



Opportunities for Exports of Projects and Engineering Services in South Africa

Project Exports and Consultancy Services : Definitions

Project Exports and Consultancy Services could be defined as an industry that comprises establishments primarily engaged in applying physical laws and principles of engineering in the design, development, and utilization of machines, materials, instruments, structures, processes, and systems. The assignments undertaken by these establishments may involve any of the following activities : provision of advice, preparation of feasibility studies, preparation of preliminary and final plans and designs, provision of technical services during the construction or installation phase, inspection and evaluation of engineering projects, supply of capital goods and industrial manufactures and related services.

The segments and the activities are outlined below :

Segments

- Design services on building and engineering infrastructure projects
- Design services on industrial processes and industrial equipment
- Design services on environmental projects
- Predesign services
- Management on building and engineering infrastructure projects
- Asset management and operation of industrial processes

Activities

- Project design and management services on construction and infrastructure projects
- Project design and management services on environmental projects
- Project design and management services on industrial processes and equipment
- Advice on procurement and funding of projects
- Process management (e.g., assess engineering and product problems)
- Asset management - life cycle asset management, management systems etc.
- Feasibility studies - including environmental impact assessment and community consultation
- Quality management assessment and accreditation
- Procurement of contractors and suppliers
- Administration of contract, and supervision of construction and plant installation
- Supply of capital goods and industrial manufactures

The engineering process outsourcing (EPO) services is considered a part of the consultancy services.



South Africa : Basic Data

South Africa is a middle-income, emerging market with an abundant supply of natural resources; well-developed financial, legal, communications, energy, and transport sectors; a stock exchange that ranks among the 10 largest in the world; and a modern infrastructure supporting an efficient distribution of goods to major urban centers throughout the region. However, growth has not been strong enough to lower South Africa's high unemployment rate, and daunting economic problems remain from the apartheid era - especially poverty and lack of economic empowerment among the disadvantaged groups. South African economic policy is fiscally conservative but pragmatic focusing on targeting inflation and liberalizing trade as means to increase job growth and household income.

Here is a snapshot of the South Africa's economy :

GDP (purchasing power parity)	: \$ 587.5 billion (2006 est.)
GDP (official exchange rate)	: \$ 201.4 billion (2006 est.)
GDP - real growth rate	: 5% (2006 est.)
GDP - per capita (PPP)	: \$ 13,300 (2006 est.)
Inflation rate (consumer prices)	: 5% (2006 est.)
Agriculture - products	: Corn, Wheat, Sugarcane, Fruits, Vegetables; Beef, Poultry, Mutton, Wool, Dairy Products
Industries	: Mining (world's largest producer of Platinum, Gold, Chromium), Automobile Assembly, Metalworking, Machinery, Textiles, Iron and Steel, Chemicals, Fertilizer, Foodstuffs, Commercial Ship repair
Industrial production growth rate	: 7.1% (2006 est.)
Exports	: \$ 59.15 billion f.o.b. (2006 est.)
Exports - commodities	: Gold, Diamonds, Platinum, other Metals and Minerals, Machinery and Equipment
Exports - partners	: Japan 9.9%, UK 9.7%, US 9.5%, Germany 6.5%, Netherlands 4.6% (2005)
Imports	: \$ 61.53 billion f.o.b. (2006 est.)
Imports - commodities	: Machinery and Equipment, Chemicals, Petroleum Products, Scientific Instruments, Foodstuffs
Imports - partners	: Germany 14.2%, China 9.1%, US 7.9%, Japan 6.8%, Canada 6.3%, UK 5.6%, France 4.5%, Iran 4.2% (2005)
Currency (code)	: Rand (ZAR)
Exchange rates	: Rand per US dollar - 6.7649 (2006), 6.3593 (2005), 6.4597 (2004), 7.5648 (2003)
Fiscal year	: 1 April - 31 March

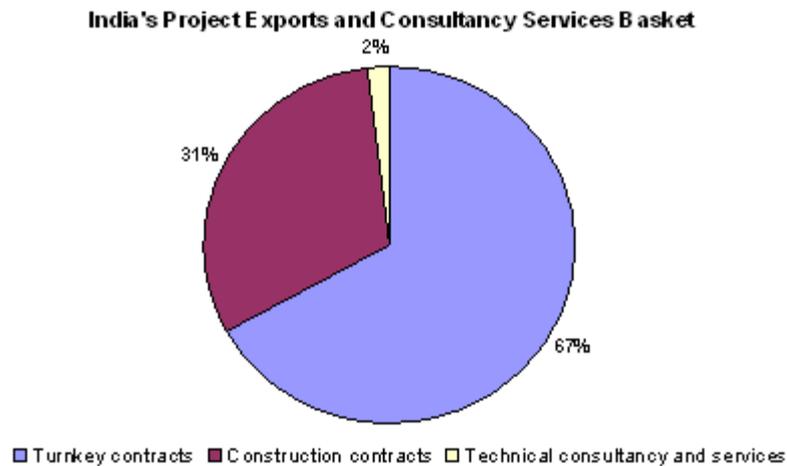
(Source : CIA – The World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/geos/sf.html>)



India as an Exporter of Projects and Consultancy Services

There is hardly any comprehensive database on project exports and consultancy services. However, data provided by Export-Import Bank of India (hereinafter referred to as EXIM Bank) are a good indicator of the Indian expertise in the field.

The following information have been obtained from EXIM Bank's Annual Report 2006-07 which show the recent performance of the sector.



During 2006-07, 57 project export contracts, including consultancy services, valued at around Rs. 14010 crore (a little over USD 3 billion) were secured by the Indian exporters, comprising civil construction, turnkey and consultancy contracts. It consisted of 35 turnkey contracts valued at Rs. 9380 crore (a little over USD 2 billion), 12 construction contracts valued at Rs. 4360 crore (about 0.97 billion) and 10 technical consultancy and services contracts valued at Rs. 270 crore (about USD 60 million).

Some major turnkey contracts secured during the year included :

- Mechanical, erection and plumbing works for City Centre project, Bahrain;
- 2 x 120 MW gas turbine power plant project in Bangladesh;
- 33 kV distribution lines in Ethiopia;
- 500 kV overhead power transmission line in Kazakhstan;
- New Aviation Fuel Depot in Kuwait;
- 33 kV single circuit power transmission line in Nigeria;
- High voltage sub-stations along with modification and cabling work for existing sub-stations and two well head platform decks with associated piping and equipment in Qatar;
- Methanol and carbon monoxide plants in Saudi Arabia; and
- A transmission line contract in the USA.

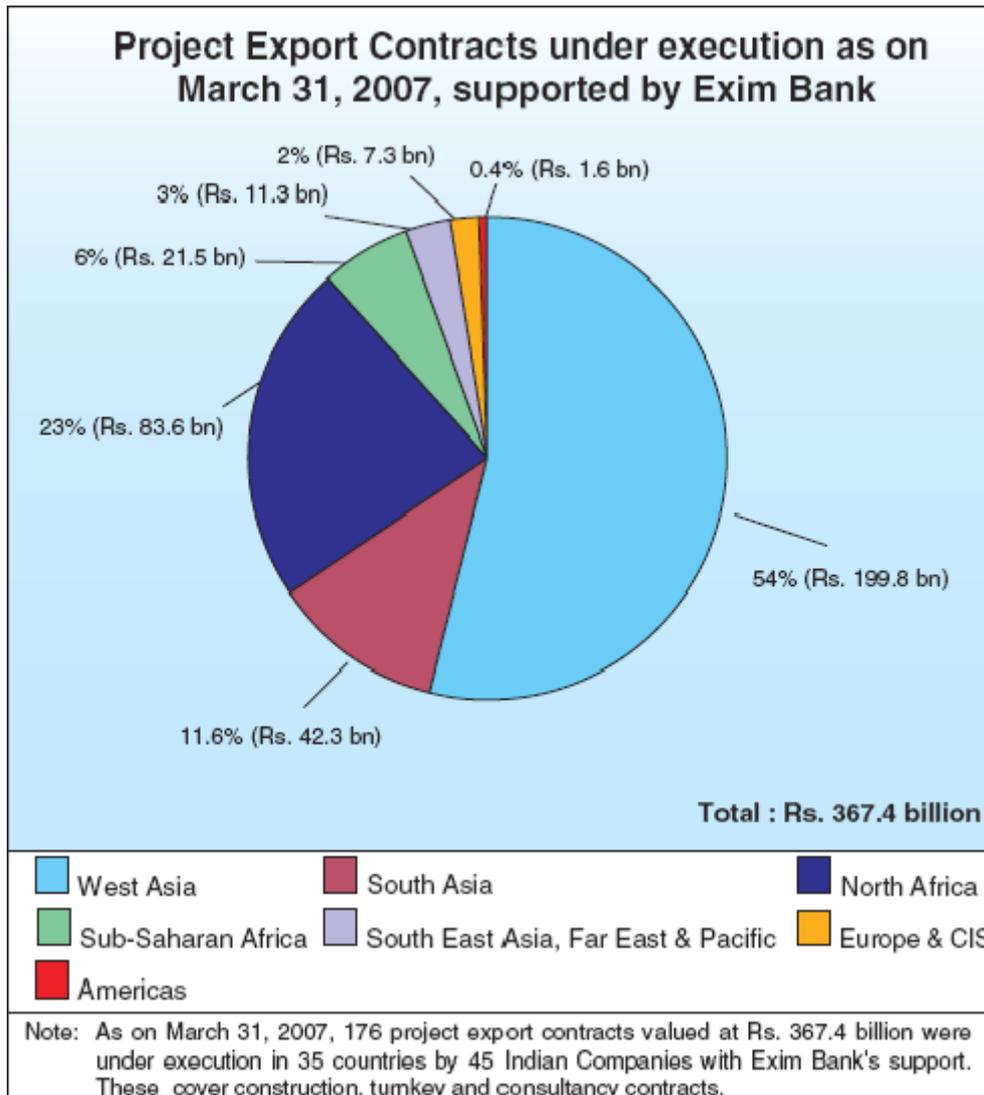
Construction contracts secured included :

- Multiple gas transmission pipeline projects in Libya;
- Dualisation and realignment of road in Oman;
- Luxury Residential Tower and pipeline relocation projects in Qatar; and
- Buildings for Dubai Lagoon Project in UAE.



Some of the major technical consultancy and services contracts included :

- Follow up and quality control activities in Algeria;
- Charter hire of metre gauge diesel locomotives to Malaysia;
- Structural and mechanical erection work for a copper smelter plant in Zambia; and
- Engineering services for a new LPG Dehydration Unit for a refinery in Abu Dhabi.



The total value of projects, funded by EXIM Bank, under execution as on 31st March 2007 was Rs. 36,740 crore (more than USD 8 billion). The geographical regionwise distribution of the same is shown here (graph reproduced from EXIM Bank's Annual Report for the year 2006-07).

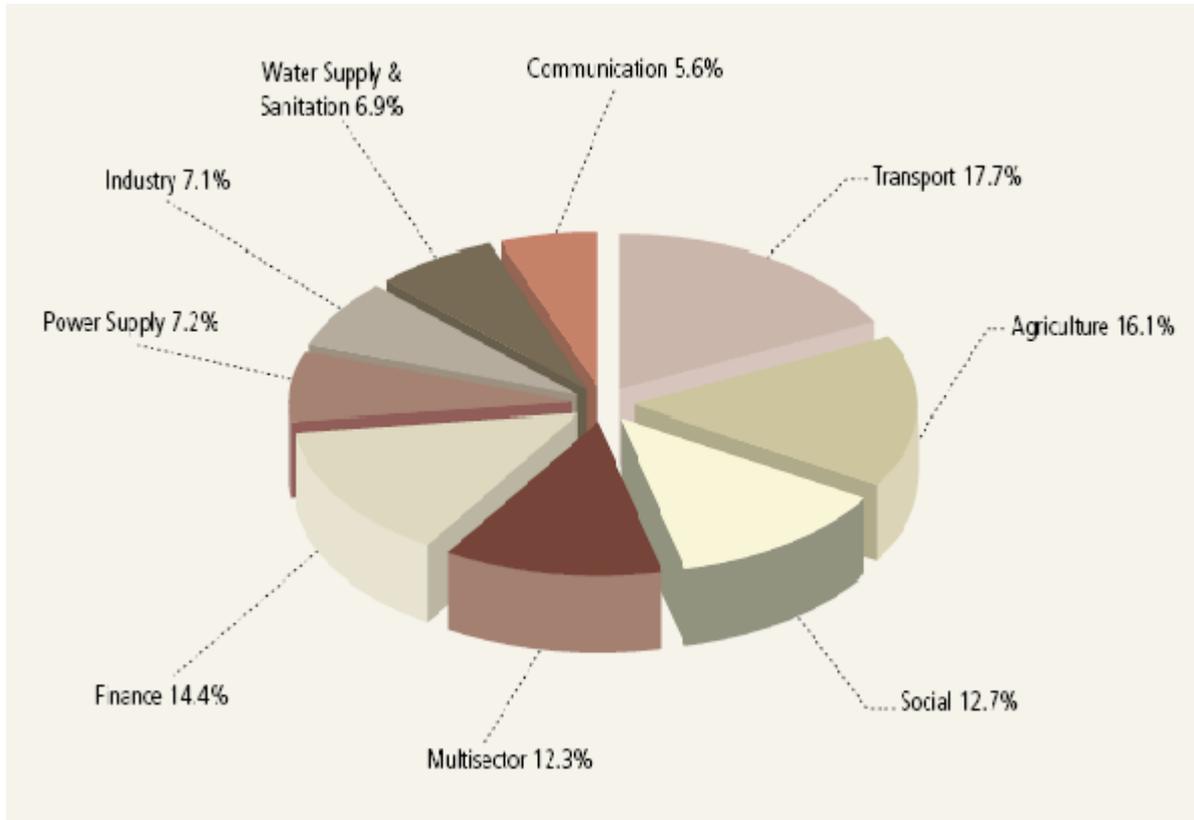
West Asia is the leading destination with 54% of the projects being executed there. This region is followed by North Africa which accounts for 23%. South Asia comes third with 11.6% share.

It can be seen that there is no presence of India in the Southern African Region.

Engineering Projects and Services Market : South Africa

Engineering Projects : Turnkey and Construction

Data are not available for project 'imports' of South Africa. However, one can have an idea of the market from the assistance provided to South Africa by the World Bank and the African Development Bank (AfDB), since almost all the projects in South Africa are funded by these two organizations.



The AfDB, and one of its institutions, the African Development Fund has spent nearly 40% (approximately Unit of Account 914 million) of its sector approvals in 2006 for infrastructure and industry, mining and quarrying of which a substantial share went to Southern Africa.

Southern Africa consists of the following countries :

Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe.

In 2006, AfDB loan and grant approvals to the Southern African region increased substantially to UA 225.1 million, more than 5 times the UA 43.5 million approved in 2005, representing 9.8 percent of total loan and grant approvals in 2006. The trend in cumulative loan and grant approvals by sector from 1967-2006 for Southern Africa is shown in the chart above (sourced from the Annual Report 2006 of AfDB). It can be seen that the share of transport, industry, water supply and sanitation, and power supply projects accounted for nearly 40% of the total loans and grants extended to Southern Africa by AfDB.

It would also be worthwhile to note that South Africa has not taken loans and grants from the AfDB since 1974 till 2006. AfDB-funded project opportunities till 2006, therefore, existed for the other Southern African countries as mentioned above.

The Development Bank of Southern Africa (DBSA) provides support to development initiatives within South Africa and the Southern Africa Development Community (SADC) region. The Bank is primarily concerned with promoting the economic



integration of the SADC economies, enabling individual economies to use internal resources more effectively and the region to become more competitive in the global economy.

The sectorwise disbursement of funds by DBSA in 2005-06, as per their Annual Report, is being given in the following table :

<i>Sectors</i>	<i>South Africa</i>	<i>Other SADC Countries</i>	<i>Total SADC</i>	<i>% share of (3)</i>
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	
Agriculture	496	0	496	2.16
Entrepreneurial, fund and manufacturing	1422	431	1853	8.05
Mining	320	0	320	1.39
Tourism	1031	101	1132	4.92
Communications	1595	1109	2704	11.75
Education – formal, recreational and residence	156	0	156	0.68
Education – non-formal and vocational	5	0	5	0.02
Energy	715	618	1333	5.79
Data, research and information analysis	7	1	8	0.03
Institution building	22	1	23	0.10
Policy	0	0	0	0.00
Residential facilities – formal and non-formal	2632	0	2632	11.44
Roads and drainage	3808	0	3808	16.55
Sanitation	233	0	233	1.01
Social infrastructure	4280	0	4280	18.60
Transportation	219	137	356	1.55
Water	3677	0	3677	15.98
Total	20618	2397	23015	100.00

It can be seen from above that the engineering projects accounted for over 52% of the total grant approved to the SADC Countries. The relevant areas could be mining, energy, residential facilities, roads and drainage, sanitation and water.

As on 31st July 2007, there were six active projects in South Africa funded by the World Bank (International Bank for Reconstruction and Development). These were :

- Renewable energy market transformation
- Durban Landfill Gas-to-Electricity Project
- ZA-C.A.P.E. : Biodiversity Conservation and Sustainable Development Project
- The Greater Addo Elephant National Park Project
- Municipal Financial Management Technical Assistance Project
- Maloti-Drakensberg Transfrontier Conservation and Development Project

About USD 7 million were still to be disbursed on these projects as on 31st July, 2007.



However, according to the Country Partnership Strategy document of World Bank, the priority areas for World Bank engagement till 2010 include :

- Urban development;
- Private sector development;
- Building partnerships for Africa;
- Social protection;
- Land reform and agriculture; and
- Public sector service delivery.

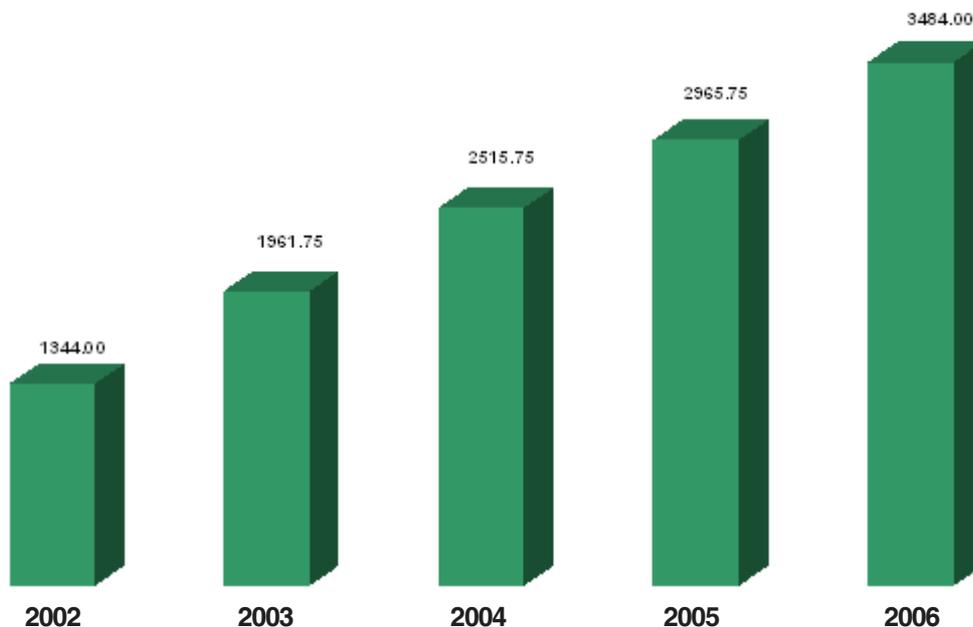
Engineering Services including EPO

The World Trade Organisation (WTO) classifies services into three broad categories, viz, transportation, travel and other commercial services excluding travel and transportation. Engineering services fall in the third category. However, no data were reported for engineering services separately.

EU happens to be the largest supplier of commercial services to South Africa (source : Staff Working Paper of WTO Economic Research and Statistics Division). Nearly half of total imports of commercial services by South Africa is originated in the EU. It can be seen from the Eurostat data quoted in the said working paper that about 25% of the commercial services imports represents construction and other business services.

The import data have therefore been derived for South Africa from the data on commercial services obtained from the Online Statistical Database of WTO. The import trend is being shown in the graph below :

Import of Construction and Other Business Services by South Africa (USD mn)



Imports of construction and other business services by South Africa rose to USD 3.5 billion in 2006. The imports are showing a steady increase over the last five years.



The Opportunities

The opportunities for the Indian exporters are given below :

Power market

South Africa's rapid economic growth in recent years has resulted in electricity demand rising faster than planners had anticipated : peak period consumption has risen by an estimated 15 percent over the past decade. That rapid increase has narrowed the gap between total electricity demand and the available supply. Eskom, the state power company, has accelerated its capacity expansion programme in line with the South African Government's drive to boost economic growth to six percent by 2010. It is estimated that this will result in average growth in demand of 4.4 percent per annum, requiring approximately 47,252 megawatts (MW) of new capacity – more than double the total existing capacity – to satisfy new demand to be built between 2005 and 2025, or roughly 2,000 MW per annum. The AfDB has already sanctioned USD 500 million, the biggest loan ever through its Africa Development Fund to for this purpose. Eskom estimates that up to \$ 16 billion will be spent on new infrastructure for transmission and power generation projects in South Africa within the next five years.

Products and services with immediate need or potential in South Africa include :

- Construction of new Power Stations,
- Pebble Bed Modular Reactor (PBMR),
- Electricity Network Upgrade,
- Refurbishment of Turbines and related Equipment,
- Transmission and Distribution Equipment,
- New Plant Equipment and Related Systems, and
- Systems Control Equipment.

Construction Industry

The South African construction industry has been among the key drivers of South Africa's post-apartheid reconstruction effort. Industry analysts forecast an average growth rate of 8.8 percent over 2006-2010 and is likely to develop from an estimated \$ 5.26 bn in 2005 to just less than \$ 9 bn by 2010, thus raising its contribution to the GDP from 2.72 percent in 2005 to 3.37 percent in 2010.

South Africa intends to invest about \$ 27.24 bn over the next five years to build, as well as to enhance existing infrastructure. State-owned transport group Transnet will spend \$ 9.51 bn on upgrading ports, railroads and pipelines over the next five years. The South African Government has earmarked an additional \$ 920 million to improve public transportation infrastructure, and deadlines for many major projects are being driven by the forthcoming 2010 FIFA Soccer World Cup.

Port Construction and Related Works

Major construction projects include the Durban harbour extensions and the Ushaka complex in KwaZulu Natal. The Government has placed particular emphasis on upgrading port facilities within the country. The Coega Industrial Development Zone and the deepwater port of Ngquru in the Eastern Cape have funding commitments of approximately \$ 1.2 bn for their development and expansion. The container terminal at the new Coega port would cost \$ 404 mn while a further \$ 217 mn would be directed to expand the Cape Town container terminal.

South African Port Operations is also embarking on a project to expand and refurbish the iron ore terminal at the Port of Saldanha to increase the export throughput tonnage. The project is divided into three phases and has a capital cost of \$ 155 mn. Richards Bay, the world's second-largest coal export port is spending \$ 195 mn to expand annual capacity by 26 percent to 91 million tons by mid 2009. This project is the result of the increase in demand for South African coal exports.



Railway Construction

The Gautrain project, in Gauteng province, is one of the biggest single items in the \$ 62 billion infrastructure spending allocation over the next three years, which is part of the South African Government's Accelerated and Shared Growth Initiative. This modern state-of-the-art rail connection will link Sandton, Johannesburg, Pretoria and the O.R. Tambo International Airport. The network, which will consist of approximately 80 km of railway line and which may be extended in the future, will be made up of two links : one between Pretoria and Johannesburg for daily commuters and another from OTIA to Sandton for business and tourists. Gautrain Rapid Link is estimated to cost over \$ 3.3 billion. The Bombela consortium was chosen as the preferred bidder and completion of this project is expected to be early in 2010.

Transnet recently announced a \$ 5.8 billion, five-year locomotive-acquisition programme for Spoornet's rejuvenation and expansion programme and the coal corridor from Mpumalanga to Kwa Zulu Natal. In addition to this, Transnet also has plans to upgrade the Sishen-Saldanha iron-ore line from the current 29-million-tons-a-year to 41-million tons by 2009-10. The expansion is necessary to cope with envisaged expansion by iron-ore miners Kumba Resources and Assmang.

The rail-upgrade plans include an increase in rolling stock, as well as improvement to the rail infrastructure. At the Saldanha port, meanwhile, South African Port Operations in 2005-06 plans to commission an additional rail-wagon tippler, stockyard and stacker/reclaimer, and replace ship loaders and stacker/reclaimers.

Construction of Hotels

Tourism-related construction activity is currently buoyant in South Africa. There are many joint ventures between foreign and South African investment companies to develop hotels in South Africa. One such joint venture is the partnership between Indian Hotels Company Limited (India) and Eurocape to develop the "Mandela Rhodes Place" at cost of \$ 21.6 mn in Cape Town. Other notable projects include Tusk Rio Hotel in Klerksdorp (\$ 15.6 mn), and the revamping of the Gold Reef City Casino and Hotel (\$ 32.71 mn). More such initiatives are expected in near future.

Renewable Energy

Although 9 percent of South Africa's energy comes from renewable sources, much of this is through the burning of wood-fuel in individual households. In an attempt to integrate renewable energy into the country's conventional energy mix, the Department of Minerals and Energy has set a target that the share of renewable energy in the country's final energy consumption should be 10,000 GWh (Gigawatt Hours) by 2013. This is approximately 4 percent or 1,667 MW of the projected energy demand of 41,539 MW for 2013, in addition to the existing renewable energy contribution.

Wind and solar thermal energy are currently heading the list in South Africa as having the most potential to be linked to the national grid and there is much potential for non-grid renewable power applications, which can be used to ensure access to power in remote rural areas. Energy studies identify solar energy as the most readily accessible renewable energy resource available in South Africa.

The State-owned Central Energy Fund has established the Energy Development Corporation, whose mandate is to investigate opportunities in the field of renewable energy and prepare business cases for viable initiatives. The Department of Minerals and Energy (DME) established the Renewable Energy Finance and Subsidy Office (REFSO) to manage renewable energy subsidies and offer advice to developers and other stakeholders on renewable energy finance and subsidies.



The Big Challenge

The biggest challenge to the Indian exporters is the Cotonou Partnership Agreement (CPA) between the European Union (EU) and African, Caribbean and Pacific (ACP) countries. The huge share of the European countries (particularly EU 15) in import of services by South Africa, or for that matter other service importing countries of Africa is a result of this Agreement.

Links

Indian High Commission in Pretoria	: india.org.za
Consulate General of India, Durban	: www.indcondurban.co.za
Consulate General of India, Johannesburg	: www.indconjoburg.co.za
South African Customs Tariff	: www.rapidttp.co.za/tariff/index.html
Statistics South Africa	: www.statssa.gov.za
Construction Industry Development Board (CIDB)	: www.cidb.org.za
South African Association of Consulting Engineering (SAACE)	: www.saace.co.za
South African Construction Industry	: www.ci-net.co.za
South African Institute of Civil Engineering (SAICE)	: www.civils.org.za
National Federated Chamber of Commerce (NAFCOC)	: www.nafcoc.org.za
South African Chamber of Business (SACOB)	: www.sacob.co.za
State Tender Board	: www.treasury.gov.za
Johannesburg Chamber of Commerce and Industry	: www.jcci.co.za
Department of Trade Industry (DTI)	: www.thedti.gov.za
Trade and Investment South Africa (TISA)	: www.tisaglobal.com
Gauteng Economic Development Agency (GEDA)	: www.geda.co.za
Durban Investment Promotion Agency (DIPA)	: www.dipa.co.za
Wesgro	: www.wesgro.org.za
Trade and Investment KwaZulu Natal	: www.tikza.co.za
Mpumalanga Investment Initiative	: www.mil.co.za
Invest North West	: www.inw.org.za
Development Bank of South Africa (DBSA)	: www.dbsa.org
National Economic Development & Labour Council (NEDLAC)	: www.nedlac.org.za
South African Revenue Services (SARS)	: www.sars.gov.za
South African Bureau of Standards (SABS)	: www.sabs.co.za
South African Law Commission	: www.doj.gov.za/salrc/index.htm
List of attorneys in South Africa	: www.attorneys.co.za
Telkom	: www.telkom.co.za
Department of Transport (DOT)	: www.transport.gov.za
Transnet	: www.transnet.co.za
Airports Company South Africa (ACSA)	: www.airports.co.za

(Source : EEPC)