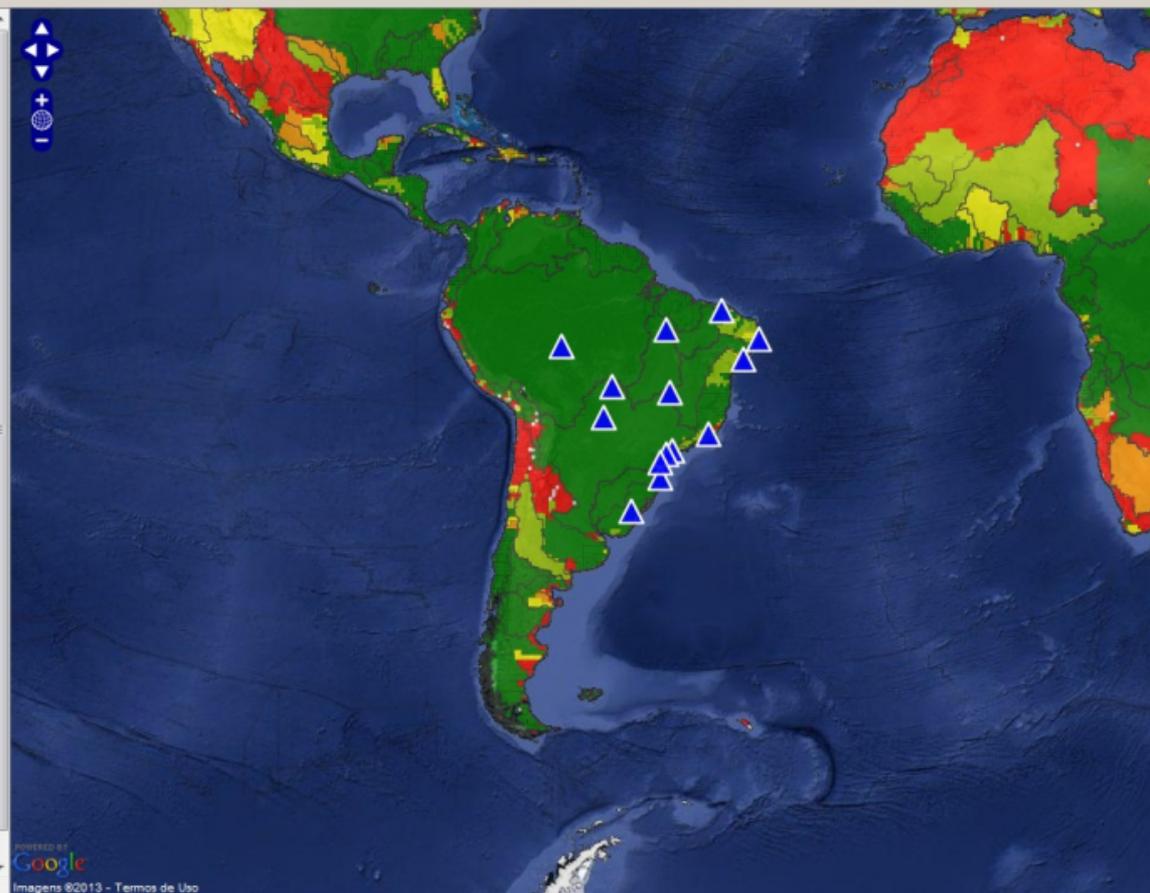
- Base Maps**
 - Google Physical
 - Google Streets
 - Google Hybrid
 - Google Satellite
- Facilities**
 - Facilities
 - Labels
- Water Resources by Country**
 - Total renewable water per person (2008)
 - Projected total renewable per person (2025)
 - Projected total renewable per person (2050)
 - Water withdrawal per person
 - Industrial withdrawal (as percent of total)
 - Dependency Ratio
 - Population with improved water (percent)
 - Population with improved sanitation (percent)
- Water Resources by Watershed**
 - Annual renewable supply per person (1995)
 - Projected annual renewable supply per person (2025)
 - Environmental water scarcity index
 - Mean annual relative water stress index
 - Physical and economic water scarcity
 - Biodiversity Hotspots



Projected annual renewable supply per person (2025)

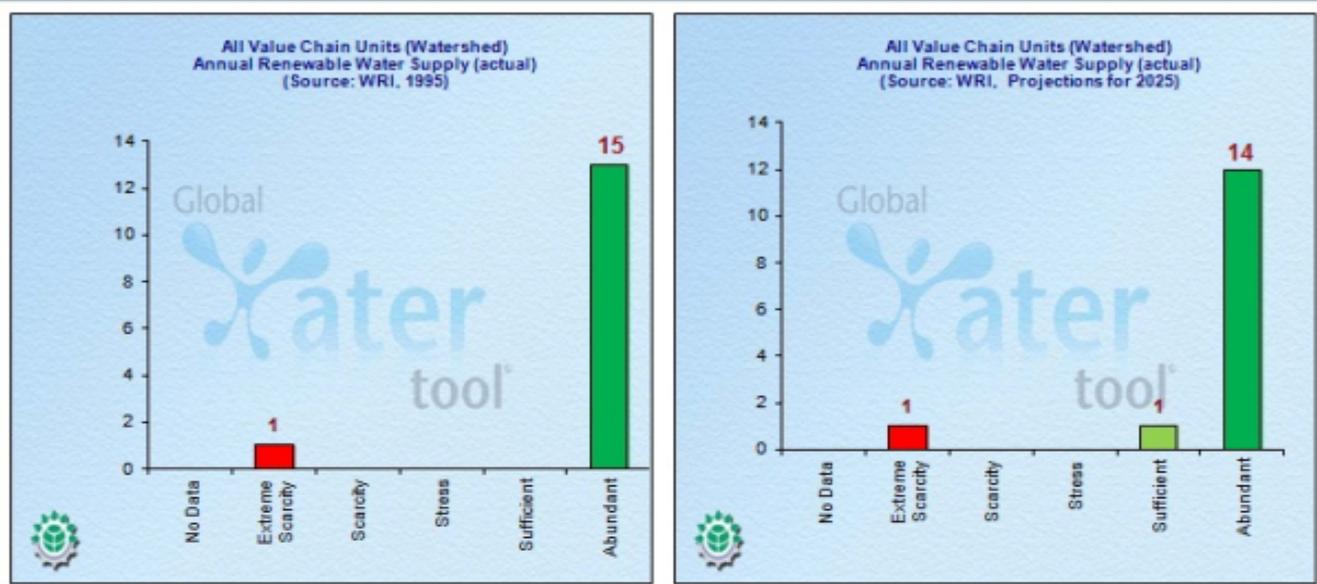
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- No Data
- Extreme Scarcity
- Scarcity
- Stress
- Sufficient
- Abundant

Global Water Tool



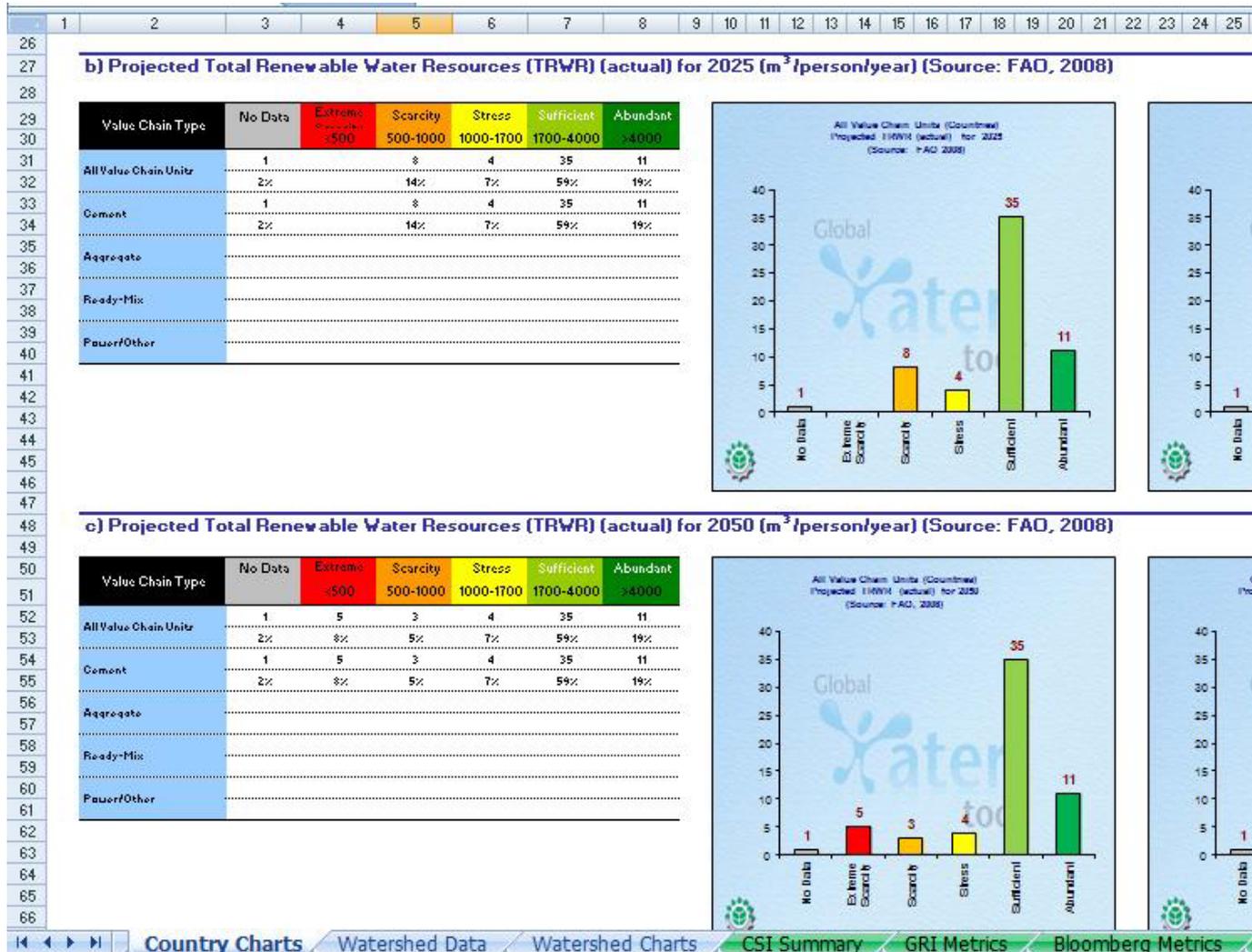
Global Water Tool

Métricas do setor

1	2	5	6	7	8	9	10	11	12	13	14	15	16	
	Country	Water Inventory										Total Recycled/ Reused (m ³ /year)	Percent Recycled/ Reused (%)	Total Freshwater Withdrawal (m ³ /year)
		Water Withdrawal			Water Discharge			Water Consumption						
		Total Freshwater Withdrawal (m ³ /year)	Total Non-Freshwater Withdrawal (m ³ /year)	Total Water Withdrawal (m ³ /year) GBLEN8	Total Freshwater Discharge (m ³ /year)	Total Non-Freshwater Discharge (m ³ /year)	Total Water Discharge (m ³ /year) GBLEN21	Total Freshwater Consumption (m ³ /year)	Total Non-Freshwater Consumption (m ³ /year)	Total Water Consumption (m ³ /year)				
16	France	1,636,983	0	1,636,983	1,570,166	0	1,570,166	66,817	0	66,817	0	0.00%	3	
17	Belgium	518,013	0	518,013	113,615	0	113,615	404,398	0	404,398	0	0.00%	0	
18	France	404,932	0	404,932	5,112	0	5,112	399,880	0	399,880	0	0.00%	0	
19	France	19,297	0	19,297	0	0	0	19,297	0	19,297	0	0.00%	0	
20	Thailand	747,354	0	747,354	105,080	0	105,080	642,274	0	642,274	0	0.00%	0	
21	Thailand	319,780	0	319,780	82,000	0	82,000	237,780	0	237,780	0	0.00%	0	
22	Morocco	214,320	0	214,320	93,073	0	93,073	121,247	0	121,247	0	0.00%	0	
23	Morocco	134,800	0	134,800	0	0	0	134,800	0	134,800	0	0.00%	0	
24	Morocco	129,574	0	129,574	37,958	0	37,958	91,616	0	91,616	0	0.00%	0	
25	Bulgaria	790,968	0	790,968	64,330	0	64,330	726,638	0	726,638	0	0.00%	1	
26	Spain	340,986	0	340,986	0	0	0	340,986	0	340,986	0	0.00%	0	
27	Spain	21,390	0	21,390	0	0	0	21,390	0	21,390	0	0.00%	0	
28	Spain	35,177	11,148	46,325	3,280	0	3,280	31,897	11,148	43,045	0	0.00%	0	
29	Greece	35,361	15,000	50,361	0	0	0	35,361	15,000	50,361	0	0.00%	0	
30	Kazakhstan	1,008,150	0	1,008,150	108,450	0	108,450	899,700	0	899,700	0	0.00%	1	
31	Egypt	716,221	0	716,221	16,500	0	16,500	699,721	0	699,721	0	0.00%	0	
32	Egypt	720,290	0	720,290	63,600	0	63,600	656,690	0	656,690	0	0.00%	0	
33	Egypt	1,200,103	0	1,200,103	78,836	0	78,836	1,121,267	0	1,121,267	0	0.00%	0	
34	Egypt	1,352,698	0	1,352,698	403,770	0	403,770	948,928	0	948,928	0	0.00%	0	
35	Egypt	265,688	0	265,688	4,965	0	4,965	260,723	0	260,723	0	0.00%	0	
36	United States of America	326,667	245	326,912	3,465	0	3,465	323,202	245	323,447	0	0.00%	1	
37	United States of America	501,441	0	501,441	6,000	0	6,000	495,441	0	495,441	0	0.00%	0	

Global Water Tool

Métricas do setor



Global Water Tool

Indicadores CSI

1	2	3	4	5	6	7														
	Value Chain Unit Type	Total Water Withdrawals (E6) (m ³ /year)	Total Water Discharge (m ³ /year)	Total Water Consumed (m ³ /year)	Percentage of sites with recycling (%)	Site Distribution by Watershed Scarcity Level (2025)														
6																				
7																				
8	All Value Chain Units	24,330,141	3,324,413	15,665,728	86.44%	<p>All Value Chain Units (Watershed) Annual Renewable Water Supply (actual) (Source: WRI, Projections for 2025)</p> <table border="1"> <tr><th>Scarcity Level</th><th>Number of Sites</th></tr> <tr><td>No Data</td><td>1</td></tr> <tr><td>Extreme Scarcity</td><td>12</td></tr> <tr><td>Scarcity</td><td>6</td></tr> <tr><td>Stress</td><td>6</td></tr> <tr><td>Smart</td><td>23</td></tr> <tr><td>Abundant</td><td>11</td></tr> </table>	Scarcity Level	Number of Sites	No Data	1	Extreme Scarcity	12	Scarcity	6	Stress	6	Smart	23	Abundant	11
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9	Cement	24,330,141	3,324,413	15,665,728	86%	<p>Cement Operations (Watershed) Annual Renewable Water Supply (actual) (Source: WRI, Projections for 2025)</p> <table border="1"> <tr><th>Scarcity Level</th><th>Number of Sites</th></tr> <tr><td>No Data</td><td>1</td></tr> <tr><td>Extreme Scarcity</td><td>12</td></tr> <tr><td>Scarcity</td><td>6</td></tr> <tr><td>Stress</td><td>6</td></tr> <tr><td>Smart</td><td>23</td></tr> <tr><td>Abundant</td><td>11</td></tr> </table>	Scarcity Level	Number of Sites	No Data	1	Extreme Scarcity	12	Scarcity	6	Stress	6	Smart	23	Abundant	11
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A tool to help cement companies understand their water risk portfolio and to inform their water management decisions.



Open-access
IT-based resource



generates maps
to highlight water
stress areas and
biodiversity hotspots



Download it **FREE** from
www.wbcscement.org/GWTcement



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