

# Queensland water and wastewater technologies and services opportunities

## Sub-Saharan Africa



### Market trends

Water presents international development business, export and investment opportunities in Sub-Saharan Africa.

There are significant ongoing investments in water and wastewater technologies, services and infrastructure worldwide, creating substantial opportunities for Queensland companies. Goldman Sachs estimates the size of the global water market at US\$425B with an annual growth rate of 4–6 per cent. It is expected the world will invest US\$23 trillion in water infrastructure by 2030.

Many countries in Sub-Saharan Africa are now regarded as having frontier emerging economies with relatively developed financial markets. These include Botswana, Cape Verde, Ghana, Kenya, Mauritius, Mozambique, Namibia, Nigeria, the Seychelles, Tanzania, Uganda, and Zambia.

Unlike more developed markets that tend to focus on water purification and wastewater treatment issues, the primary concerns for emerging Sub-Saharan African markets are water shortages, quality, and infrastructure investment.

Most of Sub-Saharan Africa urgently needs to develop water infrastructure platforms to ensure water security. Increased investment in water is also necessary to enhance agricultural productivity and achieve food security in Sub-Saharan Africa.

With rain-fed agriculture generating 30 per cent of Sub-Saharan Africa's GDP and 70 per cent of its employment, the region is particularly vulnerable to climate change.

According to the McKinsey Global Institute, Africa has strong long-term economic growth prospects, propelled by external trends in the global economy and internal changes in the continent's societies and economies.

### Queensland capabilities

Queensland companies are developing world-leading expertise in water efficiency, reuse and storage, and water and wastewater treatment. Expertise includes water and wastewater management, research, policy, environmental monitoring, infrastructure planning, precision irrigation, desalination, stormwater harvesting and groundwater management, distribution and storage. Queensland companies have also successfully delivered development funded water and sanitation projects in markets as diverse as Papua New Guinea and Pakistan, as well as Africa including Mozambique and Kenya.

Queensland is well placed to capitalise on increased demand for water technologies and services required to combat the effects of climate change around the world, including in Sub-Saharan Africa.



## Opportunities for Queensland companies

Trade and Investment Queensland has identified opportunities in Sub-Saharan Africa for Queensland water and wastewater technologies and services including (but not limited to):

- agricultural water conservation and water efficiency technology
- precision irrigation technology (such as underground drip, in-ground hydroponics, moisture meters, telemetry for automatic control of water infrastructure)
- water management and water reuse (including industrial applications)
- water saving devices
- joint ventures with overseas firms to offer integrated solutions in water treatment including performing feasibility studies, designing, technical consulting and providing operation and online maintenance services
- design, manufacture and installation of various types of wastewater systems
- construction of dams
- construction of water recycling and wastewater treatment plants (particularly in South Africa)
- water supply, sewerage and pollution (including sludge) treatment, and efficient use and reuse of water
- sewage and septic system rehabilitation, including development of packaged and transportable sewerage and wastewater treatments.

## Development assistance for water and sanitation

- As part of the Australian Government's commitment to increase engagement with Africa, and scale up the overall aid program, AusAID is increasing development assistance to Sub-Saharan Africa.
- The Australian Government has committed to spending 0.15 per cent of Gross National Income for 'Least Developed Countries' (LDCs), the majority of which are in Africa. The areas of priority will be education (particularly scholarships), health, food security and climate change. This represents a significant scaling up of Australia's overall aid and development program which will double to A\$8-9B by 2015. The Australian Government will also work towards opening up markets to LDCs to promote private commerce, trade and investment, which are all important enablers to reducing poverty.
- Africa is a key recipient of the Australian Government's A\$300M water and sanitation budget initiative. Australia is investing in infrastructure projects in southern Africa to improve access to clean water and sanitation services in smaller cities, towns and market centres. Australia is also supporting regional programs and partnering with community-level civil society organisations. The Australian Government is expected to release a water, sanitation and hygiene strategy in 2011 which will guide Australia's international development assistance program in these sectors.
- Key partners in regional programs include the World Bank and the African Development Bank. The African Development Bank currently plans to increase investments in water projects to US\$1B per year, while the World Bank has nearly US\$7B committed to water projects in Africa and this is expected to increase each year.
- Australia also supports community projects in Sub-Saharan Africa through Australian Non-Government Organisations (NGOs) and, in partnership with the World Bank, helps governments develop water and sanitation strategies and raise finance for the water sector. Australian NGOs are working in 39 African countries and a third of all donations made by Australians goes to NGO projects in Africa.

## Investments

- South Africa, one of the region's most advanced, diversified and richest economies, has announced plans to invest US\$3.9B in water supply infrastructure over the next five to eight years. The funds will be spent on the ongoing construction of 15 water resource infrastructure projects. South Africa is facing water shortages and South Africa's Department of Water and Environmental Affairs is targeting 20 per cent reduced losses in the next five years.
- China, in particular, is forging new broad-based investment partnerships in Sub-Saharan Africa. For example:
  - › **China has established a US\$5B equity fund to foster investment in Africa (the China-Africa Development Fund)**
  - › **reconstruction in Angola has been helped by three oil-backed loans from China. Chinese companies have built roads, railways, hospitals, schools, and water systems in Angola**
  - › **Chinese teams are building one hydropower project in the Republic of the Congo (to be repaid in oil) and another in Ghana (to be repaid in cocoa beans)**
  - › **in Zambia, the Chinese and Zambian Governments are investing heavily in physical infrastructure, which, over the course of the next few years, should significantly ease business operations in the country. The Zambian Government has created two multi-facility economic zones to help propel new foreign investment. The Zambian Government is working to provide the zones with proper water, power and transport facilities, and offers various incentives for companies operating in these sectors**
  - › **China is also helping to build special trade and economic cooperation zones in Nigeria, Mauritius and elsewhere in Africa which should also help propel new foreign investment.**
- During the past three years, the African Development Bank has approved non-sovereign finance totalling US\$4.7B for 80 projects, primarily in infrastructure and financial services. This has helped mobilise US\$23.5B from private and multilateral investors.
- Activity has also been picking up pace in Nigeria's water sector. The water sector is of vital importance to the development of Nigeria where significant demand exists for new facilities. However, this demand is currently not being met by government-sponsored projects.
- While resource-rich countries such as Nigeria and South Africa have received a lot of the foreign direct investment in Sub-Saharan Africa over the past decade, a second tier of smaller but high-performing countries, including Ghana, Namibia, and Zambia, are becoming increasingly attractive to investors.

## Did you know?

- Sub-Saharan Africa is among the world's most rapidly growing economic regions. Between 2002 and 2008, Sub-Saharan Africa averaged growth of six per cent a year.
- Sub-Saharan Africa is also weathering the global downturn better than most other parts of the world and is projected to grow by 4.5 per cent in 2011 – faster than Latin America, Europe, and Central Asia.
- Sub-Saharan Africa's recent sustained growth has been made possible largely by improved political and macro-economic stability, a strengthened political commitment to private-sector growth, and increased investment in infrastructure and education.
- Debt as a share of exports has declined dramatically, to levels comparable to those of other regions, and sovereign credit ratings in parts of the continent enjoy a positive outlook. Sub-Saharan African countries such as Botswana, Mauritius and South Africa have investment-grade ratings at the sovereign and corporate levels.
- There is a broadly shared conviction among Sub-Saharan Africa's leaders that sustained growth will come only from the private sector and increased integration with the global economy. Last year, two-thirds of the economies of Sub-Saharan Africa implemented reforms to ease the path of investors doing business there.

*McKinsey Global Institute, June 2010*

**Africa's agriculture holds enormous potential for companies across the value chain. With 60 per cent of the world's uncultivated arable land and low crop yields, Africa is ripe for a green revolution like those that transformed agriculture in Asia and Brazil.**

**McKinsey and Company, 2010**

## Market challenges

Despite strong economic growth, some parts of Sub-Saharan Africa are challenged by poor infrastructure, high levels of poverty, changes to political systems and low levels of education.

In addition, Africans must improve both the quality and accessibility of health care and address the sustainability of resources. According to the World Bank, the ease of doing business varies considerably from country to country in Sub-Saharan Africa.

## Trade and Investment Queensland can assist you

Trade and Investment Queensland is headquartered in Brisbane and maintains representation across the State and in 17 global locations.

In 2009–10, Trade and Investment Queensland assisted Queensland companies to make more than \$613M in export sales, and assisted 3077 clients (45 per cent from regional Queensland) to become export ready or to make new export deals.

The agency provides a wide range of exporting services to Queensland companies in delivering global assistance and support.

Trade and Investment Queensland provides export advice, market information and skills development programs to help companies make informed export decisions and achieve success in overseas markets. It supports businesses through industry-focused trade missions, business introductions linked to inbound trade visits, and other export promotional events held within the State and internationally.

Teams of international export professionals work to assist the State's businesses, not only in traditional overseas markets like Japan and China, but also in key emerging markets such as Russia, India, the Middle East and Latin America.

## Other issues in the series

- Queensland water and wastewater technologies, services and infrastructure export opportunities: USA
- Queensland water and wastewater technologies, services and infrastructure export opportunities: China
- Queensland water and wastewater technologies, services and infrastructure export opportunities: India
- Export opportunities for Queensland water and wastewater technologies and services: Gulf States
- Export opportunities for Queensland water and wastewater technologies and services: Global Demand

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<sup>1</sup> Goldman Sachs, 2008.

<sup>2</sup> US Global Investors, 2007. The US\$23 trillion figure is on a cumulative basis.

<sup>3</sup> Okonjo-Iweala, McKinsey Quarterly, June 2010.

<sup>4</sup> 42 per cent of people living in Sub-Saharan African countries do not have access to safe water, whilst 69 per cent of those populations do not have access to basic sanitation. For more information, see African Development Bank, September 2009.

<sup>5</sup> AusAid, March 2010.

<sup>6</sup> Okonjo-Iweala, McKinsey Quarterly, June 2010.

<sup>7</sup> McKinsey Global Institute, June 2010.

<sup>8</sup> AusAid, August 2010.

<sup>9</sup> AusAid, August 2010 and AusAid, March 2010.

<sup>10</sup> The Corporate Council of Africa, April 2010.

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<sup>12</sup> South Africa Infrastructure Report Q2 2010, Business Monitor International, 2010.

<sup>13</sup> Foreign Affairs, January 2010.

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<sup>15</sup> Foreign Affairs, January 2010.

<sup>16</sup> Kaberuka, McKinsey Quarterly, June 2010.

<sup>17</sup> Nigeria Business Forecast Report Q3 2010, Business Monitor International, 2010.

<sup>18</sup> Kaberuka, McKinsey Quarterly, June 2010.

<sup>19</sup> African Development Bank, 2009 and Kaberuka, McKinsey Quarterly, June 2010.

<sup>20</sup> Checking Africa's Vital Signs, McKinsey Quarterly, June 2010.

<sup>21</sup> International Bank for Reconstruction and Development/The World Bank, 2009.

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