Integration of Petroleum Up- and Downstream to Promote Economic Development of Host Countries

By

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.
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China National Petroleum Corporation (CNPC) is an integrated international energy company, with businesses covering oil and gas operations, oilfield services, engineering and construction, equipment manufacturing, financial services and new energy development.
We strive for harmonious relationships between:

- Operation and Safety
- Energy and the Environment
- Corporate and Community Interests
- Employers and Employees
Financial Highlights in 2014

- **1st**: largest oil and gas producer in China
- **3rd**: largest oil company in the world in 2015
- **4th**: among Fortune Global 500 in 2014

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<th>Total assets</th>
<th>Operating income</th>
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<td>643.6 billion USD</td>
<td>446.1 billion USD</td>
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CNPC’s overseas investment started from 1993, now we have 93 oil and gas assets and interests in 37 countries.
CNPC has strong comprehensive and integrated capacities for oilfield services, engineering & construction, and equipment manufacturing.

- More than 1,000 crews for geophysical prospecting, well drilling, well logging and mud logging in 63 countries.
- Largest onshore geophysical prospecting services in the international market.
- World’s renowned engineering construction contractor.
- Petroleum materials and equipment sold in 80 countries.
CNPC In Sub-Saharan: Running 19 projects in 7 countries...

- 12 upstream projects with 1 in deep water and 7 downstream
- Among them 3 integrated projects: Sudan, Chad and Niger.
- One of the important cooperation regions in the world.
Challenges In Sub-Sahara

- Long-distance/hinterland transportation, hot weather, poor infrastructures, high cost, currency devaluation, and security, etc.

- Some countries have to import fuels for economic development, although they have oil reserves, production, or exploration potential.

- Refineries are generally not good profitable projects in the whole petroleum industry chain, especially for small-size.
CNPC In Sudan

**Block 1/2/4N:**
- CNPC 40%
- Capacity: 57 K BOPD

**Block 6:**
- CNPC 95%
- Capacity: 54K BOPD

**PDOC:**
- CNPC 16.4%
- Sudapet 60%
- Capacity: 300k barrels/d

**Khartoum Refinery**
- CNPC 40%
- Capacity: 57 K BOPD
- Capacity: 35 million barrels/y

**Khartoum Petrochemical**
- CNPCI 95%
- SPC 5%
- Capacity: 20k tons/y
- Polypropylene

**Petrochemical Trade**
- CNPC 100%
- Capacity: sale 100k cubic meters/y
Khartoum Refinery (KRC)

• A comprehensive platform to display the technical and management advantage as the first oversea refinery of CNPC.


• Capacity increased to 35 million barrels per year after the second-stage expansion.

• Promoted petrochemical development.
Oil/fuel Self-independence

Sudan Oil Consumption and Production

Sources: U.S. Energy Information Administration (EIA)

Refined Oil Market Shares
CNPCI in Chad

- Upstream — Permit H

- CNPC acquired 100% interests of permit H on December 8, 2006.

- A number of oil fields have been found in the Bongor Basin. 4 fields have been put into production with daily production of 56,000 barrels.

- Besides oil supplied to Refinery, about 36,000 barrels per day are export to international market through Chad-Cameroon Pipeline.

- New Discovery: Precambrian fractured granitic basement has been confirmed as a good reservoir with high production.
### CNPCI in Chad

- **Downstream — N’Djamena Refinery**
  - N’Djamena Refinery has been put into production on June 29, 2011.
  - The processing capacity stands 20,000 barrels per day.
  - CNPC’s share in N’Djamena Refinery is 60%, SHT 40%.
  - Electric power transmitted to N’Djamena
CNPCI in Chad

Oil Produced Vs Processed in Chad

- Produced
- Processed

- Pre-Refinery
- After-Refinery

Gasoline price
46%

Diesel price
31.6%
For Chadian people, today is a historic day. We win the battle of energy independence. This benefited from the cooperation with China. Well done, CNPC! Long live cooperation of Chad-China!

**Idriss Deby**, President of Chad
June 29, 2011
CNPC in Niger

- **Upstream**
  - CNPC Operates three Blocks in Niger, i.e. Agadem (65% share), Tenere (100% share) and Bilma (100% share);
  - New oil fields were discovered in Agadem Block and put into production in November 2011 to feed Zinder Refinery through 463 km pipeline.
In November, 2011, the Zinder Refinery was put into production.

The processing capacity stands 20,000 barrels per day.

CNPC’s share is 60%, Niger Government 40%.

Niger is not only an oil-producing country, but will be an exporter soon.
CNPC in Niger

**Oil Produced Vs Processed in Niger**

- **Pre-Refinery**
- **After-Refinery**

**Gasoline Price**
- **20.5%**

**Diesel Price**
- **17.9%**
I’m very glad to inspect the oilfield facilities operated by CNPCI (Niger) which is the symbol of the successful cooperation between Niger and China. Please all the Nigerian and Chinese employees receive my congratulation and greeting.

*Mahamadou Issoufou*, President of Niger,

October 23, 2015.
Increasing Gov. Revenues and Accelerating Economy Growth

Oil Rents of Sudan (% of GDP)

Oil rents are the difference between the value of crude oil production at world prices and total costs of production.
Sources: World Bank, 2015
Community Development

We are committed to sharing our business achievements and development opportunities with local communities, and attach great importance to activities promoting public welfare and social progress.
Supporting Education

We aim to boost local development capabilities by providing funds and support for education.
Human Capital Development

Upholding the people-oriented concept, we protect employees’ legal rights and interests, build platform for employees development, and promote employee localization and diversification.
Environmental protection

We regard providing clean energy, minimizing environmental impact and reducing emissions as the strategic foundation for the Company’s sustainable development.
We pleased to receive our Brother Hu to come and visit KRC which is a witness for the relationship and cooperation between Sudan and China, which has set an alive example for the successful South-South Cooperation that will benefit all the parties.

_Omer Al Bashir_, President of Sudan

February 2, 2007
China’s “One belt and One Road” strategic initiative will promote new breakthroughs of the energy cooperation in Africa. CNPC will endeavor to be an outstanding corporate citizen with better profitability, greater brand influence, and higher inspiration, to make more contributions to boost the economic development of the host countries, create a more splendid and brilliant tomorrow together with the local people and co-partners in a win-win basis.
Thanks