

Global



How to use it

Any suggestions, comments,
questions? Write to:
GlobalWaterTool@wbcSD.org



World Business Council for
Sustainable Development

Water risks are everywhere

- **Increased costs and operational risks**
 - Will your business be able to get enough water to operate?
 - Will it be able to justify its allocation in relation to other users?
- **Reputational and regulatory risks**
 - Will you be able to secure your license to operate in a country with increased water scarcity?
- **Risks to health of employees and customers**
 - What is the impact on your productivity of poor health due to lack of safe drinking water and basic sanitation?
- **Risks to markets and products**
 - Will your customers have enough water to enable them to use your products or services?
- **Financial risks**
 - Will your be able to secure access to capital and insurance in the long term?

The Global Water Tool = Risk assessment / management

- Requires an understanding of a company's water needs in relation to local externalities (e.g. water availability, quality, stress, access to improved water sources and sanitation...)
- In your operations, supply chain and ultimately customers – across the entire value chain

**To manage your water globally,
you need to understand the water
situation locally**

Maps a company's water use and helps assess risks by comparing sites, suppliers and workers location with external data

- Launched in 2007 at Stockholm World Water Week (2x update)
- Uptake 300 + companies
- Increasingly recognized as the best available approach for companies to assess global water risks
- Endorsed by the GRI, applauded by the Carbon Disclosure Project, integrated in Wal-Mart Supplier Sustainability Assessment

“The Global Water Tool is the first step for any company to make water-informed decisions”

Step 1: Go to www.wbcسد.org

- **Download the Excel File** onto your computer (your data is kept secure by user – not saved on WBCSD website) **and enable macros**
- **Note any news / updates** about the tool (e.g. upcoming webinars, changes in tool, etc.)
- **Use any background material and links to other resources** (PPT, flyer, Flash demo, additional datasets and tools of interest)



Input inventory sheet (option 1 for entering your info)

Add rows if necessary

Water Inventory

Entity Name: The Global Company Total Sites: 60

Year: 2010

Tip: Always use the "bright" wherever applicable to enter data. Never type in your own data in a dropcell field as the Output reports will return erroneous data.

Site ID	Site Name	Country	Region	Sub-Region	Latitude	Longitude	Operation Type	Water Withdrawal Freshwater Sources (m ³ /year)					Water Withdrawal Non-Freshwater Sources (m ³ /year)				Total Water Withdrawal (m ³ /year)		
								Surface	Groundwater	Municipal Supply	Total Freshwater	Reclaimed	Total PW & Reclaimed	Surface	Groundwater	Reclaimed		Total Non-Freshwater	
BCD Panama	Panama	Central America	South America		-85.4016	-8.4032	OFFICE/RETAIL												
BCD Poland	Poland	Europe	Eastern Europe		22.2440	21.8110	OFFICE/RETAIL												
BCD Portugal	Portugal	Europe	Southwest Europe		16.7672	-8.1031	OFFICE/RETAIL												
BCD Sri Lanka	Sri Lanka	Asia	South Asia		8.3271	79.8688	OFFICE/RETAIL												
BCD Taiwan	Taiwan	Asia	East Asia		25.8015	121.5007	OFFICE/RETAIL												
BCD Thailand	Thailand	Asia	South East Asia		13.8846	100.4158	OFFICE/RETAIL												
BCD Turkey	Turkey	Asia	Western Asia		41.8010	35.8891	OFFICE/RETAIL												
BCD UK	United Kingdom of Great Britain	Europe	Western Europe		52.4764	-8.8807	OFFICE/RETAIL												
BCD Venezuela (COUNTRY)	Venezuela (Bolivarian Republic of)	South America	South America		8.4710	-65.5010	OFFICE/RETAIL												
BCD Zimbabwe	Zimbabwe	Africa	Eastern Africa		-17.8210	31.8678	OFFICE/RETAIL												
Business Council of Australia	Australia	Oceania	Australia and New Zealand		-37.8190	151.8132	OFFICE/RETAIL												
Business Enclosure Council Hong Kong	Hong Kong	Asia	East Asia		22.8810	114.1080	OFFICE/RETAIL												
China BCD	China	Asia	East Asia		35.1080	115.4080	OFFICE/RETAIL												
Confederation of Indian Industry	India	Asia	South Asia		20.8107	77.4814	OFFICE/RETAIL												
Confederation of Romanian Enterprises (CER)	Romania	Europe	Western Europe		45.7108	26.7107	OFFICE/RETAIL												
Council of Great Lakes Industries	United States of America	North America	North America		42.2110	-85.7105	OFFICE/RETAIL												
World Council for Sustainable Business Development	Denmark	Europe	Western Europe		55.2617	9.7107	OFFICE/RETAIL												
BERET - Uruguay	Uruguay	South America	South America		-34.8100	-56.1080	OFFICE/RETAIL												
recoeur - Germany	Germany	Europe	Western Europe		52.5102	10.4880	OFFICE/RETAIL												
Entrepreneurs (Entrepreneur) - France	France	Europe	Western Europe		48.8100	9.1078	OFFICE/RETAIL												
PERA - Mozambique	Mozambique	Africa	Eastern Africa		-23.8104	32.5710	OFFICE/RETAIL												
Production Factor National Spain	Spain	Europe	Southwest Europe		41.5710	3.1021	OFFICE/RETAIL												
Production Culture - BCD Spain	Spain	Europe	Southwest Europe		41.4080	-3.8211	OFFICE/RETAIL												
Subop-ASE	Peru	South America	Central America		8.5041	-75.5108	OFFICE/RETAIL												
Venez BCD	Venezuela (Bolivarian Republic of)	South America	South America		8.4710	-65.5010	OFFICE/RETAIL												
National Business Institute South Africa	South Africa	Africa	South Africa		-31.4080	28.8100	OFFICE/RETAIL												
Nippon Enrichment Japan Production Federalist	Japan	Asia	East Asia		35.6710	139.7100	OFFICE/RETAIL												
Peru BCD	Peru	South America	South America		-12.2617	-75.8100	OFFICE/RETAIL												

Introduction **Start** Input Water Inventory Output GRI Indicators Output Country Data Raw Country Data Combined Metrics Country Output Waters

Output: GRI water indicators



GRI Indicators on total water withdrawals (EN8), water recycled/reused (EN10), and total water discharge (EN21) are calculated for each site, country, region and total.

Global_Water_Tool_2009.02_RN [Compatibility Mode] - Microsoft Excel

Home Insert Page Layout Formulas Data Review View Developer

Clipboard Font Alignment Number Styles

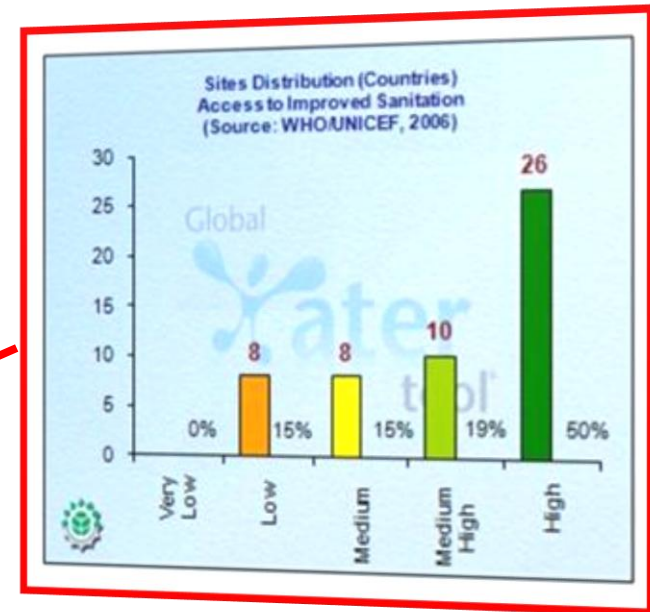
Water Consumption and GRI Water Indicators

Region	Country	Site Name	Operation Type	Water Inventory		GRI Water Indicators			
				Total Freshwater Consumption (m ³ /year)	Total Water Consumption (m ³ /year)	Total Water Withdrawals (EN8) (m ³ /year)	Total Water Discharge (EN21) (m ³ /year)	Total Recycling/ Reused (EN10) (m ³ /year)	Percent Recycling/ Reused (EN10) %
		BCSD UK	OFFICE/RETAIL	109,228	245,007	259,595	14,513	2,353	0.91%
Oceania		Total (Region)		-2,271,001,007	-2,274,111,845	605,798,688	2,880,310,533	1,235,719	0.20%
	Australia	Total (Country)		-2,422,377,511	-2,421,142,090	459,168,443	2,880,310,533	1,235,719	0.27%
		Business Council of Australia	OFFICE/RETAIL	-23,098,601	-21,863,180	1,594,233	23,457,413	35	0.00%
		WASIG/ Centre of Excellence in Cleaner Pro	OFFICE/RETAIL	-2,399,278,910	-2,399,278,910	457,574,210	2,856,853,120	1,235,684	0.27%
	New Zealand	Total (Country)		145,376,504	146,630,245	146,630,245	0	0	0.00%
		BCSD New Zealand	OFFICE/RETAIL	145,376,504	146,630,245	146,630,245	No Data	No Data	No Data
Total (All Operations Types)				-4,573,810,507	654,035,238	12,057,480,617	11,403,445,379	4,729,433	0.04%
Total (Office/Retail)				-4,573,810,507	654,035,238	12,057,480,617	11,403,445,379	4,729,433	0.04%
Total (Industrial)				0	0	0	0	0	0.00%
Total (Suppliers)				0	0	0	0	0	0.00%

Input Water Inventory Output GRI Indicators Output Country Data Raw Country Data Output Watershed Data Combined Metrics

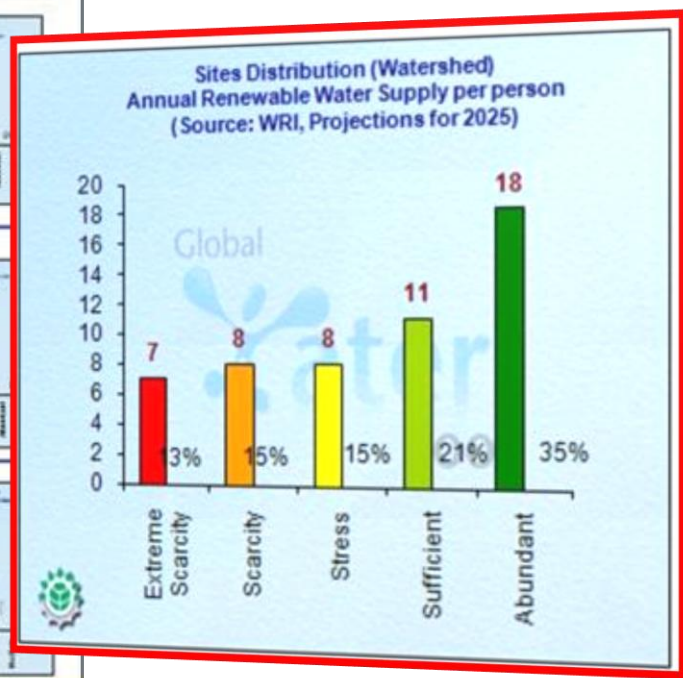
Output: Graphs (“Combined Metrics Country”) – downloadable

- Total renewable water resources per person (FAO) + Projections for 2025 and 2050
- Total water withdrawal per person (FAO)
- Dependency ratio (FAO)
- Industrial water withdrawal as par of total (FAO)
- Population served with improved water (WHO / UNICEF)
- Population served with improved sanitation (WHO / UNICEF)



Output: Graphs (“Combined Metrics Watershed”) – downloadable

- Annual renewable water supply per person (1995 and 2025) (WRI)
- Mean annual relative water stress index (UNH)



Output: A Range of Country Level Data

- Find out which sites are in red / orange, etc. by going to "Output Country Data" tab

Water Consumption and Country Information

Region	Country	Site Name	Operation Type	Water Inventory		FAO AQUASTAT												
				Total Freshwater Consumption (m ³ /year)	Total Water Consumption (m ³ /year)	Total Internal Renewable (TRWR) (2006) (m ³ /year)	Total Internal Renewable per person (TRWR/per soa) (2006) (m ³ /person/yr)	Total External (ERWR) (2006) (m ³ /year)	Total Renewable (actuel) (TRWR) (2006) (m ³ /year)	Total Renewable per person (actuel) (TRWR/per soa) (2006) (m ³ /person/yr)	Dependency Ratio (2006)	Agriculture water withdrawal as part of total (1998-2002)	Domestic water withdrawal as part of total (1998-2002)	Industrial water withdrawal as part of total (1998-2002)	Total water withdrawal per person (1998-2002) (m ³ /person/yr)	Total freshwater withdrawal as % of TRWR (1998-2002) (%)	Popul. Tot. (millions)	
Total (Region)				-9,725,616,391	-8,762,937,964													
Africa	Algeria	Total (Country)		81,029	81,029	11,047	337.23	0.42	11,647	289.33	3.40	0.68	0.22	0.10	193.23	91.61	33,351	
		Association pour la Promotion de l'Eco-effic	OFFICE/RETAL	81,029														
Egypt	Egypt	Total (Country)		32,289	-874,512	5.8	24.27	89.90	87.3	772.99	46.36	0.06	0.09	0.06	899.89	94.83	74,917	
		Association of Enterprises for Env Conserva	OFFICE/RETAL	32,289	-874,512													
Mozambique	Mozambique	Total (Country)		-1,914,999,610	-1,914,999,610	3.3	4,702.64	196.91	217.15	26,703.26	93.68	0.07	0.01	0.02	32.43	0.29	20,971	
		FEMA - Mozambique	OFFICE/RETAL	-1,914,999,610	-1,914,999,610													
Total (Country)				-1,914,999,610	-1,914,999,610	3.3	4,702.64	196.91	217.15	26,703.26	93.68	0.07	0.01	0.02	32.43	0.29	20,971	

Region	Country	Site Name
Africa		
	Algeria	Association pour la Promotion de l'Eco-effic
	Egypt	Association of Enterprises for Env Conserva
	Mozambique	FEMA - Mozambique
	Nigeria	BCSD Nigeria
	South Africa	National Business Initiative South Africa

WHO/UNICEF (2006)							
Population Urban %	Population Rural %	Access to Improved Water (%)			Access to Improved Sanitation (%)		
		Total Coverage	Urban Coverage	Rural Coverage	Total Coverage	Urban Coverage	Rural Coverage
64	36	85	87	81	94	98	87
43	57	98	99	98	66	85	52
26	66	42	74	26	31	53	19
49	51	47	66	30	30	35	25
60	40	93	100	82	59	66	49

All sites uploaded onto map



View options, incl. different maps

Click **Box**
 to select
 map

Base Maps

- Google Physical
- Google Streets
- Google Hybrid
- Google Satellite

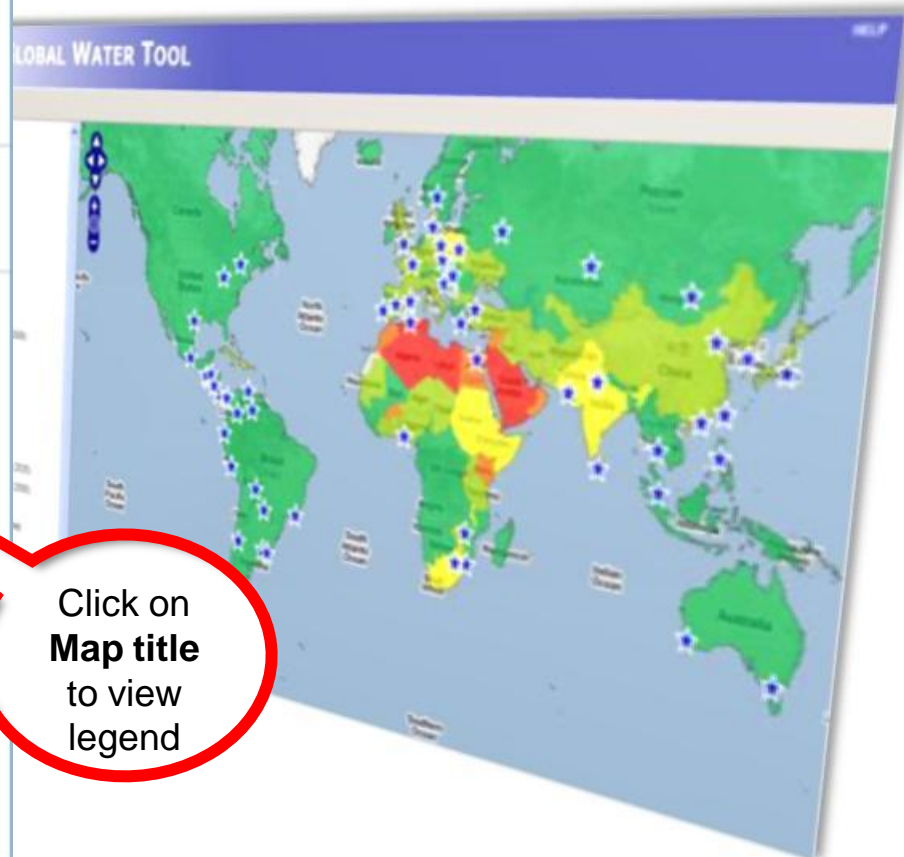
Facilities

- Facilities
- Labels

Water Resources by Country

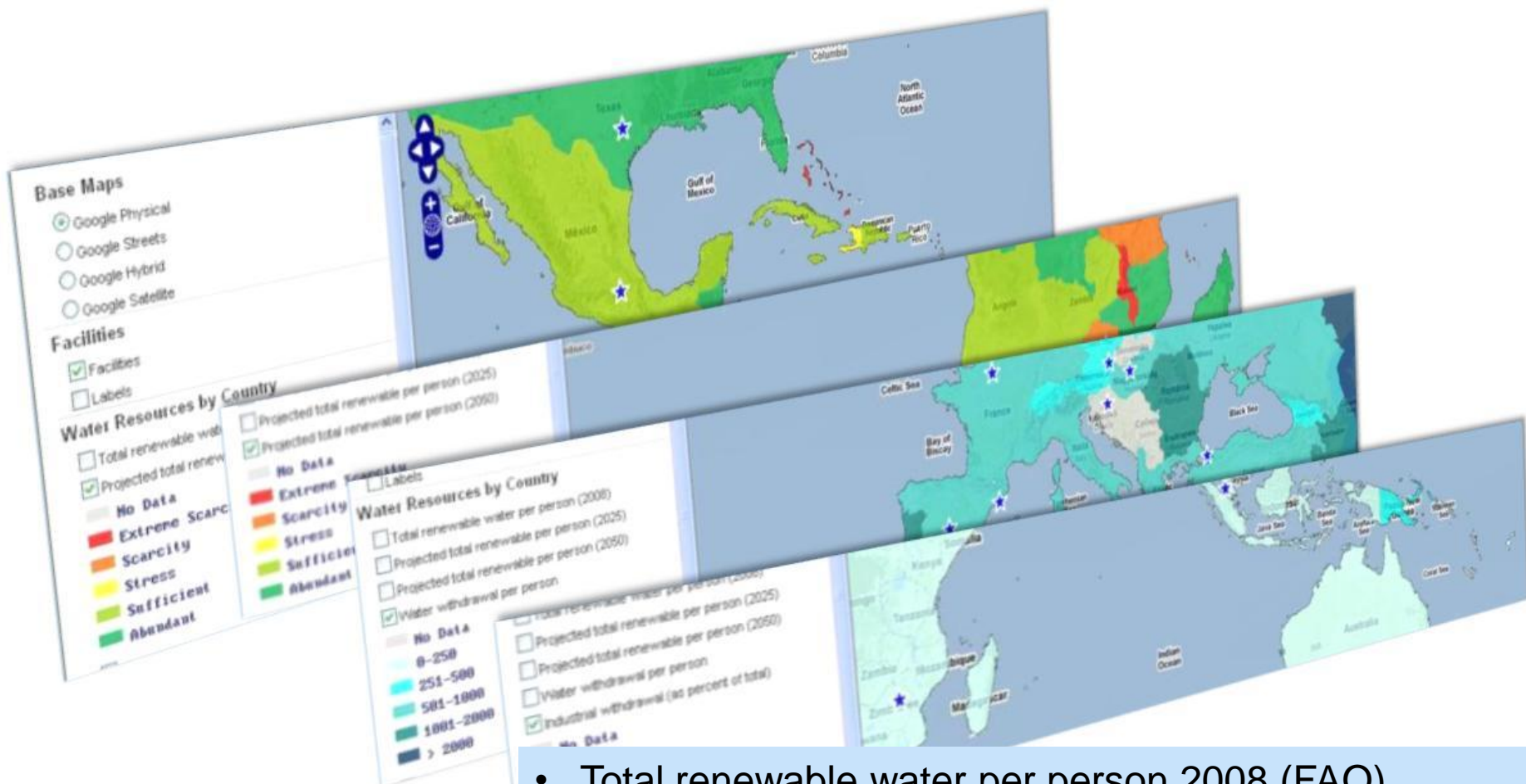
- Total renewable water per person (2008)
- Projected total renewable per person (2025)
- Projected total renewable per person (2050)
- Water withdrawal per person
- Industrial withdrawal (as percent of total)
- Dependency Ratio
- Population with improved water (percent)
- Population with improved sanitation (percent)

Water Resources by Watershed



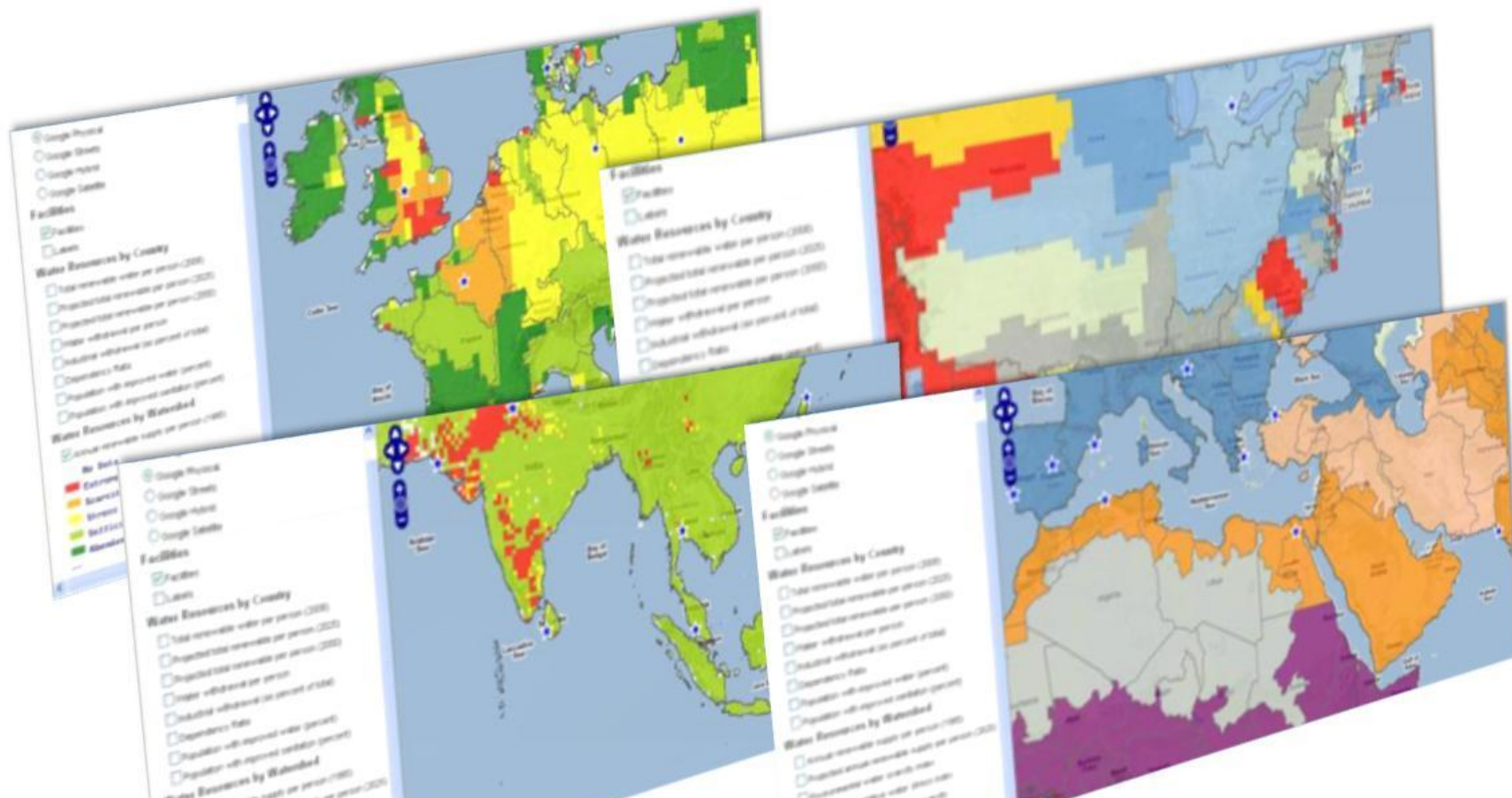
Click on
Map title
 to view
 legend

Country maps



- Total renewable water per person 2008 (FAO)
- Projected total renewable water per person 2025 (FAO)
- Projected total renewable water per person 2050 (FAO)
- Water withdrawal per person (FAO)
- Industrial water withdrawal as par of total (FAO)

Watershed maps



- Annual renewable water supply per person 1995 (WRI)
- Projected annual renewable water supply per person 2025 (WRI)
- Environmental water scarcity index (IWMI)
- Mean annual relative water stress index (UNH)
- Physical and economic water scarcity (IWMI)

Google Earth interface – global perspective

If you write a comment in the Inventory Sheet, it will appear in Google Earth

For **non-commercial use**, download free version of Google Earth
For **commercial use**, purchase Google Earth Pro or other



Some users may face problems due to their own internal IT system

Danish Council for Sustainable Business Development

OFFICE/RETAIL - WBCSD co-hosted Copenhagen Business Day at UNFCCC COP15 with ICC
Directions: [To here](#) - [From here](#)

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2010 TerraMetrics
© 2010 Cnes/Spot Image
© 2010 Google

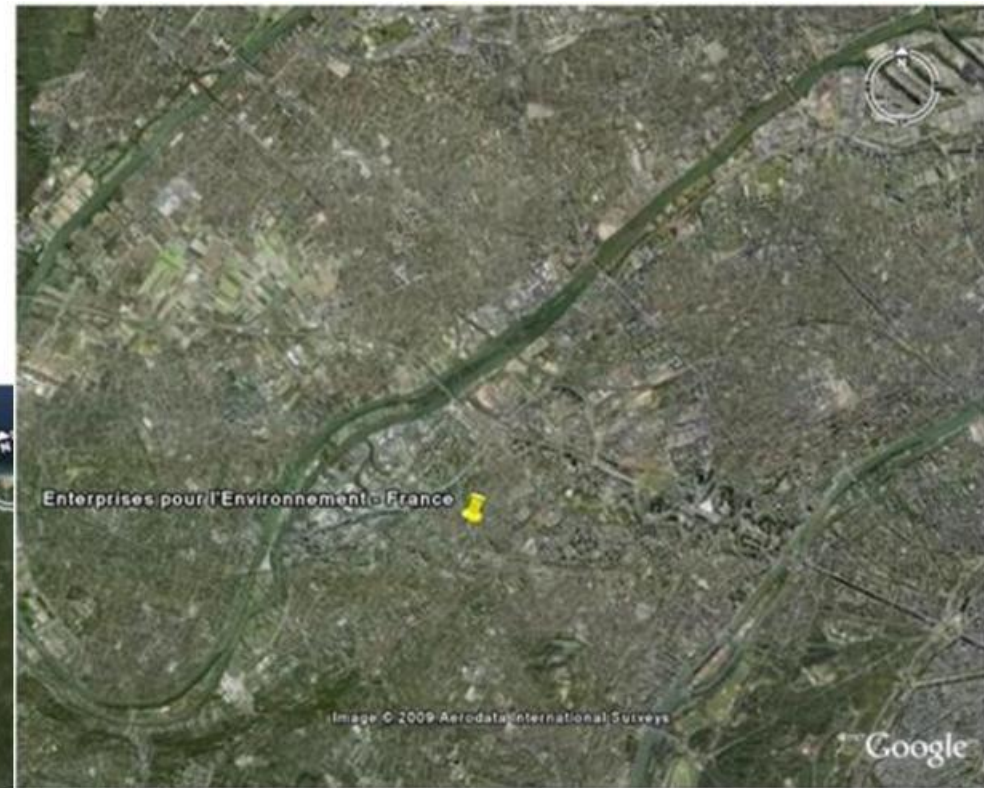
46°37'33.41"N 17°07'59.26"E elev 0 ft

2009 Google

Eye alt 4650.78 mi

Zoom in – real impressions

Are you near a river /
lake / sea?



Are you in a densely-
populated area?

Many companies have used the tool

ABN Amro

Akzo Nobel

Anglo Coal

ArcelorMittal

Borealis

Caterpillar

CEMEX

CH2M HILL

Chevron

ConocoPhillips

Dow

DSM

DuPont

GrupoNueva

Holcim

ITT Corp

Lafarge

Mondi

Norsk Hydro

Pepsi

Suncor Energy

Shell

StatoilHydro

Syngenta

Unilever

Nestlé

Kraft

Abbott Labs

Baxter

Bristol Myers

Squibb

SAB Miller

Cargill...

Some feedback from users



The tool gave us an indication of site locations that may experience potential water scarcity in the future. Sites located within these areas have been asked to undertake an initial site assessment. [Novartis](#)

The global water tool provides a comprehensive and dynamic picture of our operations' water footprint and is the basis for the strategic management of water risks. [Borealis](#)



The Global Water Tool results were used for reporting purposes, including the recently launched water survey of the carbon disclosure project. [Bayer](#)

The proactive assessment and management of water resource risks are so critically important, and yet, until the development of the GWT, there has never been a comprehensive tool available in the public domain for all sectors to use with which to conduct these assessments. [PepsiCo](#)



Need more info?

- Go to:
www.wbcasd.org/web/watertool.htm
- Download the tool freely
- FAQs, dataset details definitions
- Demo of the tool
- Questions? info@globalwatertool.org