

Safeguarding China's Cross-border Pipeline Projects under WTO Law: Lessons from Two Recent Panel Reports

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Abstract: The cross-border pipelines (CBPs) connecting China's energy consumption market deliver oil and gas from Russia, Central Asia, and Myanmar, and are significant for China's energy security. However, they face substantial political risks in host states that international legal instruments should mitigate. The WTO regime provides vital international legal protection for these CBPs due to its extensive treaty content, wide membership, and unique dispute settlement mechanism. This article aims to examine the application of WTO law to China's CBPs and the extent to which the potential risks can be effectively mitigated. In this regard, the Panel Reports in *Russia — Traffic in Transit* and *EU — Energy Package* provide important clues and are thoroughly studied. This article concludes that WTO law has great potential in protecting China's energy security. Therefore, when the WTO is caught in the Appellate Body crisis and faces marginalization, China should continue to firmly support the multilateral trading system (MTS) as well as promote WTO reform and Doha Round negotiations.

Keywords: Cross-border Pipelines, Energy Security, Export Restrictions, Pipeline Transport Services, Energy Market Reform, General Exceptions, National Security Defense, *Russia — Traffic in Transit*, *EU — Energy Package*

I. INTRODUCTION

In order to ensure sufficient external supplies of oil and natural gas, China has developed three groups of cross-border pipelines (CBPs) within the past two decades, which connect its consumption market with supplies from Russia, Central Asia, and Myanmar. These CBPs are a vital component of China's external energy strategy, and have great energy security, geopolitical, and economic importance. However, they also face potential political risks that can be mitigated

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by implementing legal tools. In addition to national laws and commercial contracts, international economic law also provides protection. This research focuses on the application of the WTO regime to the China-linked CBPs and analyzes its adequacy/effectiveness in protecting the CBPs. The two recently-issued Panel Reports in *EU — Energy Package* and *Russia — Traffic in Transit* provide important clues in this regard and will be studied in-depth here.

After the introduction section, the article first includes basic information about the China-linked CBPs, and points out their major risks that international economic law can address. In the following section, the WTO rules applicable to the CBPs and challenges to their application will be introduced. Afterwards, the article focuses on the Panel Reports in *EU — Energy Package* and *Russia — Traffic in Transit* since the potential risks faced by the China-linked CBPs may lead to disputes involving similar legal issues that the two Panels addressed. In the conclusion section, the article answers the research questions and provides policy recommendations.

II. CHINA'S CROSS-BORDER PIPELINES

There are three groups of CBPs linking China with Russia, Central Asia, and Myanmar respectively. Except for the oil and gas pipelines with Russia, China has delegated the China National Petroleum Corporation (CNPC) to construct and operate these CBPs in cooperation with host states' national oil companies (NOCs). After mergers and reorganizations, Sino-Pipeline International Company (SPI) has replaced other CNPC subsidiaries to become the sole company in charge of the CBPs.¹ It has 13 joint ventures and sole proprietorships operating in Uzbekistan, Kazakhstan, Tajikistan, Kyrgyzstan, Myanmar, and China. This company operates 6 natural gas pipelines, 3 crude oil pipelines, and owns a 300,000-ton crude oil terminal on Maday Island in Myanmar.²

A. China-Russia Crude Oil and Gas Pipeline

In 1994, Russia proposed the China-Russia crude oil pipeline (CRCOP). After

¹ Sino-Pipeline International Company Limited, Company Profile, http://spi.cnpc.com.cn/spi/fzlc/fzlc_index.shtml (Last Visited on December 5, 2022).

² Sino-Pipeline International Company Limited, Milestones, http://spi.cnpc.com.cn/spi/gsgk/gsgk_index.shtml (Last Visited on December 5, 2022).

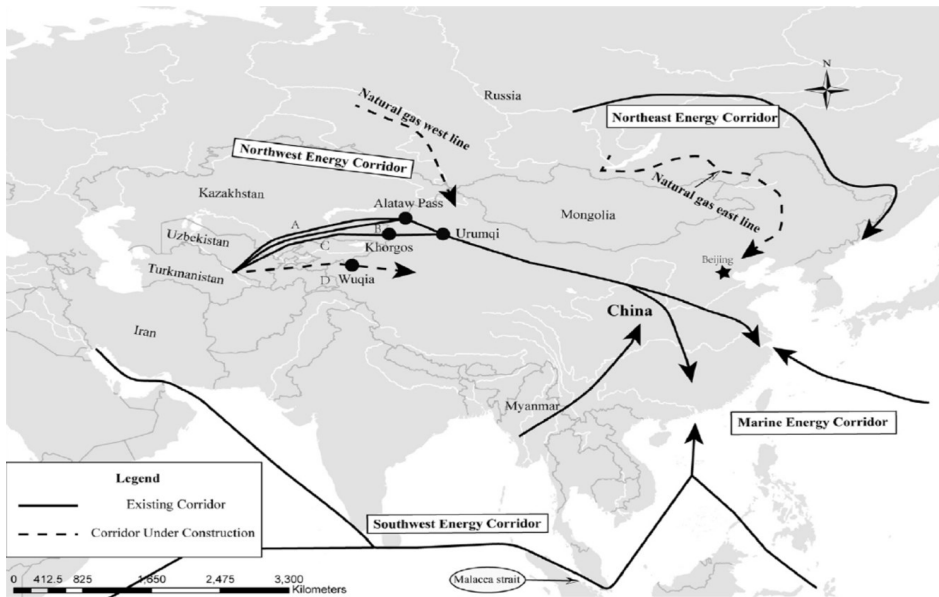


Figure 1. The Natural Gas East Line

Source: Fei-fei Guo, Cheng-feng Huang and Xiao-ling Wu, Strategic Analysis on the Construction of New Energy Corridor China–Pakistan–Iran–Turkey, *Energy Reports*, No. 5, 2019, p. 828.

14 years, in February 2009, these two countries concluded the *Agreement between the Government of the People's Republic of China and the Government of the Russian Federation on Cooperation in the Oil Field*. Based on an inter-governmental agreement (IGA), their companies signed an agreement on the construction and operation of a crude oil pipeline between Skovorodino, Russia and the Chinese border, a crude oil purchase and sale contract, and a loan agreement. According to the IGA, Russia would supply 15 million tons of crude oil to China per year through this pipeline over a contract period of 20 years. This pipeline started at Skovorodino and ended at the Daqing Terminal Station (Daqing, China) with a total length of 999 kilometers, and started operating on January 1, 2011. CNPC and Transneft constructed the pipeline segments within their respective countries.³ To supply China with crude oil, Transneft constructed the Eastern Siberia-Pacific Ocean Oil Pipeline (ESPOOP) in Russia, which extended 3,000 miles from Tayshet, Russia to the Pacific Coast and was completed in two stages. The first stage focused on constructing

3 China5e, China-Russia Crude Oil Pipeline, https://www.china5e.com/html/old_special_html/special_368.html (Last Visited on December 5, 2022).

a pipeline from Tayshet to Skovorodino, which became operational in January 2011 and connected to the CRCOP. The second stage, which started operating at the end of 2012, arrived at the Russian Pacific port of Kozmino and enabled Russia to send more crude oil to China via a sea route.⁴ In March 2013, China and Russia signed the *Agreement on the Expansion of Cooperation on Crude Oil Trade*. Accordingly, in June 2013, CNPC and Rosneft signed the *Purchase and Sales Contract for Additional Crude Oil Supply from Russia to China under the Conditions of Advance Payment*, requiring an increase in crude oil supplies amounting to 15 million tons per year to China through the CRCOP.⁵ To increase supply, CNPC constructed CRCOP Line 2, running in China from Mohe to Daqing in parallel with the Chinese segment of the original pipeline.⁶ As of January 2022, CNPC had imported more than 300 million tons of pipeline crude oil from Russia.⁷

On May 21, 2014 in Shanghai, China and Russia signed the *Sino-Russian East Route Natural Gas Cooperation Project Memorandum* after a decade of negotiations over the import price and supply route. Meanwhile, CNPC and Gazprom signed the *China-Russia East Route Gas Supply and Sales Contract*. According to the bilateral arrangements, China-Russia East-route Natural Gas pipeline (also known as the Power of Siberia pipeline) sends Russian gas from the Kovikkin gas field in Irkutsk Oblast and the Chayankin gas field in the Sakha Republic to northeast China. Gazprom developed these gas fields as well as constructed natural gas processing plants and the Russian segments of this pipeline. CNPC constructed its Chinese segments, together with domestic gas storage and other supporting facilities. The gas transmission volume via this pipeline is 5 bcm (billion cubic meters) per year in the first phase but will increase annually and eventually reach 38 bcm per year in 2023, for a total

4 US Energy Information Administration, China, September 30, 2020, <https://www.eia.gov/international/overview/country/CHN> (Last Visited on December 5, 2022).

5 Hongfeng Xu and Haiyan Wang, New Development and Existing Constraints in Sino-Russian Energy Cooperation, *Eurasian Economics*, Vol. 1, 2017, pp. 92-93.

6 Belt and Road Cooperation, Sino-Russian Energy Cooperation, November 30, 2022, <https://obor.nea.gov.cn/pictureDetails.html?id=2569> (Last Visited on December 5, 2022).

7 CNPC, China and Russia Join Hands to Welcome the Winter Olympics, A New Chapter on Oil and Gas Cooperation Is Written, CNPC's Cooperation with Russia Has Achieved Many Results, February 7, 2022, <https://www.cnpc.com.cn/cnpc/jtxw/202202/c3823918c1d443858ca15d14fa7e554f.shtml> (Last Visited on December 5, 2022).

period of 30 years. The pipeline started its operations on December 2, 2019.

B. China-Kazakhstan Crude Oil Pipeline

China and Kazakhstan's official intention to jointly construct a crude oil pipeline started in 1997 when they signed the *Agreement on Cooperation in the Oil and Gas Sector*. However, construction of the China-Kazakhstan Crude Oil Pipeline did not start until 2004. This pipeline had more than 2,800 kilometers over four segments: Atyrau-Kenkiyak Pipeline (448.8km), Kenkiyak-Kumkor Pipeline (794.1km), Kumkor-Atasu Pipeline (620km), and Atasu-Alashankou Pipeline (965.1km). In September 2004, the construction of the first phase of the China-Kazakhstan Pipeline (Atasu-Alashankou Pipeline) began. In July 2006, it was completed and officially started operations with a transmission capacity of 10 million tons/year. In April 2008, the construction of the second phase (Kenkiyak-Kumkor Pipeline) started, and after it started operating in October 2009, its transmission capacity reached 20 million tons/year. Kazakhstan-China Pipeline LLP has constructed and operated these two segments. Its shareholders are KazTransOil JSC and SPI (formerly China National Oil and Gas Exploration and Development Corporation), who hold equivalent shares.⁸ Part of the oil transported via this pipeline is produced in CNPC-invested oil fields or is imported from Russia. In particular, according to the recent *Supplementary Agreement 3 to the Crude Oil Purchase and Sale Contract to Guarantee Oil Supply to Western China's Refinery*, Russia will supply 100 million tons of crude oil to China via Kazakhstan for a 10-year period.⁹ By February 2022, the pipeline had transported more than 150 million tons of crude oil to China.¹⁰

C. China-Central Asia Gas Pipeline

In April 2006, the *General Agreement on the Implementation of the China-Turkmenistan Natural Gas Pipeline Project and Turkmenistan's Sale of Natural*

⁸ Kazakhstan-China Pipeline, About KCP, <https://www.kcp.kz/company/about?language=en> (Last Visited on December 5, 2022).

⁹ CCTV, Sino-Russian Energy Cooperation Went One Step Further, Signing an Agreement on the Supply and Sale of Natural Gas in the Far East, February 6, 2022, <https://news.cctv.com/2022/02/06/ARTI17qz-VKif6l8ali6CKgFA220206.shtml> (Last Visited on December 5, 2022).

¹⁰ Xinhua, The China-Kazakhstan Crude Oil Pipeline Has Transported More than 150 Million Tons of Oil to China, February 11, 2022, http://xj.news.cn/2022-02/11/c_1128356229.htm (Last Visited on December 5, 2022).

Gas to China between the Government of the People's Republic of China and the Government of Turkmenistan was signed, which represented the official start of the China-Central Asia Gas Pipeline. In 2007, China concluded IGAs with Uzbekistan and Kazakhstan on the pipeline segments located within their territories, after which these countries' managing enterprises signed commercial agreements.¹¹ CNPC also established joint ventures of equivalent equity (50:50) with its counterparts in Kazakhstan and Uzbekistan respectively to construct and operate the pipeline segments in their home countries. Accordingly, when implementing this pipeline, China divided it into several sections to negotiate and cooperate with each host state on a one-to-one rather than a one-to-many basis.¹² This pipeline starts from the Turkmenistan-Uzbekistan border, passes through central Uzbekistan and southern Kazakhstan, and enters China through Korgas in Xinjiang. It started operations in 2009 and is composed of three parallel lines: Line A (completed in 2009), Line B (completed in 2010), and Line C (completed in 2014). Its overall length is 1833 km, and its overall transmission capacity is 60 bcm. The gas supply for this pipeline primarily comes from Turkmenistan, supplemented by Uzbekistan and since 2017, also by Kazakhstan.¹³ Meanwhile, CNPC not only purchased Turkmenistan gas produced in gas fields at the Amu Darya River, but also explored for and exploited gas there.¹⁴ Since the pipeline started operating, Central Asian countries have supplied China with a total of about 300 bcm of natural gas through it within 10 years, with Turkmenistani gas accounting for more than 80%.¹⁵ The construction of this pipeline's Line D, which started in September 2015, is still ongoing. The new line has a different route from the previous ones. It starts at the

11 Energy Charter, China-Central Asian Natural Gas Pipeline: Construction, Operation and Transit, https://www.energycharter.org/fileadmin/DocumentsMedia/Events/20151127-S2_Zhang_Peng.pdf (Last Visited on December 5, 2022).

12 Jing Chen, The Central Asia Natural Gas Pipeline Was Born with Innovative Genes, *China Youth Daily*, May 11, 2017.

13 Xinhua, In 2020, China-Central Asia Gas Pipeline Delivered More than 39 bcm of Natural Gas to China, January 6, 2021, http://www.xinhuanet.com/fortune/2021-01/06/c_1126952374.htm (Last Visited on December 5, 2022).

14 CNPC, Turkmenistan, https://www.cnpc.com.cn/cnpc/Turkmenistan/country_index.shtml (Last Visited on December 5, 2022).

15 Xinhua Silk Road, Central Asian Countries Have Supplied about 300 bcm of Natural Gas in Total to China through the China-Central Asia Gas Pipeline, January 14, 2020, <https://www.imsilkroad.com/news/p/398293.html> (Last Visited on December 5, 2022).

Turkmenistan-Uzbekistan border, passes through Uzbekistan, Tajikistan, and Kyrgyzstan, and enters China at Erkeshtam in Xinjiang. The entire length will be 1000 km and the transmission capacity will be 30 bcm.¹⁶

D. China-Myanmar Oil and Gas Pipelines

The China-Myanmar Gas Pipeline starts from Kyaukpyu, Myanmar, enters China at Ruili, and then goes to Nanning where it connects with the West-East Natural Gas Transmission System Line II. The overall length from Kyaukpyu to Ruili is 793 km, and the annual transportation capacity is 12 bcm. The gas pipeline was completed and started operating in 2013. It delivers natural gas from blocks A-1 and A-3 of the offshore Shwe gas field to China and Myanmar's domestic market. This pipeline is operated and managed by Southeast Asia Natural Gas Pipeline Company, which is jointly established by CNPC, Myanmar National Petroleum Corporation (MNPC), Posco Daewoo Company (South Korea), India Oil and Gas Caspian Exploration and Production Corporation, India Gas Corporation, and Korea Natural Gas Corporation.¹⁷

The China-Myanmar crude oil pipeline starts from Madaya Island's crude oil terminal with an unloading capacity of 22 million tons per year, then goes parallel to the gas pipeline, and eventually heads to Chongqing Province after entering China at Ruili. Its length in Myanmar is 770.5 km and annual throughput is 22 million tons. This pipeline helps China to receive crude oil from the Middle East and Africa faster without passing through the Malacca Strait.¹⁸ Although the oil pipeline was commissioned in early 2015, it did not become operational until April 2017.¹⁹ This pipeline was invested in and constructed by CNPC and MNPC, which jointly established the Southeast Asia Crude Oil Pipeline Company to operate and manage this pipeline.²⁰

16 CNPC, The Miracle of Pipeline Construction in the World: China-Central Asia Gas Pipeline, October 15, 2015, <http://www.cnpc.com.cn/syzy/yqcy/201510/d4018f897dbe4121bc0ec5ae19904280.shtml> (Last Visited on December 5, 2022).

17 CNPC, China-Myanmar Oil & Gas Pipeline Project (Myanmar Section): Special Report on Social Responsibility, <https://www.cnpc.com.cn/en/myanmarcsr/201407/8de2c1f19f2c46e19fcb4afdbc05abf0/files/51ef2416408e480d9ab8d50d675354e2.pdf> (Last Visited on December 5, 2022).

18 Myanmar Pipeline Gives China Faster Supply of Oil from Middle East, *South China Morning Post*, April 12, 2017.

19 Dave Forest, Myanmar Oil Pipeline Could Bring Cheaper Crude to China, April 13, 2017, <https://oilprice.com/Energy/Crude-Oil/Myanmar-Oil-Pipeline-Could-Bring-Cheaper-Crude-To-China.html> (Last Visited on December 5, 2022).

20 *Supra* n. 17.

III. RATIONALE AND RISKS

China is a massive importer of oil, surpassing the United States at the end of 2013 to rank as the world's largest net importer of petroleum and other liquids. Faced with this dilemma, China has been trying to diversify its import origins to ensure its energy security. This is highly important, especially when the world's most oil-rich countries are in unstable political environments. Another dilemma China faces is the need to secure its oil imports through the Strait of Malacca. Since the Middle East is the major source of China's oil imports, it cannot avoid passing through this strait when transporting oil. Considering potential political squabbles with the US and Southeast Asian nations, there is a huge potential risk factor for China.²¹ Besides oil, China has also been experiencing a dramatic rise in its use of natural gas, partly since it is a cleaner fossil fuel, and also because the Chinese government intends to use it to replace coal and oil to enhance efforts towards environmental protection. China's natural gas consumption also relies greatly on imports, and it is necessary to increase imports while diversifying import sources. Moreover, its domestic market for natural gas is still under price controls, which tends to significantly influence the financial viability of gas projects if imported gas is too expensive. China also needs sufficient pipeline imports of natural gas to gain more bargaining power in the LNG (liquefied natural gas) market and decrease the high LNG prices in the Asian spot market compared with North America and Europe.²²

In this context, an external energy policy is significant for China's overall energy strategy and involves multiple considerations:

"The international components of China's energy policy arise from a combination of energy, industrial, diplomatic, strategic and other considerations. On the one hand, the government appears to have an innate distrust of international energy markets and feels increasingly vulnerable to accidental disruptions to the market, as well as to deliberate actions that might be taken by other

²¹ *Supra* n. 4.

²² Jacob Koch-Weser and Craig Murray, *The China-Russia Gas Deal: Background and Implications for the Broader Relationship*, *US-China Economic and Security Review Commission*, June 9, 2014, https://www.uscc.gov/sites/default/files/Research/China%20Russia%20gas%20deal_Staffbackgrounder.pdf (Last Visited on December 5, 2022).

states such as the US. On the other hand, energy provides a useful vehicle for China to build diplomatic relations across the world”.²³

Moreover, China’s international energy strategy has three priorities for protecting the security of its energy supplies:

First, the key priority has been to raise the level of oil imports and to diversify their sources. These supplies from major resource rich states (RRS) are underpinned by long-term supply agreements and by wider economic and diplomatic engagement.

Second, it has been to construct new infrastructure to deliver oil and gas imports to China, including rail capacity to bring oil from Russia, port capacity to receive marine oil tankers, along with re-gasification facilities for seaborne LNG and its own oil tanker fleet.

Third, the component of this international oil and gas strategy has been China’s investment in overseas oil and gas assets by its NOCs.²⁴

China’s external energy security strategy emphasizes that CBPs make substantial contributions to these priorities by bringing a large amount of oil and gas from key neighboring suppliers to China. It also stresses the need to reduce China’s dependence on seaborne imports to diversify import routes. Finally, in the case of pipelines through Myanmar, it should reduce its dependence on sea lanes off South and East Asia, especially those in the Malacca Straits.²⁵ In addition to diversifying supply sources and routes, this strategy uniquely contributes to China’s energy security during wartime scenarios involving the US, as well as during a “down market” with high energy prices and supply shortages in international spot markets. In addition, it has spill-over effects. These include boosting economic development and stability in frontier provinces as well as achieving foreign policy goals focused on increasing China’s regional clout while promoting regional cooperation, prosperity, and stability. In short, China’s CBPs are strategically important and should be effectively protected.²⁶

Nevertheless, CBPs are energy megaprojects prone to risks and failures.

23 Philip Andrews-Speed, *China’s Energy Needs and Energy Security*, In David Zweig and Yufa Hao (Eds.), *Sino-US Energy Triangles: Resource Diplomacy under Hegemony*, Routledge, 2016, pp. 38-39.

24 *Ibid.*, pp. 48-50.

25 *Ibid.*

26 Øystein Tunsjø, *Security and Profit in China’s Energy Policy: Hedging against Risk*, Cambridge University Press, 2013, Chapter 6.

Furthermore, China's import pipelines are particularly high in safety and political risks caused by third-party attacks, regulatory changes, and hatred by host states' nationals.²⁷ China's pipeline "market" is based on long-term sales and purchase agreements, partially fixed pricing mechanisms created by negotiation, inflexible and expensive pipeline infrastructure, as well as diplomatic ties between China and each involved state.²⁸ However, this market's high degree of inflexibility and interdependence makes China vulnerable to supply-side disruptions such as price disputes and supply shortages, which are frequently encountered when trying to protect energy security considering the scarcity and strategic importance of energy resources. Additionally, pipeline infrastructure is physically vulnerable to attacks by terrorists, insurgent groups, or thieves, and domestic instability in involved states adds extra security risks to the portions of pipelines in their territory. Moreover, host states may express backlash against these CBPs constructed based on Chinese investments. For instance, people from Myanmar protested to express their dissatisfaction with the China-Myanmar oil and gas pipelines, which led to postponements in their start of operations. It is also typical for conflicts between the involved states to interrupt the operation of CBPs, especially in the case of the China-Central Asia Gas Pipeline, which involved several countries who had conflicting national interests. Another source of regulatory risks is related to the current trend of liberalization and regionalization in energy market reform. In particular, the Eurasian Economic Union (EAEU), whose Member states include Kazakhstan, Kyrgyzstan, and Russia, requires the establishment of the Common Gas Market as well as the Common Market of Petroleum and Petroleum Products. The new regulations that these states adopted to establish a common energy market, such as mandatory third-party access (TPA), might conflict with existing legal regimes governing the CBPs going through these states to China and deserve further study.

27 Paul Stevens, Cross-border Oil and Gas Pipelines: Problems and Prospects, 2003, https://esmap.org/sites/default/files/esmap-files/03503.Cross_Border%20Oil%20and%20Gas%20Pipelines_Problems%20and%20Prospects.pdf (Last Visited on December 5, 2022); Filippos Proedrou, Revisiting Pipeline Politics and Diplomacy: From Energy Security to Domestic Politics Explanations, *Problems of Post-Communism*, Vol. 65, No. 6, 2018; Lixia Yao, Looking into Energy Security through the Lens of the Belt and Road Initiative: Can China Achieve a More Secure Energy Future? In Joseph Chinyong Liow, Hong Liu and Gong Xue (Eds.), *Research Handbook on the Belt and Road Initiative*, Edward Elgar, 2021.

28 *Supra* n. 26.

Moreover, the EAEU's energy bloc also grants its Members more bargaining power and regulatory tools to achieve regional energy security, which can threaten China's long-term energy security interests.

International economic law is vital for solving cross-border disputes that may result from political risks. There are several groups of international legal instruments that can be applied to China's CBPs, including bilateral investment agreements, free trade agreements, inter-governmental pipeline agreements, and non-binding cooperation agreements that refer to pipelines. In addition, WTO law is applicable and relevant to this article.

IV. THE APPLICATION OF WTO LAW

At present, China, Myanmar, Russia, Tajikistan, Kazakhstan, and Kyrgyzstan are all WTO Members. Three groups of WTO rules are applicable to CBPs, which are related to freedom of transit, export restrictions, and pipeline services. Firstly, the term "transit" as defined in Article V(1) of the General Agreement on Tariffs and Trade (GATT) refers to "through-transit", that is, transportation of goods through the territory of a transit state that is neither the state of origin nor the destination.²⁹ Legal scholars have widely discussed the application of transit rules as stipulated in GATT Article V to energy transit via fixed pipeline infrastructure, especially when examining legal issues on CBPs.³⁰ Secondly, GATT and the Agreement on Trade-Related Investment Measures (TRIMs Agreement) regulate measures affecting trade in goods, with the latter's applicable scope restricted to investment measures. The two Agreements are applicable to export restrictions on oil and gas, one of the major challenges

29 Danae Azaria, Energy Transit under the Energy Charter Treaty and the General Agreement on Tariffs and Trade, *Journal of Energy & Natural Resources Law*, Vol. 27, 2009, p. 561.

30 *Ibid.*; Lothar Ehring and Yulia Selivanova, Energy Transit, In Yulia Selivanova (Ed.), *Regulation of Energy in International Trade Law*, Wolters Kluwer, 2011; Mireille Cossy, Energy Trade and WTO Rules: Reflexions on Sovereignty over Natural Resources, Export Restrictions and Freedom of Transit, In Christoph Herrmann and Jörg Philipp Terhechte (Eds.), *European Yearbook of International Economic Law 2012*, Springer, 2012; Vitaliy Pogoretsky, Freedom of Transit and the Principles of Effective Right and Economic Cooperation: Can Systemic Interpretation of GATT Article V Promote Energy Security and the Development of an International Gas Market, *Journal of International Economic Law*, Vol. 16, No. 2, 2013.

to China's external energy security. Thirdly, the General Agreement on Trade in Services (GATS) regulates the supply of services through four modes, namely, cross-border supply (Mode 1), consumption abroad (Mode 2), commercial presence (Mode 3), and the presence of natural persons (Mode 4). GATS covers pipeline construction and transmission services, thereby also applicable to CBPs. Moreover, as latecomers to the WTO system, Russia and Kazakhstan have made additional commitments in their accession protocols, some of which are relevant to CBPs within their territories. In addition, Turkmenistan and Uzbekistan have become WTO observers, meaning that they are in accession negotiations with WTO Members. China can leverage the negotiation process to push for extra commitments that provide better protection for its import pipelines.³¹

Without prejudice to the importance and complexity of the rules that have been explored in legal scholarship, this article focuses on two recent WTO cases where the Panels have discussed legal issues relevant to China's CBPs. To illustrate, in *EU — Energy Package*, the Panel examined the EU gas market regulations related to the operation and development of transmission pipelines that affected the supplies of Russian gas and pipeline transmission services. A thorough study of the case shows that although the WTO system allows market-oriented reform in domestic and regional gas markets, it provides limited policy space for origin-biased and politically-driven energy measures. Moreover, *Russia — Traffic in Transit* emphasized the transit rules and national security exception in a wartime scenario. Before examining these two cases, this section first introduces the challenges and opportunities regarding the application of WTO law to energy issues, especially China's CBPs.

Commercial activities in the energy industry, especially in CBPs, have special features. Energy issues often relate to the core interests of states, i.e., national security, industrial development, and environmental sustainability, and states' energy strategies may violate the principles of free trade and WTO rules. For example, compared to other commercial products, it is much more often and likely that energy products will face export and production restrictions, such as the Organization of the Petroleum Exporting Countries (OPEC)'s

31 Julien Chaisse and Jamieson Kirkwood, One Stone, Two Birds: Can China Leverage WTO Accession to Build the BRI? *Journal of World Trade*, Vol. 55, No. 2, 2021.

oil production quota and the US' oil export prohibition.³² However, as reflected in the US-imposed Iranian sanctions, energy exporting countries may also face “energy weapons” in the form of import restrictions.³³ In addition, alongside the privatization and deregulation processes in the energy sector, the anti-competition behavior of large energy companies can have a worse impact on free trade as compared to governmental restraints, making it necessary to have competition rules.³⁴ In jurisdictions such as the EU, the unbundling of vertically integrated undertakings (VIUs) and third-party access (TPA) to midstream natural gas infrastructure is mandatory. However, when the WTO was designed, Members focused on promoting free trade, removing import barriers, and constraining governmental interference in international trade, but marginalized issues related to energy, export restrictions, and competition.³⁵ Furthermore, the WTO regulations on trade in energy services are insufficient because the GATS takes a positive approach for national treatment (NT) and market access, while WTO Members made limited commitments on energy services in this regard.³⁶ In addition, the GATS covers all types of services without specially referencing energy services that emphasize special features and challenges.³⁷ Thus, it is questionable if the WTO rules can help to appropriately address energy disputes when considering the sector's special features.

Nevertheless, energy issues are gaining increasing relevance under the WTO regime. Several major energy exporters, such as Saudi Arabia, Russia, and Kazakhstan, have become WTO Members, while some others, such as Turkmenistan, are in accession negotiations. A trend is that energy issues are granted more attention during the accession negotiations of energy-rich countries, and more WTO-plus energy commitments are included in the accession

32 Jason Bordoff and Trevor Houser, Navigating the US Oil Export Debate, *Columbia University Center on Global Energy Policy*, https://www.energypolicy.columbia.edu/sites/default/files/Navigating%20the%20US%20Oil%20Export%20Debate_January%202015.pdf (Last Visited on December 5, 2022).

33 Lior Herman, Energy as an Instrument in Global Politics, In Kathleen J. Hancock and Juliann Emmons Allison (Eds.), *The Oxford Handbook of Energy Politics*, Oxford University Press, 2021, p. 304.

34 Tilman Michael Dralle, *Ownership Unbundling and Related Measures in the EU Energy Sector Foundations, the Impact of WTO Law and Investment Protection*, Springer, 2018, pp. 273-277.

35 Ibid.; Anna-Alexandra Marhold, *Energy in International Trade Law: Concepts, Regulation and Changing Markets*, Cambridge University Press, 2021, pp. 46-49.

36 Mireille Cossy, Energy Services under the General Agreement on Trade in Services, In Yulia Selivanova (Ed.), *Regulation of Energy in International Trade Law*, Wolters Kluwer, 2011, pp. 158-159.

37 Ibid., pp. 152-158 & 163-168.

protocols of these countries.³⁸ Not least due to the geopolitical sensitivity of this sector, states used to show restraint when challenging energy measures at the WTO. However, there is a paradigm shift in this restraint alongside the rise of WTO disputes regarding energy. Among these, *EU — Energy Package* addresses EU gas regulations on pipeline infrastructure and is discussed in detail here.³⁹ Moreover, during the Doha Round, the negotiations on energy services took place for the very first time.⁴⁰

However, the current pragmatic disfunction of the WTO system is worrisome, substantially restricting its ability to protect China's CBPs. To illustrate, the Doha Round has remained deadlocked for decades, suggesting a lack of effective collaboration on WTO reform. Another influential episode during the trade war that has damaged the WTO multilateral trading system (MTS) is the Appellate Body (AB)'s paralysis since December 2019, as the US has blocked the appointment of AB members due to its dissatisfaction with the WTO rules and dispute settlement mechanism (DSM).⁴¹ Currently, every time any party to a WTO dispute refuses to adopt the panel report and appeals, it will be impossible to reach any final decision that is binding and enforceable. The WTO's effectiveness largely depends on a functioning DSM, and its collapse makes it much more difficult to ensure Members' compliance with these rules, and also creates uncertainty regarding the proper interpretation of the national security exception. Furthermore, the popularity of unilateral actions outside the WTO during the trade wars and abuses of national security claims during WTO dispute settlement also harm the effectiveness of its MTS.⁴²

38 *Supra* n. 35, pp. 61-62.

39 *Ibid.*, pp. 62-63.

40 *Ibid.*, pp. 50-51.

41 Tetyana Payosova, Gary Clyde Hufbauer and Jeffrey J. Schott, *The Dispute Settlement Crisis in the World Trade Organization: Causes and Cures*, Peterson Institute of International Economy Policy, March, 2018, <https://www.piie.com/system/files/documents/pb18-5.pdf> (Last Visited on December 5, 2022); Aditya Rathore and Ashutosh Bajpai, *The WTO Appellate Body Crisis: How We Got Here and What Lies Ahead?* *Jurist*, April 14, 2020, <https://www.jurist.org/commentary/2020/04/rathore-bajpai-wto-appellate-body-crisis/> (Last Visited on December 5, 2022).

42 Trey Fields, *Donald Trump and the Securitization of Trade*, Niskanen Center, August 20, 2018, <https://www.niskanencenter.org/donald-trump-and-the-securitization-of-trade/> (Last Visited on December 5, 2022); Emily Stewart, *Can the US-China Trade War Be Stopped? 11 Experts Weigh in*, *Vox*, July 8, 2018, <https://www.vox.com/policy-and-politics/2018/7/8/17544460/trump-china-tariffs-trade-war> (Last Visited on December 5, 2022); Ben Dooley, *Japan Cites "National Security" in Free Trade Crackdown. Sounds Familiar?* *New York Times*, July 15, 2019.

V. LESSONS FROM *EU — ENERGY PACKAGE*

Alongside the accession of major energy exporting countries to the WTO, the value and potential of its DSM to facilitate energy disputes are becoming apparent. In 2012, Russia became a WTO Member. Two years later, it unsurprisingly brought the case *EU — Energy Package* (DS476) against the EU and its Member States. This case mainly relates to the Third Energy Package (especially the Gas Directive⁴³) that the EU enacted in 2009. It focuses on regulatory measures related to the EU's internal gas market and gas infrastructure development. This is the very first WTO dispute dealing with energy market regulations, thereby revealing the compatibility of the current trend of energy market reform with the WTO framework. Moreover, this dispute addressed regulatory measures targeting the EU's energy supply security, reminding us that the DSM can deal with sensitive issues involving energy security interests.

According to the Panel Report issued in 2018, Russia unsuccessfully challenged unbundling measures as well as several exemptions to the unbundling regime (measures related to public bodies, LNG, infrastructure exemptions, and upstream pipeline networks). Russia also brought a claim regarding the Ostsee Pipeline Anbindungsleitung (OPAL) Capacity Cap and Gas Release Programme (the specific infrastructure exemption regime for OPAL, the southward onshore extension of the offshore Nord Stream and Nord Stream 2 pipelines located in Germany). Subsequently, the Panel found that this Programme constituted quantitative import restrictions prohibited by GATT Article XI. Moreover, Russia made claims on the third-country certification and Trans-European Energy Networks (TEN-E) measures, which related to transmission pipeline investment. The former is a screening mechanism applicable to foreign undertakings in the gas transmission sector out of energy security concerns, and it was found to have breached the NT commitments that Croatia, Hungary, and Lithuania made under the GATS. Moreover, the defence included in GATS Article XIV(a) on public order was not applicable. As for the TEN-E measure, Russia managed to establish a violation of GATT Articles I and III, because the criteria of gas supply diversification for selecting Projects of Common Interests

43 Directive 2009/73/EC of the European Parliament and of the Council of July 13, 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (Gas Directive).

(PCIs) are discriminatory towards Russian gas. In contrast, the EU failed to defend its measure under GATT Article XX(g). However, the TEN-E measure did not violate GATS Article II.

A. Definition of Pipeline Transport Services

The Panel first analyzed Russia's proposed definition of pipeline transport services (PTS). It concluded that these services "encompass the transportation or transmission of natural gas through transmission pipelines and also coincide with the services provided by a transmission system operator (TSO) as defined by the Gas Directive, and excluded supply or LNG services."⁴⁴ According to the Gas Directive, TSO refers to "a natural or legal person who carries out the function of transmission and is responsible for operating, ensuring the maintenance of, and, if necessary, developing the transmission system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transport of gas". The Panel then examined the term "Pipeline Transport [Services]" in the Schedules of Croatia, Hungary, and Lithuania, reaching the same conclusion as above. More specifically, based on dictionary definitions and industry sources, the Panel found that the ordinary meaning of this term referred to "the activity consisting in carrying or conveying goods, usually oil or gas through a long pipe, often underground, over long distance".⁴⁵ This finding also had support from an examination of contextual elements as well as the object and purpose of the GATS.⁴⁶

B. Unbundling Measures

The unbundling measures are a breakthrough of the TEP, aiming to prevent anti-competitive practices caused by vertical monopoly. They apply to VIUs⁴⁷

⁴⁴ Panel Report, *EU — Energy Package*, WT/DS476/R, August 10, 2018, para. 7.285.

⁴⁵ *Ibid.*, para. 7.312.

⁴⁶ *Ibid.*, paras. 7.314-7.338.

⁴⁷ Gas Directive, Article (20): "‘vertically integrated undertaking’ means a natural gas undertaking or a group of natural gas undertakings where the same person or the same persons are entitled, directly or indirectly, to exercise control, and where the undertaking or group of undertakings perform at least one of the functions of transmission, distribution, LNG or storage, and at least one of the functions of production or supply of natural gas"; Gas Directive art 2(36): "‘control’ means any rights, contracts or any other means which, either separately or in combination and having regard to the considerations of fact or law involved, confer the possibility of exercising decisive influence on an undertaking, in particular by: (a) ownership or the right to use all or part of the assets of an undertaking; (b) rights or contracts which confer decisive influence on the composition, voting or decisions of the organs of an undertaking".

and require effective separation between the transmission businesses and the activities of production and supply. This is because VIUs are incentivized to discriminate against upstream and downstream competitors not only during the operation of transmission networks but also when planning and developing new networks.⁴⁸ As TSOs are independent, it is much less likely that any producer or supplier can have preferential or sole access to transmission networks, which they used to have when vertically integrated with TSOs. The 2009 Gas Directive stipulates three models for the separation of TSOs from undertakings engaged in production or supply:

- 1) Ownership unbundling model (OU model) (Article 9): It requires the structural separation of TSOs from undertakings engaged in production or supply.⁴⁹
- 2) Independent system operator model (ISO model) (Article 14): The VIU is the owner but not the operator of the transmission system. Instead, an ISO shall be designated as the operator.
- 3) Independent transmission operator model (ITO model) (Chapter IV): It allows the VIUs not only to own, but also to operate the transmission systems through an independent subsidiary. Moreover, multiple behavioral and organizational rules are adopted to ensure the effective unbundling and independence of TSOs from supply and operation interests.

EU Member States are obligated to implement ownership unbundling that requires fundamental changes in the VIUs, namely, they shall sell off their gas networks. As alternatives, states can choose to implement the other two models if the transmission systems belonged to VIUs before September 3, 2009 (i.e., the effective date of the Gas Directive). The EU believes that among the three models, ownership unbundling is “clearly an effective and stable way to solve the inherent conflict of interests and to ensure security of supply”, making it

⁴⁸ Gas Directive, Recital 6

⁴⁹ Gas Directive, Article 9(1)(b): “the same person or persons are entitled neither: (i) directly or indirectly to exercise control over an undertaking performing any of the functions of production or supply, and directly or indirectly to exercise control or exercise any right over a transmission system operator or over a transmission system; nor (ii) directly or indirectly to exercise control over a transmission system operator or over a transmission system, and directly or indirectly to exercise control or exercise any right over an undertaking performing any of the functions of production or supply”.

the most useful tool to address drawbacks caused by vertical integration.⁵⁰

Russia claimed that the unbundling measures in the Gas Directive violated GATS Article II:1, GATT Article III:4, and GATT Article I:1. All these claims were based on a comparison between the alleged less favorable treatment accorded to PTS and service suppliers or natural gas in EU Member States that implemented the OU model, and the alleged more favorable treatment accorded to like PTS and service suppliers or natural gas in EU Member States who have implemented the ISO and/or ITO models.⁵¹ According to Russia, the different treatment in EU Member States adopting different unbundling models led to discrimination towards Russian service suppliers providing PTS as well as Russian natural gas.⁵²

Regarding the claim under GATS Article II:1, the Panel first found that the unbundling measure affected the supply of PTS through Mode 3 of commercial presence, thereby falling within the GATS scope.⁵³ It also decided that the PTS and service suppliers of different origins, operating under different unbundling models were like services and service suppliers pursuant to Article II: 1.⁵⁴ The Panel then made rulings regarding the element of “less favorable treatment”. It concluded that PTS and service suppliers were accorded less favorable treatment under the OU model in comparison with the ITO model. Under the former model, VIUs must choose between continuing to produce or supply gas and continuing to supply PTS, while under the latter, it was not necessary to make this choice.⁵⁵ However, Russia did not successfully demonstrate that the unbundling measure accorded *de facto* less favorable treatment to PTS and service suppliers of Russian origin in comparison with those from other non-EU countries. This was because Russia only pointed to four specific examples, one of Gazprom and three of VIUs from other non-EU countries, without considering the totality of facts and circumstances, or assessing the design, structure, and expected operation of the unbundling measures.⁵⁶

⁵⁰ Gas Directive, Recital 8.

⁵¹ *Supra* n. 43, paras. 7.373-7.375.

⁵² *Ibid.*, para. 7.374.

⁵³ *Ibid.*, paras. 7.406-7.410.

⁵⁴ *Ibid.*, paras. 7.411-7.422.

⁵⁵ *Ibid.*, paras. 7.450-7.481.

⁵⁶ *Ibid.*, paras. 7.482-7.513.

Table 1. Russia's Method of Establishing *de facto* Discrimination

	Treatment of Gazprom	Treatment of the Suppliers of PTS from Other Countries
Under the OU model, a gas supplier was separated from a pipeline operator.	Gazprom <i>was required to divest its shares</i> in the TSO Amber Grid in Lithuania, which has implemented only the OU model.	The US VIU Conoco Phillips divested its shares in a TSO, pursuant to the OU model.
Under the ITO model, a gas supplier continued to supply PTS in the EU.	Gazprom continued to supply PTS through a commercial presence in the ITO GASCADE and the ITO NEL GT under the ITO model, implemented in Germany.	Norwegian Statoil and Azeri SOCAR <i>continued to have shares</i> in various ITOs in Germany, Greece, and Italy, which have implemented both the OU and ITO models.

Source. Vitaliy Pogoretsky and Kim Talus, The WTO Panel Report in *EU — Energy Package* and Its Implications for the EU's Gas Market and Energy Security, *World Trade Review*, 2019, p. 10.

As for the non-discrimination claims under the GATT, the Panel found that the unbundling measures at issue were covered by GATT Articles I:1 and III:4 because they affected the internal sale and transportation of natural gas.⁵⁷ However, Russia failed to demonstrate that the measure modified the conditions of competition to confer a more favorable treatment to natural gas under the ISO/ITO models in comparison with the OU model.⁵⁸ Therefore, the unbundling measure at issue did not violate GATT Articles I:1 and III:4.

In addition, Russia made three separate claims regarding the unbundling measures in the national implementing laws of Croatia, Hungary, and Lithuania for alleged violations of subparagraphs (a), (e), and (f) of GATS Article XVI:2 on market access. These countries had undertaken their commitment with respect to Mode 3 of the PTS in their GATS Schedules.⁵⁹ These provisions read:

Article XVI Market Access

2. In sectors where market-access commitments are undertaken, the measures which a Member shall not maintain or adopt either on the

⁵⁷ *Ibid.*, paras. 7.519-7.527 & 7.537.

⁵⁸ *Ibid.*, paras. 7.537-7.569 & 7.578-7.584.

⁵⁹ *Ibid.*, para. 7.360.

basis of a regional subdivision or on the basis of its entire territory, unless otherwise specified in its Schedule, are defined as:

(a) *limitations on the number of service suppliers* whether in the form of numerical quotas, monopolies, exclusive service suppliers or the requirements of an economic needs test;

...

(e) measures which restrict or require *specific types of legal entity or joint venture* through which a service supplier may supply a service; and

(f) *limitations on the participation of foreign capital* in terms of *maximum percentage limit on foreign share-holding* or *the total value of individual or aggregate foreign investment*.

The application of subparagraph (a) depended on whether the national measures constituted a numerical and quantitative limitation that restricted the number of pipeline service suppliers to one or a small number.⁶⁰ However, Russia did not demonstrate that the unbundling measures at issue imposed an impermissible quantitative limitation under Article XVI:2(a).⁶¹ As for subparagraph (e), the Panel decided that the mere fact that an entity might or might not own or control another entity was insufficient to meet the “specific type of legal entity” standard under Article XVI:2(e), because ownership or control *per se* was irrelevant to the legal form of either entity.⁶² For a measure to fall with subparagraph (f), it must constitute a limitation on the “participation of foreign capital” due to the foreign origin of the capital and take one of the two stipulated forms, but the measures at issue were origin-neutral on their face.⁶³

C. OPAL Capacity Cap and Gas Release Programme

The measures of unbundling and TPA in the Gas Directive contribute to a fully open and non-discriminatory gas market that involves fair competition. However, these measures also substantially challenge the traditional models of business transactions in gas pipeline infrastructure and may create obstacles to the

⁶⁰ *Ibid.*, para. 7.600.

⁶¹ *Ibid.*, paras. 7.602-7.622.

⁶² *Ibid.*, paras. 7.627-7.701.

⁶³ *Ibid.*, paras. 7.707-7.727.

financing of new CBPs.⁶⁴ Thus, to stimulate new investments, Article 36 of the 2009 Gas Directive stipulates exemptions applicable to major new gas infrastructure for a defined period, if the infrastructure can simultaneously meet five conditions in the Article. The OPAL conditions at issue included the infrastructure exemption granted to the Pipeline, and limited OPAL's exit capacity available to Gazprom by stipulating 1) a 50% capacity cap and 2) the gas release and capacity release programs.⁶⁵ Under this regime, the OPAL capacity that Gazprom can use for Russian gas exportation to the EU is subject to a 50% cap, unless the requirements of the gas release and capacity release programs are satisfied.⁶⁶ According to Russia, the OPAL conditions violated GATT Article XI:1.

The Panel first broadly defined the term “quantitative restrictions” as stipulated in GATT Article XI:1 to include measures which were not administered at border, but still had a limiting effect on importation and the competitive opportunities available to imports.⁶⁷ The Panel then found it irrelevant that the OPAL conditions imposed in connection with the infrastructure exemption granted to the Pipeline which was an “advantage” to it.⁶⁸ Instead, the question at issue was whether the OPAL conditions *per se* that were quantitative constituted a quantitative restriction with a limiting effect on importation of Russian gas into the EU.⁶⁹ The Panel, by pointing out the characteristics of pipeline importation of gas, determined that an internal EU regulatory measure affecting the exit capacity of the extension (i.e., OPAL) of an import pipeline from Russia did have a limiting effect on the importation of Russian gas.⁷⁰ These characteristics included “the fixed nature of pipeline infrastructure and the necessity for natural gas transported by pipeline to flow along predetermined paths and

64 Andrey Konoplyanik, Third EU Energy Package: Regulatory Changes for Internal EU Energy Markets in Gas and Possible Consequences for Suppliers (incl. non-EU Suppliers) and Consumers, *Oil, Gas & Energy Law*, Vol. 9, No. 3, 2011; Andrey Konoplyanik, Gas Transit in Eurasia: Transit Issues between Russia and the European Union and the Role of the Energy Charter, *Journal of Energy & Natural Resources Law*, Vol. 27, No. 3, 2009.

65 The capacity cap limited the ability of OPAL GT, to allocate, in any given year, more than 50% of capacities in the pipeline to dominant undertakings on one of the Czech gas markets, including Gazprom.

66 *Supra* n. 43, para. 7.983.

67 *Ibid.*, para. 7.975.

68 *Ibid.*, para. 7.896.

69 *Ibid.*, paras. 7.987 & 7.988.

70 *Ibid.*, paras. 7.994 & 7.995.

to be imported through a limited number of fixed entry points”.⁷¹ Although it is possible for other Russian suppliers and Gazprom to book the remaining capacities, the condition did effectively discourage the Russian gas importers of Gazprom and other companies from exceeding the 50% capacity cap.⁷²

D. Third Country Certification Measure

In the EU energy market, only certified TSOs are allowed to provide gas transmission services. However, the conditions and procedures for national regulatory authorities to authorize this certification distinguish between EU and foreign undertakings, because the latter is required to pass an energy security test. To illustrate, while both EU and foreign investors shall comply with the unbundling requirements to become a TSO, the latter shall fulfill the additional requirement of not risking the energy supply security of the Member State and Community.⁷³ The Panel did not find that the third-country certification measure in the Directive violated the MFN obligation in GATS Article II:1. In other words, it was not established that the measure discriminated between foreign service suppliers from different countries.⁷⁴ However, the Panel agreed with Russia that the third-country certification measures in the national implementing Laws of Croatia, Hungary, and Lithuania violated their NT commitments under GATS Article XVII.⁷⁵ To illustrate, the third-country certification measure in question concerned the supply of PTS via Mode 3 of commercial presence, and the three countries have made NT commitments regarding this item in their GATS Schedules.⁷⁶ Moreover, the Panel found that domestic and third-country PTS suppliers were like service suppliers, and these national measures placed an additional burden on the latter, thereby modifying the conditions of competition in favor of the former.⁷⁷

The EU made its defence under GATS Article XIV(a):

Article XIV General Exceptions

Subject to the requirement that such measures are not applied in a

⁷¹ *Ibid.*, para. 7.994.

⁷² *Ibid.*, paras. 7.999 & 7.1000.

⁷³ Gas Directive, Articles 10(2) & 11(3).

⁷⁴ *Supra* n. 43, para. 7.1112.

⁷⁵ *Ibid.*, para. 7.1134.

⁷⁶ *Ibid.*, paras. 7.371, 7.1123 & 7.1124.

⁷⁷ *Ibid.*, paras. 7.1127 & 7.1128.

manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on trade in services, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any Member of measures:

- (a) necessary to protect public morals or to maintain public order;⁵
 (footnote original)⁵ The public order exception may be invoked only where a *genuine and sufficiently serious threat* is posed to one of the *fundamental interests of society*.

If a measure can be justified under GATS Article XIV(a), it shall satisfy the requirements in both subparagraph (a) and the *chapeau*.⁷⁸ Regarding the first condition, the Panel relied on three steps to make rulings on whether the measure was “designed” and “necessary” to protect public morals or maintain public order.⁷⁹ The Panel first applied the standard in footnote 5 to assess whether the stated policy objective of ensuring the EU’s energy supply security fell within the scope of “maintain public order”.⁸⁰ It agreed that the security of energy supply was a “fundamental interest of society”.⁸¹ In addition, foreign control of TSOs posed a genuine threat because foreign governments would have incentives to undermine the EU’s energy security as well as “the means to do so either by controlling a TSO itself or by being in a position to require or induce foreign private persons that, in turn, control a TSO to do so”.⁸² The threat was also sufficiently serious, considering the severe social, economic, and political consequences of an interrupted gas supply.⁸³ Secondly, the measure was designed (i.e., not incapable) to ensure the EU’s energy supply security because the *ex-ante* screening mechanism that the measure provided was capable of allowing the authorities to prematurely examine the potential risks.⁸⁴ The third step was the necessity test, which required a weighing and balancing exercise that referred to the importance of the objective, the measure’s contribution to the objective, and the measure’s trade restrictiveness. This test also included

⁷⁸ *Ibid.*, para. 7.1138.

⁷⁹ *Ibid.*, para. 7.1140.

⁸⁰ *Ibid.*, para. 7.1142.

⁸¹ *Ibid.*, paras. 7.1145-7.1156.

⁸² *Ibid.*, para. 7.1191.

⁸³ *Ibid.*, para. 7.1197.

⁸⁴ *Ibid.*, paras. 7.1203-7.1208.

the assessment of potential alternative measures that were reasonably available, less trade-restrictive, and able to achieve an equivalent level of protection.⁸⁵ In this case, energy supply security was fundamentally important and this measure was “manifestly apt to address *ex ante* the threat ... posed by foreign control over TSOs”.⁸⁶ Moreover, the Panel did not find that the measure was trade restrictive because existing applications for third-country certification had always been successful, and Russia did not demonstrate any appropriate alternative.⁸⁷ However, the measure did not satisfy the requirements in the *chapeau* of GATS Article XIV, because domestically controlled TSOs might pose the same risk or threat to energy security as the foreign ones but were not subject to the same screening mechanism.⁸⁸ In conclusion,

“While we do not mean to imply that the same regulatory scheme should necessarily be applied with respect to foreign and domestically controlled TSOs, we believe that the European Union is required to adapt or ‘calibrate’ its measure in a way so it address the threats posed by foreign governments requiring or inducing domestically controlled TSOs to undermine the European Union’s security of energy supply as well. The lack of any assessment of threats posed by foreign governments requiring or inducing domestically controlled TSOs to undermine the European Union’s security of energy supply, in our view, is not compatible with the cause or rationale of the third-country certification measure. Hence, this constitutes arbitrary and unjustifiable discrimination in violation of the *chapeau* of Article XIV of the GATS”.⁸⁹

E. TEN-E Measures

The EU’s TEN-E regime aims to attain its “timely development and interoperability”.⁹⁰ Under this regime, gas pipelines that are necessary for the identified

⁸⁵ *Ibid.*, para. 7.1209.

⁸⁶ *Ibid.*, paras. 7.1212 & 7.1224.

⁸⁷ *Ibid.*, paras. 7.1225-7.1238.

⁸⁸ *Ibid.*, paras. 7.1249-7.1251.

⁸⁹ *Ibid.*, para. 7.1253.

⁹⁰ Regulation (EU) No 347/2013 of the European Parliament and of the Council of April 17, 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009 [2013] OJ L115/39 (TEN-E Regulation), Article 1.

priority gas corridors,⁹¹ involve at least two Member States, and meet other criteria can qualify as PCIs.⁹² These can have administrative and regulatory advantages regulated under the TEN-E Regulation and more importantly, are eligible for EU financial assistance.⁹³ After examining the design, structure, and operation of the TEN-E measure, the Panel found that in many cases, the criteria of gas supply diversification for selecting PCIs demanded the development of pipeline infrastructure to import non-Russian gas.⁹⁴ Accordingly, this measure, which provided administrative, regulatory, and financial incentives, was designed to increase the availability of new import pipelines for natural gas of non-Russian origin, including domestic and any other country, and decrease the availability of new import pipelines for Russian gas.⁹⁵ Thus, Russian natural gas was accorded with less favorable treatment in comparison with domestic natural gas as well as natural gas imported from any other country, which violated MFN and NT obligations under the GATT.⁹⁶

The EU contended that this measure was justified under Article XX(j), arguing that natural gas was a product “in general or local short supply” due to “genuine and serious risks of disruption of supply”.⁹⁷ Moreover, this measure sought to develop and improve infrastructure for supply within and around the EU to ensure energy security and therefore was “essential” to the “acquisition or distribution” of natural gas.⁹⁸ According to the Panel, a responding Member must demonstrate all the elements as included in subparagraph (j) and the *chapeau* of Article XX to justify a challenged measure under this general exception.⁹⁹ For a measure to gain provisional justification under subparagraph (j) of GATT Article XX, it is required that,

- “(a) the measure is *designed* to address the *acquisition or distribution* of products *in general or local short supply*;
- (b) the measure is *essential* to the acquisition or distribution of

⁹¹ The priority gas corridors are identified in Annex I(2) of the TEN-E Regulation.

⁹² TEN-E Regulation, Article 4.

⁹³ *Ibid.*, Article 14.

⁹⁴ *Supra* n. 43, paras. 7.1267-7.1285.

⁹⁵ *Ibid.*, paras. 7.1298-7.1300 & 7.1310-7.1312.

⁹⁶ *Ibid.*, paras. 7.1301 & 7.1313.

⁹⁷ *Ibid.*, para. 7.1326.

⁹⁸ *Ibid.*

⁹⁹ *Ibid.*, para. 7.1328.

- products in general or local short supply;
- (c) the measure must be consistent with the principle that all Members are entitled to an equitable share of the international supply of the products concerned;
- (d) the measure inconsistent with the other provisions of the GATT 1994 must be discontinued as soon as the conditions giving rise to [the measure] have ceased to exist”.¹⁰⁰

The assessment of the term “in general or local short supply” involves “an examination of the extent to which a particular product is ‘available’ for purchase in a particular geographical area or market, and whether this is sufficient to meet demand in the relevant area or market”.¹⁰¹ Moreover, subparagraph (j) only covers products that are presently in short supply. Therefore, the existence of the genuine and serious risk that gas supply might become unstable or inaccessible was insufficient to establish that natural gas was a product in short supply.¹⁰² The Panel also proceeded to address other elements of the provision. The “essentiality” test that the Panel developed under GATT Article XX(j) was identical to the necessity test under other general exceptions in GATT Article XX and GATS Article XIV.¹⁰³ In this case, the test failed because “a demonstration that the diversification of natural gas supply and routes contributes to the security of energy supply does not establish that the diversification of natural gas supply and routes also contributes to the ‘acquisition or distribution’ of natural gas”.¹⁰⁴

Russia also submitted that this measure modified competition conditions to the detriment of Russian PTS and service suppliers, thereby violating GATS Article II:1.¹⁰⁵ However, the Panel discovered that this measure regulated pipeline infrastructure development that preceded the use of such infrastructure to

¹⁰⁰ *Ibid.*, para. 7.1329.

¹⁰¹ *Ibid.*, para. 7.1342.

¹⁰² *Ibid.*, paras. 7.1348-7.1353.

¹⁰³ *Ibid.*, para. 7.1359: “the following factors are relevant in assessing whether a measure is ‘essential’: (a) the extent to which the measure sought to be justified contributes to ‘the acquisition or distribution of products in general or local short supply’; (b) the relative importance of the societal interests or values that the measure is intended to protect; and (c) the trade-restrictiveness of the challenged measure. In most cases, a comparison between the challenged measure and reasonably available alternative measures would also be undertaken”.

¹⁰⁴ *Ibid.*, para. 7.1372.

¹⁰⁵ *Ibid.*, paras. 7.1383-7.1385.

supply PTS and therefore did not concern the supply of the services.¹⁰⁶ Neither did Russia establish that project promoters, which could be PTS suppliers once the projects were completed, were treated differently based on origin.¹⁰⁷ Therefore, the alleged discrimination against pipeline development projects connecting Russia under this measure did not necessarily lead to discriminatory treatment to Russian PTS or service suppliers.¹⁰⁸ Overall, the Panel concluded that Russia did not demonstrate that this measure was inconsistent with GATS Article II:1.¹⁰⁹

F. Interim Conclusions

According to *EU — Energy Package*, the WTO regime provides sufficient policy space for unbundling measures accomplished based on different models if they occur in a non-discriminatory and origin-neutral manner.¹¹⁰ However, WTO rules may prohibit politically driven and origin-biased measures aimed at energy supply security, such as screening mechanisms solely targeting foreign undertakings and investment schemes intended to encourage supply diversification from dominant suppliers.¹¹¹ China's import pipelines might encounter these measures. In *EU — Energy Package* and *India — Solar Panel*, the responding states brought a defense under GATT Article XX(j) to justify their trade measures in the name of protecting their long-term energy security. However, the Panels' rulings demonstrated that the threshold to establish a defence was high and the respondents' efforts were fruitless. In comparison, although the third-country certification measure in the EU Gas Directive complied with the requirements in the provision of GATS Article XIV(a) on the public order exception, it violated the *chapeau* of this Article.¹¹² Therefore, the general exceptions under the GATT and GATS provide a limited amount of policy space for energy security policies that violate WTO obligations. Furthermore, the Panel in *EU — Energy Package* found that an internal measure affecting the

¹⁰⁶ *Ibid.*, paras. 7.1423-7.1427.

¹⁰⁷ *Ibid.*, para. 7.1428.

¹⁰⁸ *Ibid.*, para. 7.1429.

¹⁰⁹ *Ibid.*, para. 7.1439.

¹¹⁰ *Supra* n. 35, pp. 202-203.

¹¹¹ *Ibid.*, p. 209.

¹¹² *Ibid.*, p. 263.

transmission capacity of a gas import pipeline from Russia constituted quantitative restrictions on Russian gas importation in violation of GATT Article XI. This factored in the reliance of gas trade on fixed pipeline infrastructure. This finding can be applied to export restrictions imposed in relation to PTS, which are relevant to China's import CBPs. At last, as Pogoretskyy and Talus pointed out, a controversial issue related to the decisions on the TEN-E measure is:

“whether a measure may be considered to have a detrimental impact on the competitive opportunities of products of a certain origin within the meaning of Articles I:1 or III:4 (e.g. Russian gas) when it in fact aims to correct the inequality of competition between these products and products of other origins, due to the underdeveloped infrastructure between consumers and the alternative sources of supply. This question is particularly pertinent in the context of network-bound trade, where there is no market without a sufficiently developed infrastructure, such as gas pipelines and LNG terminals, the construction of which normally costs billions of euros in investments and takes many years”.¹¹³

VI. LESSONS FROM *RUSSIA — TRAFFIC IN TRANSIT*

In WTO cases, the panels have interpreted and applied the freedom of transit clause only in *Columbia — Port of Entry* and *Russia — Traffic in Transit* without providing comprehensive interpretations or addressing its applications to pipeline transit. In *Russia — Traffic in Transit*, the Panel found that Russia's halt of road and rail transit from Ukraine during the Ukrainian Crisis violated the clause. Prohibition on PTS is a threat that China's import CBPs may face during conflicts with transit states, which will violate GATT Article V on transit.

More importantly, Russia invoked the national security defense in GATT Article XXI(b)(iii), arguing that “the measures were among those that it considered necessary for the protection of its essential security interests, which it took in response to the emergency in international relations that occurred in

113 Vitaliy Pogoretskyy and Kim Talus, The WTO Panel Report in *EU — Energy Package* and Its Implications for the EU's Gas Market and Energy Security, *World Trade Review*, 2019, p. 17.

2014, and which presented threats to Russia's essential security interests".¹¹⁴ The defense is relevant to energy measures implemented out of energy security concerns and that violate WTO obligations. Although GATT Articles XX and XIV have been sufficiently tested in the DSM, showing that there is a high threshold to establish the general exceptions, the national security defense in GATT Article XXI and GATS Article XIV manifests its recent relevance and potential and also still lacks clarification. To illustrate, although the contracting parties to GATT 1947 occasionally invoked the national security exception in dispute settlement, they had not done so for decades after the WTO's establishment.¹¹⁵ However, this self-restraint by WTO Members recently changed, and two WTO Panels have made rulings on the defense, which reads:

"Nothing in this Agreement shall be construed ...

(b) to prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests ...

(iii) taken in time of war or other emergency in international relations; ..."¹¹⁶

In *Russia — Traffic in Transit*, the Panel examined the national security defence for the first time in WTO history, and it followed this ruling's interpretative approach and analytical framework for *Saudi Arabia — Protection of IPR*.¹¹⁷ According to the Panel Reports, this defence was not wholly self-judging or non-justifiable.¹¹⁸ Every Member had the freedom to define its own essential security interests¹¹⁹ and what actions were necessary to protect these interests,¹²⁰ but the WTO Panels had jurisdiction over the following issues:

114 WTO, DS512: *Russia — Measures Concerning Traffic in Transit*, https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds512_e.htm (Last Visited on December 5, 2022).

115 Tatiana Lacerda Prazeres, Trade and National Security: Rising Risks for the WTO, *World Trade Review*, Vol. 19, 2020; Daria Boklan and Amrita Bahri, The First WTO Ruling on National Security Exception Balancing Interests or Opening Pandora Box, *World Trade Review*, Vol. 19, 2020; Sebastián Mantilla Blanco and Alexander Pehl, *National Security Exceptions in International Trade and Investment Agreements: Justiciability and Standards of Review*, Springer, 2020.

116 GATT Article XXI, GATS Article XIV bis.

117 Although the Respondent in the latter case relied on Article 73(b)(iii) of the TRIPS Agreement to justify its violation of the TRIPS Agreement, the wording of the provision is identical to that of GATT Article XXI(b)(iii).

118 Panel Report, *Russia — Traffic in Transit*, WT/DS512/R, April 5, 2019, paras. 7.102-7.104.

119 *Ibid.*, paras. 7.130-7.131.

120 *Ibid.*, paras. 7.146-7.147.

“a. whether the existence of a “war or other emergency in international relations” has been established in the sense of subparagraph (iii) to Article 73(b);

b. whether the relevant actions were “taken in time of” that war or other emergency in international relations;

c. whether the invoking Member has articulated its relevant “essential security interests” sufficiently to enable an assessment of whether there is any link between those actions and the protection of its essential security interests; and

d. whether the relevant actions are so remote from, or unrelated to, the “emergency in international relations” as to make it implausible that the invoking Member considers those actions to be necessary for the protection of its essential security interests arising out of the emergency”. [with minor changes]¹²¹

For the first item, the Panels found that the circumstance of “war or other emergency in international relations” was “an objective fact”,¹²² and the Panels shall objectively decide its existence. In particular, the Panels defined “emergency in international relations” strictly as “a situation of armed conflict, or of latent armed conflict, or of heightened tension or crisis, or of general instability engulfing or surrounding a state”.¹²³ This situation shall “give rise to particular types of interests for the Member in question, i.e. defence or military interests, or maintenance of law and public order interests”.¹²⁴ The Panels also elaborated on the distinction between “emergency in international relations” and political and economic conflicts,

“while ‘political’ and ‘economic’ conflicts could sometimes be considered ‘urgent’ and ‘serious’ in a political sense, such conflicts will not be ‘emergenc[ies] in international relations’ within the meaning of subparagraph (iii) ‘unless they give rise to defence and military interests, or maintenance of law and public order interests’”.¹²⁵

121 Panel Report, *Saudi Arabia — Protection of IPRs*, WT/DS567/R, June 16, 2020, para. 7.242.

122 *Supra* n. 118, para. 7.71.

123 *Ibid.*, para. 7.76.

124 *Ibid.*

125 *Supra* n. 121, para. 7.245.

As for the second issue, the term “taken in time of” indicated that the actions at dispute shall “be taken *during* the war or other emergency in international relations”.¹²⁶ Moreover, the good faith obligation that Members shall not abuse the exception “as a means to circumvent their WTO obligations” limited the discretion of every Member to decide its “essential security interests” and which action is “necessary” for the protection of these interests.¹²⁷ Thus, the panels undertook the obligation to assess the third and fourth issues invoked above. The “essential security interests” of a state related to “the quintessential functions of the state, namely, the protection of its territory and its population from external threats, and the maintenance of public order internally”.¹²⁸ Nevertheless, the threshold to establish “essential security interests” was not high, considering that the main function of the analytical step is to “enabl[e] an assessment by the Panel of whether ... the challenged measures ... is plausibly connected to the protection of those essential security interests”.¹²⁹ The necessity test under the defense was also loosely defined, given that responding states were only required to prove that the measures at issue “are not implausible as measures protective of these interests”.¹³⁰ Accordingly, the national security defense provided more discretion than general exceptions in GATT Article XX and GATS Article XIV.¹³¹

The two WTO Panels in *Russia — Traffic in Transit* and *Saudi Arabia — IPR Protection* adopted the same interpretative approach and analytical framework regarding the national security exception, which is well-balanced, while some WTO Members and scholars have welcomed these aspects.¹³² However, while the Panel Report in *Russia — Traffic in Transit* has been adopted, Saudi Arabia appealed and disagreed with the Panel’s findings regarding the national security defense in *Saudi Arabia — IPR Protection*, meaning that this case has

126 *Supra* n. 118, para. 7.70 (emphasis original).

127 *Ibid.*, para. 7.133.

128 *Ibid.*, para. 7.130.

129 *Supra* n. 121, para. 7.281.

130 *Supra* n. 118, para. 7.138.

131 For the comparison, see Joost Pauwelyn, Export Restrictions in Times of Pandemic: Options and Limits under International Trade Agreements, *Journal of World Trade*, Vol. 54, No. 5, 2022, pp. 735, 736 & 737-742.

132 See eg. Minutes of the Meeting Held in the Centre William Rappard of April 26, 2019, WT/DSB/M/428, June 25, 2019; See *supra* n. 115, Tatiana Lacerda Prazeres (2020), Daria Boklan and Amrita Bahri (2020), and Sebastián Mantilla Blanco and Alexander Pehl (2020), pp. 26-27.

reached an impasse during the AB crisis. In WTO history, the panels' findings for numerous WTO disputes were overturned in appeal by the AB whose interpretation was adopted during subsequent disputes and gained widespread acceptance among WTO Members. Thus, it is still far too early to say that a standard and uniform understanding of this defense has been sufficiently developed under the WTO regime.¹³³ In other words, short of AB confirmation, the credibility of the interpretative approach that the panels have developed is somewhat defective. If the panels during future disputes adopt the same stance, it can be argued that the consistency of their interpretation may "at least have a moral persuasion effect on States".¹³⁴ Nevertheless, the opposite may also occur. In addition, if a WTO Member to the dispute disagrees with the panel's interpretation of the defense, it can also appeal to set aside the rulings.

Overall, the Panels in *Russia — Traffic in Transit* and *Saudi Arabia — Protection of IPR* took "a combination of an objective and subjective approach" to interpret the exception, aiming to balance protecting national security interests and lowering trade barriers to ensure free trade.¹³⁵ Based on their interpretation that might ultimately be overturned, it could be argued that the "essential security interests" of a state also cover its energy industry. However, states adopt most energy security policies due to political and economic considerations, rather than "in time of war or other emergency in international relations", which prevents them from meeting the criteria.

VII. CONCLUDING REMARKS

This article discussed how WTO law can potentially mitigate political risks that China's strategically important CBPs face, as it focuses especially on two recent cases (*EU — Energy Package* and *Russia — Traffic in Transit*). In summary, WTO law allows unbundling measures that different models accomplish by implementing them in a non-discriminatory and origin-neutral manner. Furthermore, this can protect China from cuts to their energy sources that transit

133 Laura Magi, The Effect of the WTO Dispute Settlement Crisis on the Development of Case Law on National Security Exceptions: A Critical Scenario, *Question of International Law*, Vol. 69, 2020, p. 36.

134 *Ibid.*

135 *Supra* n. 115, Daria Boklan and Amrita Bahri (2020).

through pipelines, restrictions that export countries impose on pipelines, and discriminatory treatment towards Chinese-supplied PTS. Moreover, the national security defense does not apply to energy security measures taken during peacetime, but grants states with abundant discretion during wartime scenarios, which is detrimental for China, who is an energy consumer that relies heavily on imports. However, the threshold for using general exceptions (on short supply and public order) to justify energy security policies is high, which could be a concern and should be effectively reformed. Overall, WTO law has great potential for protecting China's energy security in a CBP context. However, the AB crisis as well as the rise of unilateralism and national security claims imply that the MTS is declining. Therefore, China should continue its support for the WTO system and make efforts to help restore its normal operation.