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The 'Hormuz Shock,' China's 15th FYP, and Guangdong's Energy Dilemma

Dominik Mierzejewski

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This issue brief examines how the Middle East conflict, particularly the disruption of energy flows through the Strait of Hormuz, reinforces the strategic logic underpinning China's 15th Five-Year Plan (2026–2030). Contrary to analyses that focus primarily on great-power competition or China's diplomatic posture, the brief argues that the crisis highlights a fundamental challenge for China's technological modernization agenda: the dependence of advanced industrial development on secure and affordable energy supplies. Beijing has responded by strengthening energy security through a combination of domestic fossil-fuel production, renewable-energy expansion, strategic reserves, grid modernization, and regional power-market integration. Particular attention is paid to Guangdong and Southern China, where dependence on imported LNG exposes key centers of advanced manufacturing to external shocks. The brief concludes that the "Hormuz shock" accelerates China's pursuit of energy self-reliance and elevates interprovincial electricity coordination into a central national-security priority.

The war in the Middle East is mainly seen through the lens of power competition and China's future engagement in the region. Nothing could be further from the truth. More fundamentally, it affects China's 15th Five-Year Plan (FYP) by confirming its central assumption: technological modernization now depends as much on stable energy sources as on technological capabilities themselves. The 15th FYP already describes the international environment as one in which great-power rivalry, geopolitical conflicts, protectionism, deficits in global governance, and external uncertainty increasingly affect domestic development.[1] This is exactly the kind of risk represented by the U.S.–Israeli attack on Iran and the disruption around the Strait of Hormuz. The Strait of Hormuz is a major global chokepoint: according to UNCTAD, it carries around **one-**

quarter of global seaborne oil trade and significant LNG volumes, and the disruption has pushed up oil, transport, insurance and broader supply-chain costs. The plan, therefore, should be read not only as an industrial development document but also as a national security strategy:[2] China wants technological self-reliance, but this requires energy self-reliance, grid resilience, domestic reserves, and control over strategic supply chains.

China's Central Government Reaction and 15th FYP

China's formal diplomatic response was predictable: Beijing condemned the U.S.–Israeli strikes, called them a violation of Iranian sovereignty, and urged an immediate end to military operations. Later, the Foreign Ministry directly linked the disruption in the Strait of Hormuz to the U.S.–Israel operation and warned that the crisis could damage the global economy and energy security.[3]

But the more important reaction is not diplomatic. It is domestic and structural: China has used the crisis to justify a stronger push for energy security within the 15th FYP framework. On March 23, 2026, the National Development and Reform Commission (NDRC) introduced temporary control measures to mitigate the domestic impact of abnormal increases in international oil prices.[4] Domestic gasoline and diesel prices were raised by RMB 1,160 and RMB 1,115 per ton, respectively. The NDRC also ordered CNPC, Sinopec, CNOOC and other refiners to organize production and transport, guarantee a stable supply, and strictly implement the state price policy. In addition, China reportedly restricted refined-fuel exports, ordering an immediate ban on exports of gasoline, diesel, and aviation fuel to pre-empt a possible domestic fuel shortage caused by the US-Israeli war on Iran. The reported ban applied to cargoes not yet cleared by March 11, except for aviation bunkering fuel.[5]

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Apart from the NDRC regulations, the National Energy Administration presented China's response as a comprehensive energy security initiative.[6] By the end of March 2026, China's renewable-energy installed capacity reached 2.395 billion kilowatts, up 22 percent year-on-year, accounting for about 60.4 percent of the country's total installed capacity. China had strengthened domestic oil and gas exploration, kept crude output above 200 million tons per year, expanded long-distance oil and gas pipelines to more than 200,000 km, increased LNG receiving capacity to over 120 million tons per year, and built oil and gas trade with nearly 50 countries. Between January and March 2026, China's crude output reached 54.8 million tons, up 1.3 percent year on year; crude imports reached 146.83 million tons, up 8.9 percent; and crude processing reached an estimated 181.7 million tons, up 3.1 percent. Coal, however, remained a backstop. But here too the situation was not entirely stable. International coal prices rose sharply due to the developments in the Middle East. Still, China's

domestic coal market remained broadly stable: raw coal output in the first quarter reached 1.2 billion tons, power-plant coal stocks reached 190 million tons, enough for 32 days, and the market showed "slight price increases, sufficient inventories, and stable supply-demand."

Facing the "Hormuz shock", however, the vulnerability is clear. In 2025, China officially imported around 42 percent of its crude oil from Middle Eastern suppliers.[7] China also imported around 31 percent of its LNG from the Middle East, with Qatar as the dominant supplier. Columbia University's Centre on Global Energy Policy notes that around half of China's oil imports and nearly one-third of its LNG imports transit the Strait of Hormuz, making the conflict a direct threat to China's energy security.

For the 15th FYP, this creates a basic contradiction. China wants to accelerate AI, semiconductors, EVs, robotics, new materials, advanced manufacturing, digital infrastructure, and data centers.[8] But all of these sectors require stable and affordable electricity. A war that raises oil prices, disrupts LNG supply, increases shipping insurance costs, and creates uncertainty in energy markets threatens not only China's import bill but also the operating conditions necessary for its industrial upgrading strategy.

The 15th FYP gives this logic a formal policy framework. It sets the goal of building a clean, low-carbon, secure, and efficient new energy system and calls for the "safe, reliable and orderly replacement" of fossil fuels with non-fossil fuels. It highlights wind, solar, hydropower, nuclear power, offshore wind, coastal nuclear power, distributed energy, green hydrogen, green ammonia, green methanol, solar thermal power, geothermal energy, pumped storage, new energy storage, smart grids, and a national unified electricity market.

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At the same time, the plan does not abandon fossil energy. It explicitly says China must strengthen the energy production, supply, storage, and distribution system; keep crude oil production at around 200 million tons per year; steadily increase natural gas production; strengthen coal-to-oil and coal-to-gas capacity and technology reserves; expand national petroleum reserves; improve gas-storage capacity; increase coal reserves; strengthen medium- and long-term energy contracts, and improve emergency dispatch and backup power capabilities. This is the central point: China's energy self-reliance is not simply a decarbonization strategy. It is a mixed approach combining domestic fossil-fuel backup, non-fossil-fuel expansion, reserves, electrification, and grid coordination. The 15th FYP's target of reaching 58 billion tons of standard coal equivalent in comprehensive energy production

capacity by 2030 turns energy production itself into a national security indicator.[9]

Why are Guangdong and Southern China Especially Exposed?

The most direct pressure, however, falls on Southern China, particularly on Guangdong, China's "one step ahead" province.[10] Apart from being deeply integrated into the global economy, Guangdong has one of China's largest gas-fired power fleets and is home to around one-fifth of China's gas import facilities.[11] After the Hormuz disruption, LNG deliveries to Guangdong reportedly fell by nearly 40 percent compared with the same period in 2025, while gas became more than 60 percent more expensive than renewable sources.[12] Gas-fired power accounted for around 22 percent of the province's generating capacity. This is why even a limited disruption in LNG supplies can affect the marginal price of electricity in Guangdong's marketized power system.

Interestingly, the "Hormuz shock" would not have produced such strong effects without local seasonal pressures. Southern China was already entering a difficult transition from the dry season to the wet season.[13] Several provinces entered summer around 20 days earlier than the previous year, the regional peak load rose to 235 million kW, and April electricity consumption across the southern region increased 14 percent year-on-year. At the same time, hydropower output fell by 23 percent from March levels; solar output in Guangdong fell by around 20 percent, and around 18 million kW of generating capacity was under maintenance. Yunnan and Guizhou rely much more on hydropower and domestic energy resources, while Guangdong is more exposed to imported fuels, especially LNG and imported coal-price spillovers.

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This also matters politically because Guangdong, home to Tencent, Huawei, and BYD, is not an ordinary province within the logic of the 15th FYP. It is part of the Greater Bay Area and a core hub for China's advanced manufacturing, innovation, exports, AI-related data infrastructure, electronics, batteries, EVs, and robotics. Moreover, Guangdong's electricity consumption rose 7.6 percent in the first quarter, partly because of industrial recovery and the growth of AI-related data centers. The energy shock has hit the exact region most critical to China's technological modernization agenda.

Needless to say, Guangdong's electricity demand is structurally very high due to its concentration of manufacturing, ports, export industries, urbanization, air-conditioning demand, and increasingly data centers and other new industrial loads.[14] It cannot rely only on its own generation capacity, so it depends on large-scale interprovincial electricity inflows, including electricity from Yunnan, Guizhou, and other regions. Yunnan's role is different. It is a major hydropower and clean-energy base, but its ability to export cheap power depends heavily on rainfall and seasonal water flows. This means Yunnan is not simply a passive electricity supplier. In dry

periods, its export capacity weakens, and its bargaining position vis-à-vis receiving provinces like Guangdong can strengthen.

The blockade has increased the strategic value of electricity imported from inland and neighboring systems. If LNG-fired generation becomes more expensive, Guangdong will have a stronger need to buy hydropower and renewable electricity from Yunnan, Guizhou, and Guangxi, and even from cross-border sources such as Laos. The '21st Century Economy' report notes that Southern China increased cross-grid and cross-border transactions, including power from Laos via the China–Laos 500 kV interconnection, and that additional Lao hydropower was expected to support Guangdong from June 2026 onward.[15] Moreover, Guangdong's real-time generation-side price rose from 247 yuan/MWh to as high as 978 yuan/MWh, while electricity prices repeatedly approached one yuan/kWh in April. As reported by *The Straits Times*, Guangdong spot rates climbed to nearly 680 yuan/MWh on 14 April from around 350 yuan/MWh in March, linking the shock to tighter gas supply and Guangdong's large gas-fired fleet.[16]

To mitigate future disruption in Southern China, the most important institutional response is the strengthening of the Southern Regional Power Market. This market covers Guangdong, Guangxi, Yunnan, Guizhou, and Hainan.[17] The National Energy Administration describes it as China's first continuously operating regional power market, with more than 220,000 registered market participants, including coal, nuclear, gas, hydropower, renewables, electricity retailers, and end users.[18] It is also described as the first spot market to break through provincial administrative boundaries and enable the unified, multi-province allocation of electricity resources.

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It is also important to note that the South China regional cross-provincial trading rules state that, for outward transmission transactions, the seller can be either the sending-province grid company or point-to-grid plants while the buyer is the receiving-province grid company. Transmission entities participate in the negotiation and confirmation process. The seller and buyer independently negotiate and report transaction volumes, prices, and load curves to the trading platform, while Guangzhou Power Exchange clears the transaction.[19]

The price Guangdong effectively pays is not just the Yunnan generation price. The rules define the receiving-province landed price as including the generation/sending-side transaction price, Yunnan outward-transmission price, cross-provincial transmission price, and transmission losses.[20] Cross-provincial transmission tariffs and government surcharges are set by state rules rather than bargained freely. The Yunnan–Guangdong electricity price is set through a hybrid mechanism: framework volumes are determined by interprovincial government agreements under

national coordination, while market-based volumes are negotiated among power companies, grid firms, users, and electricity retailers through the Guangzhou Power Exchange.[21]

This is crucial for Guangdong. If imported LNG becomes expensive or uncertain, Guangdong will need more electricity from within China. Yunnan's hydropower, the generation capacity of Guizhou and Guangxi, and the broader West-to-East electricity transmission system therefore become more important.[22] In this sense, the Southern Regional Power Market is also a security mechanism for the Greater Bay Area. If well coordinated, it will allow Guangdong to rely more heavily on domestic electricity flows rather than imported LNG.

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Nevertheless, this also creates a political-economy problem. Yunnan, Guangxi, and Guizhou are not passive energy suppliers. They also want to use their electricity resources to attract data centers, green aluminum, battery materials, chemicals, advanced materials and other energy-intensive industries. The Middle East war, therefore, strengthens Guangdong's need for western China's electricity, but it may also increase the bargaining power for energy-rich provinces. During the 15th FYP period, energy is likely will become one of the key fields where China must manage inter-provincial coordination and competition.

Conclusions: Path to Self-Reliance

The Middle East war does not fundamentally reshape China's 15th FYP energy security agenda, but it does make that agenda more urgent. It shows that China's technological transformation is vulnerable not only to semiconductor sanctions or export controls, but also to oil, LNG, shipping and power-market shocks. For Southern China, especially Guangdong and the Pearl River Delta, the problem is particularly acute because the region combines industrial ambition with high energy demand and significant exposure to imported LNG.

In this regard, Beijing's response extends well beyond diplomacy. The measures being pursued through central and local policy cycles are practical and structural: building reserves, limiting gas use when necessary, replenishing coal stocks, accelerating nuclear and renewables deployment, strengthening domestic oil and gas output, expanding storage, improving emergency dispatch mechanisms, and deepening regional electricity markets. The long-term result is likely to be a more robust version of energy self-reliance.

In other words, the "Hormuz shock" strengthens China's self-reliance strategy in five important ways.

First, it reinforces the idea that external energy routes are strategic vulnerabilities. China can no longer assume that oil and LNG from the Gulf will remain cheap, stable, and politically neutral.

Second, it strengthens the argument for expanding domestic oil and gas production, even where these resources are more expensive or technically difficult. The 15th FYP's emphasis on oil output, gas production, coal-to-oil/gas technology reserves, petroleum reserves and gas-storage capacity should be read in this context.

Third, it accelerates the shift from imported fossil fuels to domestically generated electricity. The electrification of transport, industry, logistics, and heating reduces the dependence on imported oil and LNG. This is why EVs, renewable power, nuclear power, storage, smart grids and green hydrogen are not only climate policies; they are also energy-security policies.

Fourth, it elevates the strategic importance of the grid itself. The key issue is no longer simply how much energy China produces, but whether electricity can flow from resource-rich regions to industrial demand centers at the right time, in the required quantities and at an acceptable price. But also, as the cooperation with Laos illustrates, Beijing will focus more on Southeast Asia when it comes to securing energy sources.

Fifth, and perhaps the most important, however, is creating an integrated Southern China electricity market. The "Hormuz Shock" gave the central government a stronger reason for disciplining provincial development strategies in pursuit of national objectives. Guangdong needs reliable electricity to remain China's advanced manufacturing and export engine. Yunnan, Guangxi, and Guizhou need energy-intensive industries to support their own development.

Achieving a unified electricity market as scheduled will require the central government to prevent provincial competition from undermining national energy security and industrial priorities. This task will be difficult, as it challenges the entire political economy of China and the existing bureaucratic status quo. For that reason, creating a unified Southern electricity market may prove to be one of the most consequential- and most politically demanding-objectives of the 15th FYP period.

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Author –

Dominik Mierzejewski *is Associate Professor at the University of Łódź, where he leads the Department of Asian Studies and the Centre for Asian Affairs (think-tank), specializing in China's political discourse, local China and China's international behaviours. Mierzejewski studied at Shanghai International Studies University and was a visiting professor at the Chinese Academy of Social Sciences. He is the author of 'China's Provinces and the Belt and Road Initiative' (Routledge, 2021) and has published in journals such as Asian Affairs and the Journal of Contemporary China and co-authored 'China's Vertical Multilateralism and the Global South Narratives, Networks, and Money' (Routledge, 2025). He serves as a principal investigator in grants supported by the Polish National Science Centre and the Ministry of Foreign Affairs in Poland.*

Endnotes

1 People's Daily, "中华人民共和国国民经济和社会发展第十五个五年规划纲要 [Outline of the 15th Five-Year Plan for National Economic and Social Development of the People's Republic of China]," CPC News, March 14, 2026, https://cpc.people.com.cn/n1/2026/0314/c64387-40681800.html.

2 Ibid.

3 Ministry of Foreign Affairs, "Foreign Ministry Spokesperson Mao Ning's Regular Press Conference on March 2, 2026," People's Republic of China, March 2, 2026, https://www.fmprc.gov.cn/mfa_eng/xw/fyrbt/202603/t20260302_11867202.html.

4 National Development and Reform Commission, "Domestic refined oil prices adjusted on March 23," 2026, People's Republic of China, March 23, 2026, https://www.ndrc.gov.cn/xwdt/xwfb/202603/t20260323_1404295.html

5 Trixie Sher Li Yap, Chen Aizhu and Siyi Liu, "China orders immediate ban on March fuel exports," sources say, *Reuters*, March 12, 2026, https://www.reuters.com/business/energy/china-orders-immediate-ban-march-fuel-exports-sources-say-2026-03-12/.

6 National Energy Administration, "国家能源局新闻发布会文字实录 [Transcript of the press conference of the National Energy Administration]," April 27, 2026, https://www.nea.gov.cn/20260427/09f3dbc015664a74b9cbe2444c4891bf/c.html.

7 Erica Downs, "Implications of the Conflict in the Middle East for China's Energy Security," Center on Global Energy Policy, Columbia University, March 4, 2026, https://www.energypolicy.columbia.edu/implications-of-the-conflict-in-the-middle-east-for-chinas-energy-security/.

8 People's Daily, n. 1.

9 Ibid.

10 China Southern Power Grid, "About Us," n.d., https://www.bidding.csg.cn/about.jhtml.

11 S&P Global, "Southern China power market launch signals modernization, climate push," July 27, 2022, https://www.spglobal.com/energy/en/news-research/latest-news/energy-transition/072722-southern-china-power-market-launch-signals-modernization-climate-push.

12 UNCTAD, "Strait of Hormuz disruptions: Implications for global trade and development," March 2026, https://unctad.org/publication/strait-hormuz-disruptions-implications-global-trade-and-development.

13 Xinhua, "China advances flood control, disaster relief efforts in key southern regions," *People's Daily Online*, April 22, 2026, https://en.people.cn/n3/2026/0422/c90000-20449208.html.

14 Guangzhou Municipal Development and Reform Commission, "广州市发展和改革委员会 广州市工业和信息化局关于印发广州市面向2035年电力供应保障规划的通知 [Notice from Guangzhou Municipal Development and Reform Commission and Guangzhou Municipal Bureau of Industry and Information Technology on Issuing the Guangzhou Municipal Power Supply Guarantee Plan for 2035]," February 26, 2025, https://fgw.gz.gov.cn/fzgg/fzgh/content/post_10293508.html.

15 Yang Qixin, "高电价≠高电费：南方区域电力供应充足，现货价格波动影响有限 [High electricity prices ≠ high electricity bills: Power supply in southern regions is sufficient, and fluctuations in spot prices have a limited impact]," 21 Jingji, April 27, 2026, https://www.21jingji.com/article/20260427/herald/f4ec3f7a9f136b4b18eb70607004b895.html.

16 "China's factory hub faces gas price shock as Iran war tightens supply," *Straits Times*, April 23, 2026, https://www.straitstimes.com/business/economy/chinas-factory-hub-faces-gas-price-shock-as-iran-war-tightens-supply

17 Nikit Abhyankara, Jiang Lina, Xu Liua, and Froylan Sifuentes, "Economic and environmental benefits of market-based power-system reform in China: A case study of the Southern grid system," *Resources, Conservation & Recycling* 153 (2020), https://doi.org/10.1016/j.resconrec.2019.104558.

18 National Energy Administration, "关于征求《南方区域跨区跨省电力 中长期交易规则》意见的函 Letter Soliciting Opinions on the "Rules for Medium- and Long-Term Electricity Transactions Across Regions and Provinces in Southern China"]," Yunnan Regulatory Office, 2021, https://ynb.nea.gov.cn/jflyfox/nengyuan/ueditor/file/20210930/20210930_200406_472348.pdf.

19 Ibid.

20 National Energy Administration, https://nfj.nea.gov.cn/xwzx/tzgg/202502/P020250214585645069049.pdf.

21 Fredrich Kahrl and Jingying Chen, "Regional Electricity Markets in China: A review of China Southern Grid's proposed regional market design," RAP, December 2023, https://www.raponline.org/wp-content/uploads/2025/03/rap-kahrl-chen-regional-electric-markets-in-China-dec-2023-2025edit.pdf.

22 "The world's first ±800 kV DC transmission project was completed and put into operation," CNYES, June 21, 2010, https://m.cnyes.com/news/id/3363260.