

CHINA'S QUEST FOR ENERGY AND THE SEA POWER CONFLICT: AT THE NEXUS OF ENERGY ECONOMICS AND GEOPOLITICS

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Overview

China is the single biggest energy consumer in the world and will account for a large share of energy demand growth over the coming decades. After providing an overview of China's energy sector and China's strategic goals, this paper analyzes recent developments in China's oil and gas sector and their implications for security of oil and gas supplies, as well as their effects on international energy markets and international relations. Furthermore, the paper analyzes the steps that have been taken so far to accomplish the energy transition that is needed as China transitions from an economy driven by exports to an economy driven by domestic consumption. Energy supply security is analyzed through the lens of geopolitics to clarify and categorize the major issues related to an economic system in transition.

China's strategic priorities include:

- Transitioning from an export driven to a consumption driven economic system
- Securing waters that host potentially hostile countries
- Implementing a credible naval force that in the medium- or long-term could compete with the US Navy
- Implementing a logistic chain spanning from China's shores to the Mediterranean Sea passing through the Indian Ocean

These geopolitical objectives are consistent with the vital needs to guarantee energy supply security but at same time they lead to higher energy consumption and huge investments in a country that is already heavily indebted. According to International Monetary Fund estimates China's non-financial sector debt has reached 242% of GDP in 2016 and is forecasted to reach about 300% of GDP by 2022.

China has to identify and follow a consistent transition to reduce carbon energy sources (coal and hydrocarbons) in favor of renewables and nuclear. The paper will investigate the actions that policy makers are taking to achieve such an ambitious, considering the quantitative dimension, task. In fact, to substantially reduce the share of coal in energy consumption also has an important social dimension. The latter is an additional challenge for a country that already has several geopolitical, social and thus politically critical issues to solve.

To transition to a more sustainable growth pattern, China's government needs to shift its economic growth strategy by relying less on investment as the major driver for economic growth and more on consumption. Achieving such goal however, requires a speedier implementation of a number of reforms, such as market-, tax-, and social reforms. Furthermore, this transition is also in conflict with China's strategic priorities, which require substantial investments which will in turn contribute to a further rise in its public debt.

This paper therefore attempts to answer the following question:

Are the mentioned priorities compatible with the actual energy affordability of China?

The paper is structured as follows:

1. Introduction

Energy security, how is China approaching this question, developments in the oil and gas sectors. Are market structures conducive to energy security? Domestic pricing policies? Import policies?

2. China's energy profile and its 13th Five Year Plan

3. Oil and gas demand, supply, trade/import dependency

4. Domestic market developments and pricing: the role of coal

5. Implications of recent developments for international energy markets and relations

6. China's geopolitical context and the impact on national energy policies

7. New energy policies for a transition to de-carbonization and national socio-political conditions: the difficult compromise
8. The role of renewables and the transition from a “producing” to a “consuming” economy
9. A wider conceptualization of “security of supply”: from conventional to renewable energy options
10. Conclusions

Methods

The paper relies on both quantitative and qualitative analysis.

Data analysis related to energy demand and supply, the energy balance, energy prices, and other variables is performed.

Domestic and international (contract) pricing is analyzed.

Results

Preliminary results show that China faces enormous challenges in reconciling mutually conflicting goals.

Conclusions

The paper focuses on the “security of supply concept” for the world’s biggest energy consumer. China is a major player on the world scene due to its demographic, economic, energy-economic, and geopolitical importance. China faces enormous challenges in reconciling mutually conflicting goals:

- For example, China’s economic transition from export oriented to consumption driven is colliding with the geopolitical imperative to preserve the country’s unity.
- The need to satisfy energy consumption growth is in contrast with the de-carbonization process, if, for socio-economic reasons, the role of coal should stay prominent.
- Reforming energy pricing policies is crucial in order to have a consistent framework where actors can find their role to achieve demand side management-, and the security of supply goals.
- The dimension of investments in energy supply and the strategic investments in the military deterrent budget (especially for its navy) can hardly live together with the giant public debt.

All these issues point to several questions that need to be investigated in order to have a clearer vision of which direction China will take to comply with all major goals fixed by this unique “Socialist Market Economy”.