

The Business of Solid Waste Management

Presented to:



The World Bank

Urban Solid Waste Management

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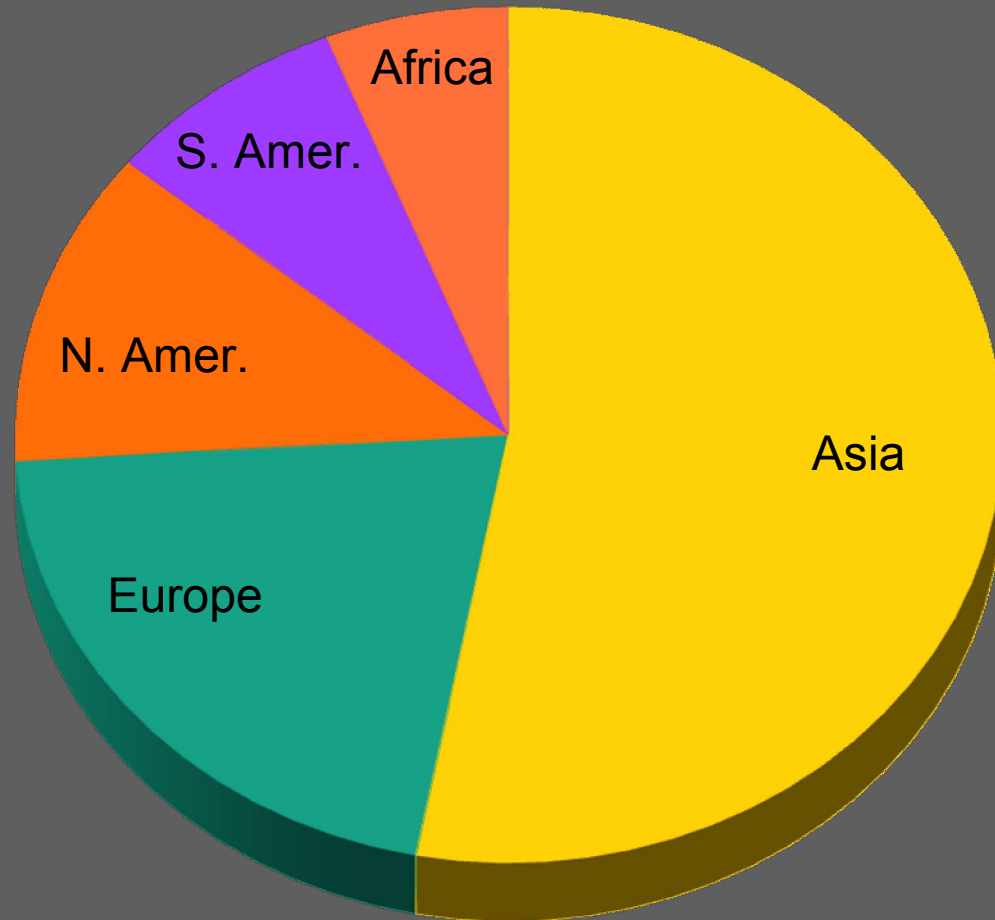
Garbage Bonanza

“Buried in China’s giant trash heaps lies gold for international engineering and waste management companies.”

– BUSINESSWEEK - June 9, 2008

Two billion tonnes of solid waste produced annually

Distribution of 2 Billion Tonne Market



Solid waste is a public responsibility

- Public control does not require public operation
- Operation can be delegated to private firms
- If they can be attracted

Business is local – few think global

- WMI and BFI/Allied have retrenched to the U.S.
- Covanta moves abroad cautiously
- Suez has global presence
- Veolia is global market share leader
- Every country has solid waste entrepreneurs

Waste Management refocused on N. America

- Formed Waste Management International in 1991
- Grew to \$1.9 billion in 1996
- But profits were disappointing
- Management missteps led to high debt
- Began divesting non-U.S. assets in 2000

WMI non-U.S. operations sold piece by piece

Operations	Buyer
Sweden and Australia	SITA (Suez)
Finland	Lassila & Tikanoja
The Netherlands	Shanks
Italy	EMAS and Italcogim
Germany	Cleanaway
UK	Severn Trent
Denmark, Slovakia, and Czech Republic	Marius Pederson
Hong Kong, Mexico, and Brazil	Onyx (Veolia)

SITA (Suez) bought and BFI/Allied sold

- BFI's non-U.S. operations grew to \$1.5 B in 1996
- 80% of revenue came from Germany, the UK, and the Netherlands
- Other operations in Australia, Finland, Hong Kong, Kuwait, New Zealand, Spain, and Switzerland
- BFI sold the operations to SITA in 1998
- And maintained a 20% interest in SITA
- Allied acquired BFI in 1999 and sold that interest

Covanta beginning to expand globally

- Own and operate one W-T-E facility in Italy
- DBO agreement for a W-T-E project in Ireland
- Acquired a 40% stake in Sanfeng in 2007
- Sanfeng has interest in two W-T-E plants in China
- JV with Guangzhou Development to build, own, and operate W-T-E facilities in Guangdong Province

Suez has global presence

Division	Countries Served	SW Revenue (2006)
Europe	Belgium, Czech Republic, Finland, France, Germany, Italy, Luxembourg, The Netherlands, Poland, Slovakia, Spain, Sweden, the UK	\$5 billion
International	Australia, Hong Kong, Macao	?

Veolia ES is global market share leader in SW

- 2007 revenue of \$9.2 billion, 64% outside of France
- European operations: Belgium, Denmark, Germany, Norway, Poland, Romania, the UK
- Asian operations: China, the Philippines, Taiwan
- Other: Australia, Brazil, China, North America, United Arab Emirates

Conditions that attract private firms

- Assurance of adequate waste volumes
- ... or guaranteed minimum operating fees
- Sufficient contract duration to recover investment
- Security of getting paid
- Reasonable risk profile
- Balanced competition, transparency, accountability

What about developing countries?

- Global firms give them scant mention
- Entrepreneurs collect wastes in Ghana
 - geeWaste
 - Liberty Waste Ltd.
 - Salamco Sons
 - TEM Municipal Waste
- They are not making a profit

Scavenging – the oldest form of recycling



A modern waste sorting operation



New business models needed

- Potential market is close to a trillion dollars
- Developing countries are underserved
- As are non-urban areas of growing economies
- No organization – public or private, profit or non-profit – can long survive with an operating loss

Garbage by A. R. Ammons

garbage has to be the poem of our time because

garbage is spiritual, believable enough to get our attention

..... what else deflects us from the

errors of our illusionary ways, not a temptation to trashlessness, that is too far off, and, anyway, unimaginable, unrealistic ...