

Sajal Mathur *Editor*

Trade, the WTO and Energy Security

Mapping the Linkages for India



 Springer

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Centre for
WTO 
Studies
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Contents

1 An Introduction to Trade, WTO, and Energy Security: Linkages for India	1
Sajal Mathur	
2 Energy Security and the WTO Agreements.	15
James J. Nedumpara	
3 GATT/WTO Accessions and Energy Security	73
Sajal Mathur and Preeti Mann	
4 Trade and Energy Security: Legal Assessment of the Linkages and Implications for India	95
R. V. Anuradha and Piyush Joshi	
5 India, OPEC, and an Agenda for Energy Security.	147
Atul Kaushik	

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Chapter 1

An Introduction to Trade, WTO, and Energy Security: Linkages for India

Sajal Mathur

Abstract International trade, World Trade Organization (WTO), and energy security are three broad topics that each could be subject to standalone and detailed analysis. While some work has been done to examine the interface in an international context, there has been little or no work done to map the inter-linkages or implications for India. This introduction and the subsequent chapters seek to address and fill this gap.

Contents

1.1 Introduction.....	2
1.2 Energy Security Across the Energy Divide	3
1.3 Trade and Energy Security in India	4
1.4 WTO and the Energy Sector.....	8
1.5 Trade, WTO, and Energy Security: Mapping the Linkages for India	11
Bibliography	13

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1.1 Introduction

Energy and international trade experts usually work in their own respective domains and may struggle to fully comprehend and map out trade and energy security linkages. Governance structures for international trade are relatively well-defined with the World Trade Organization (WTO) and the rules-based multilateral trading system coupled with bilateral, regional, and now transcontinental trade agreements setting new benchmarks. International or regional cooperation on energy or energy security, by comparison, has been less elaborate and may still be considered at a nascent stage of development. There are, however, some notable exceptions. The Energy Charter Treaty (ECT) is one such initiative. Some trade agreements such as the North American Free Trade Agreement (NAFTA) have also taken on board energy considerations with a separate ‘energy’ chapter. The workings of the Organization of the Petroleum Exporting Countries (OPEC) are, of course, well documented.

The linkages between rules governing trade and energy security—with some India focus—are the main theme of this book. This edited volume brings together the views of academics, policy makers, and experts who have extensive experience covering WTO and international trade issues. The WTO interface is important as trade and energy security linkages may assume significance as a topic for negotiation in the not too distant future. There is, of course, still no consensus on how to conclude the Doha Development Agenda (DDA—Doha Round) but that has not dissuaded some commentators from suggesting that the WTO’s negotiating agenda needs to be updated to include twenty-first century concerns such as climate change or energy security. India has so far given due attention and priority to concluding the ongoing Doha Round without seeking to overload the agenda with new issues at this stage.¹

This book is a collection of papers on trade and energy security that were commissioned by the Centre for WTO Studies (CWS) at the Indian Institute of Foreign Trade (IIFT) to deepen the understanding of the interface between energy security and trade rules, particularly from the Indian perspective. Some of the issues that have been covered are mapping of the linkages between trade and energy security in the WTO agreements, case law, accession, and Doha negotiations (Chair texts and proposals); assessing the issues that could be raised by energy deficit or surplus countries and the systemic implications if issues related to energy security are negotiated in the WTO; analyzing the provisions of the ECT and NAFTA vis-à-vis domestic policy; and examining the trade regimes of select

¹ The summing-up by the Chairman at the WTO Eight Ministerial Conference highlights this divergence and reads: “a number of Ministers stressed that for the WTO to remain credible and relevant it needed to address current global challenges. Some of the issues mentioned included climate change, energy, food security, trade and exchange rates, competition and investment. [...] Other Ministers expressed reservations about initiating negotiations on new issues. They were concerned about the possibility of addressing issues selectively or shifting the focus away from unresolved issues in the DDA negotiations” (WTO document WT/MIN(11)/11).

OPEC members and other major suppliers of fossil fuels to India. While the Indian perspective is evident in the contributions, this book may also be of interest to an international audience as trade, WTO, and energy security are global concerns and of relevance to all practitioners and academics working on these issues.

Before diving deeper into the trade, WTO, and energy security inter-linkages, this introductory chapter seeks to provide an overview and set the platform for the subsequent chapters.

1.2 Energy Security Across the Energy Divide

Economies run on energy. All sectors be it agriculture, industry, services, or even households depend on energy. It is hard to imagine one's life without energy. Securing existing reserves or ensuring energy supply in a sustainable and uninterrupted manner is a matter of commercial significance and national importance. This is precisely the reason why countries across the globe are so actively engaged in managing their energy reserves or securing the supply of energy. Energy security is often viewed as an integral element of national security.

But what is meant by energy security? The definition of energy security is guided by the availability or absence of energy resources. One can consider there to be an 'energy divide'² determined by endowments of energy resources. Energy surplus nations would naturally view the concept of energy security somewhat differently from energy deficient countries. There is focus on conservation of exhaustible natural resources and managing energy supplies for price and demand volatility in the former. For the latter, the core issue is one of access and security in energy supplies with minimal or no disruptions to commercial or household activity.

While there may be some commonalities across the 'energy divide', the approach to energy security usually concerns 'sovereignty' or 'security' considerations (Pauwelyn 2010). The 'sovereignty'-based approach to energy security is particular to energy abundant countries. The extraction, use, or conservation of exhaustible energy resources is often viewed as a sovereign right or decision of the country. Energy deficient countries are more preoccupied with 'security' considerations in terms of securing supplies to counter market or supply risks, diversifying the energy basket and, to the extent feasible, easing dependence on foreign supplies.

² Ayres and Ayres (2009) approach the so-called 'energy divide' to examine how renewable energy can replace fossil fuels. There is little or no focus on the types and relative merits of different energy resources in this book. The use of 'energy divide' is more to suggest that energy surplus and deficit countries may have different notions and priorities when it comes to looking at the trade and energy security linkages in WTO or other fora. This book seeks to limit itself to the more narrow confines of this debate.

Several energy security definitions have been proffered for the Indian context (see Singh 2010). For India, energy is more of a 'security' concern. According to the Integrated Energy Policy (Planning Commission 2006): "The country is secure when we can supply lifetime energy to all our citizens as well as meet their effective demand for safe and convenient energy to satisfy various needs at affordable costs at all times with a prescribed confidence level considering shocks and disruptions that can be reasonably expected". It is also interesting to look at the concept from a different angle and the prism of energy 'insecurity'. According to Bohi and Toman (1993), energy insecurity can be defined as "the loss of welfare that may occur as the result of a change in price or availability of energy." Noronha and Sudarshan (2009) have stressed that energy security in India should cover threats that arise from poverty or energy 'inequity'.

Based on these definitions, it is clear that an energy deficient nation like India needs to ensure availability, affordability, and sustainability for energy security. There are economic and political fallouts if energy security is compromised as witnessed during the oil-shocks of the 1970s or 1990s.

1.3 Trade and Energy Security in India

As the Planning Commission (2006) has noted, energy security in the Indian context raises the following concerns: (i) will India get all the energy it needs even when willing and able to pay the price?; and (ii) how to manage supply disruptions due to external events or factors beyond India's control? In addition to the 'supply risk' there are also 'market risks' due to price volatility³ or 'technical risks' that could stem from accidents or technical failures that disrupt domestic energy supply or production. Reducing or dealing with these risks include steps to manage demand and increase efficiency in production and use of energy; reduce import dependence and boost domestic production of energy; diversify the energy basket (fuels and suppliers of energy); and expand India's domestic energy resource base and output.

The history of the energy sector in India has seen several twists (Singh 2010). Post independence, India took its first tentative steps to expand exploration and production of oil and gas. The Oil and Natural Gas Commission (ONGC) was set up in the 1950s and 'mineral and oil' was first listed in the Second Five Year Plan. The importance of a national policy on energy was recognized in the 1970s. The growing energy needs of the country coupled with the volatility and oil crisis had a direct economic fallout as the 1970s marked a period of double digit inflation and GDP shrank by 2.5 % in 1979. 'Energy' was covered as a separate topic in the

³ The market risk associated with sudden or large increases in prices of fossil fuels can be just as damaging as supply risks, i.e., factors or events beyond one's control that may disrupt energy supply.

Sixth Five Year Plan and several private companies in the energy sector were nationalized during this period. The Gulf War and the balance of payments crisis in the early 1990s provided the impetus for economic liberalization and opening of the energy sector. The Government opened exploration and production (E&P) to private investment and in 1997 the New Exploration Licensing Policy (NELP) was introduced to encourage greater private sector participation. The administrative pricing mechanism for petroleum was also gradually dismantled. The India Hydrocarbon Vision 2025 was formulated in 2000 to chart out and safeguard energy security at the turn of the century. Energy security was given a broad policy framework in the Integrated Energy Policy drafted by the Planning Commission in 2006. In 2013, the Kelkar Committee was constituted by the Ministry of Petroleum and Natural Gas, Government of India to chart a Roadmap for Reduction in Import Dependency in the Hydrocarbon Sector by 2030.

India's energy needs are growing with the growth in population and income levels. The country's energy production has for the most part struggled to match pace with both the quantum and growth of its consumption of energy. Given the shortfall, India has had to rely heavily on imports to meet its growing energy requirements.

In 1991, 17.85 % of India's total commercial primary energy supply (TCPES) was met by imports. By 2004–2005 imports accounted for 30 % of TCPES (Planning Commission 2006). According to the Kelkar Committee (2013), India presently imports about 70 % of its oil and 30 % of its gas requirements from abroad. Coal imports amount to 14 % of the demand and are also likely to grow over time. In 2013, India's energy imports amount to US\$150 billion or about 35 % of its primary energy requirements. By 2030, the cost of importing our energy requirements is estimated to touch almost US\$300 billion. Most of India's energy needs are met with fossil fuels (oil, gas, coal) though there has been a push to diversify and promote alternatives, including renewable energy and non-conventional energy resources.

Figure 1.1 charts out the production and consumption of crude oil and petroleum products in India over the period 2004–2005 to 2011–2012. Crude oil production has remained largely static and the country has had to rely on imports to meet requirements. Domestic production of petroleum products, however, exceeds domestic consumption. Production has increased markedly from 118.58 million tons (mt) in 2004–2005 to 196.71 mt in 2011–2012. Consumption over the same period increased from 111.63 to 148 mt. The surplus production of petroleum products has grown to almost 50 mt by 2011–2012 and has been a major export item in India's trade basket.

On the trade side, Figs. 1.2 and 1.3 show the gross imports, exports, and net imports of crude oil, liquefied natural gas (LNG), and petroleum products in both volume and value terms. India has been a net importer of petroleum products. The country has to rely mainly on imports to meet its crude oil and LNG requirements. However, India has spare refining capacity and some of the crude oil imported is, with value addition, exported as refined petroleum products.

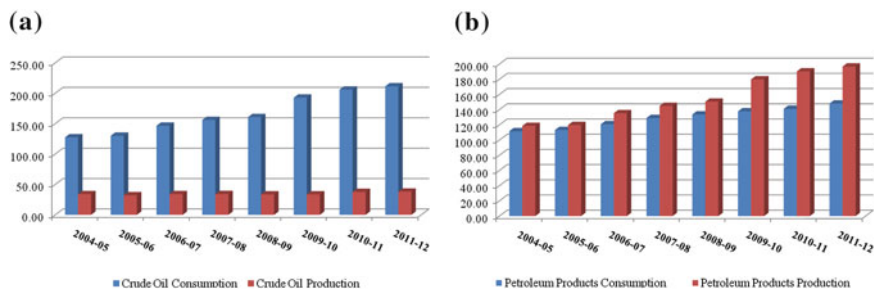


Fig. 1.1 a and b Production and consumption of crude oil and petroleum products in India (mt). *Source* Basic statistics on Indian petroleum and natural gas (2011–2012)

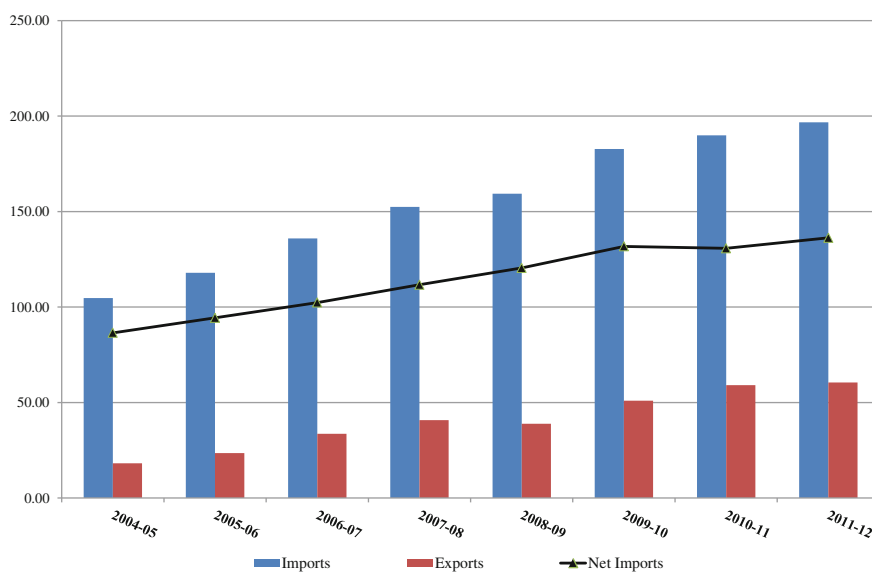


Fig. 1.2 Volume of India's trade in crude oil and petroleum products (mt). *Source* Basic statistics on Indian petroleum and natural gas (2011–2012)

The share of fossil fuel imports as a percentage of India's total imports has grown from just over a quarter (26.33 %) in 2004–2005 to 31.50 % in 2011–2012. Interestingly, petroleum exports as a percentage of India's total exports have grown even faster over the same period and more than doubled from 7.97 % in 2004–2005 to 18.33 % in 2011–2012.⁴ Crude oil (HS 27090000) is the single largest import item in India's trade basket amounting to almost 30 % of total

⁴ Data from the Basic Statistics on Indian Petroleum and Natural Gas (2011–2012).

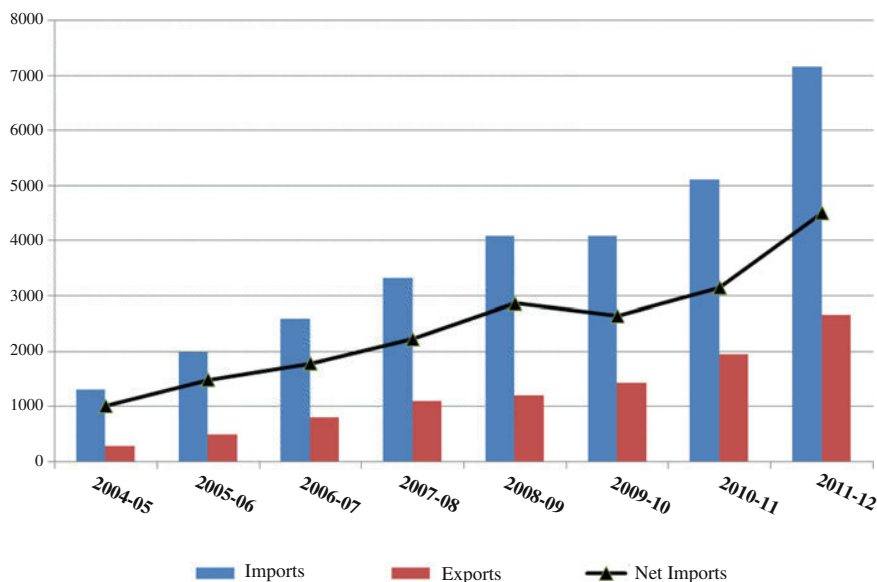


Fig. 1.3 Value of India's trade in crude oil and petroleum products (Rs. Billion), Excluding LNG from net imports. *Source* Basic statistics on Indian petroleum and natural gas (2011–2012)

imports in 2012–2013. High speed diesel (HS 27101930) is the single largest export item amounting to about 7.5 % of India's exports in 2012–2013.⁵

In volume terms (Fig. 1.2), gross imports have almost doubled from 104.69 mt in 2004–2005 to 196.74 mt in 2011–2012. Exports of petroleum products have more than trebled over the same period from 18.21 mt in 2004–2005 to 60.52 mt in 2011–2012. Even though the rate of growth of exports has been greater than the growth in imports, India remains a net importer of crude oil and petroleum products with the net amounting to 136.22 mt in 2011–2012.

Figure 1.3 highlights the 'market risk' and the impact of price and exchange rate volatility on India's energy security. In value (Rupee) terms, even after excluding LNG, the gross import bill for crude oil and petroleum products has grown from Rs. 1319.17 billion in 2004–2005 to Rs. 5117.21 billion in 2010–2011. Just a year later in 2011–2012, the import bill amounted to a whopping Rs. 7173.56 billion (an increase of over Rs. 2,000 billion). With the depreciation of the rupee and the appreciation of crude oil and petroleum prices, India's exports in this sector have also registered strong growth. Exports of petroleum products grew almost ten-fold in value (Rupee) terms from Rs. 299.98 billion in 2004–2005 to Rs. 2664.86 billion in 2011–2012. The gap between gross imports

⁵ Data from the Import Export Data Bank, Ministry of Commerce, Government of India <http://commerce.nic.in/eidb/ecom.asp> (accessed on 15 April 2014).

and exports of oil and petroleum products, however, continued to widen and amounted to Rs. 4508.7 billion in 2011–2012.

Petroleum products dominate India's trade basket. Fossil fuels are considered essential import items and India has to secure its energy needs, regardless of the price. However, the trade balance and size of the current account deficit is impacted with the hardening of prices. In addition to the 'market risk' there can be 'supply risk'. Securing energy supplies and diversifying the energy sources and suppliers especially in a volatile market remains a priority.

India has diversified and sources its oil imports from 59 countries (up from 25 countries in 2006 (Planning Commission 2006)). The Middle East Region is the main source accounting for nearly two-thirds of India's fossil fuel imports. In the Middle East—Saudi Arabia, Kuwait, Iran, Iraq, and the United Arab Emirates (UAE) are among the main suppliers. India has also sourced oil imports from other regions with Nigeria as a major supplier of crude oil to India. In addition, Angola, Brazil, Malaysia, and Venezuela are also among the top 15 suppliers to India (see Chap. 5 for more details).

1.4 WTO and the Energy Sector

Major suppliers of oil and gas were, until recently, operating outside the WTO and the scope of the multilateral trading system. The landscape has been changing and several energy majors, including Saudi Arabia and Russia, are now WTO members. Others such as Iran or Iraq are negotiating WTO entry. The direct fallout of the entry (or the prospective membership) of these oil and gas majors has been that energy may be more directly addressed at the WTO.

There are only two sector-specific agreements in the WTO, namely the WTO Agreement on Agriculture and the Agreement on Textile and Clothing that were both negotiated during the Uruguay Round. Energy products and energy security issues have not been addressed separately in the GATT/WTO framework. There is no standalone WTO agreement on energy or energy security. That is not to say that WTO provisions do not apply to energy products.

The energy sector is covered in the WTO. GATT/WTO provisions that are relevant for the energy sector and specifically energy security have been highlighted in Chaps. 2 and 3 of this book.⁶ The analysis in the subsequent chapters will not be repeated here. Rather it may be useful to re-look at the 'energy divide' and see how sovereignty or security concerns of energy surplus or deficit countries are accommodated in the WTO rules framework.

Energy majors have noted that energy resources are exhaustible and that the use or conservation of these resources should remain a sovereign decision of the

⁶ Yanovich (2011) and Marceau (2010) have also comprehensively examined WTO rules and energy linkages.

country. There are general and national security exceptions in the General Agreement on Tariffs and Trade (GATT) 1994 covering trade in goods and the General Agreement on Trade in Services (GATS)⁷ covering all service sectors (except those supplied in the exercise of governmental authority). The relevance of these exceptions from WTO commitments is that it provides the justification for measures “necessary to protect human, animal or plant life or health” or “relating to the conservation of exhaustible natural resources”. National security exceptions provide the grounds for a WTO member to take “any action which it considers necessary for the protection of its essential security interests”. The chapeau of GATT Article XX requires that the measures must not be applied in a manner that would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade. Trade restrictions for conservation of exhaustible energy resources may be justified only if equivalent measures to conserve energy resources are applied domestically.

Conservation is not the only preoccupation. Energy majors also need energy and may view energy resources as an ‘endowment’ to be used at the discretion of the country. Energy-related sectors both upstream and downstream are by corollary seen as areas where energy rich countries have a ‘competitive’ if not a ‘comparative’ advantage.

The energy sector in energy rich economies is often dominated by state owned or controlled enterprises and may be subject to the WTO disciplines on state trading enterprises. Investment and competition policies are not directly covered in the WTO but are of relevance in the context of the energy sector. Pricing policy, in particular the practice of ‘dual pricing’, where energy prices for exports and domestic use are differentiated and energy products sold at a lower price domestically has been the subject of scrutiny in WTO accession negotiations. Some issues have also been raised in the context of the WTO rules negotiations on subsidies and trade remedies in the Doha Round. Under GATS, specific commitments have been made in energy-related sectors such as services incidental to mining, energy distribution, or transportation of fuels.

Transit issues and access to fixed infrastructure such as electricity gridlines or pipeline transportation for oil and gas is important for the energy security of both energy surplus and deficit countries. In the WTO context, the GATT Article V freedom of transit provisions have been buttressed with the Trade Facilitation Agreement⁸ concluded at the WTO Bali Ministerial Conference. Though there is no explicit reference to energy transit or to fixed infrastructure in the Agreement, the negotiations itself did include proposals on the subject.

For energy deficit countries, ‘security’ in access to energy supplies is the main preoccupation. Securing energy supplies with predictability, i.e., without or with

⁷ Article XX and XXI of GATT 1994 and GATS Article XVI and XVI *bis* are similar in structure and provide the basis for general and national security exceptions, respectively.

⁸ WTO document WT/MIN(13)/36 and WT/L/911 (available online at <https://docs.wto.org/>).

minimal price or supply volatility is the lens through which these countries would view any WTO rules concerning energy security. For this reason, energy deficit countries would usually be reluctant to impose import restrictions or high tariffs that may hamper the import of energy products. Not surprisingly, import tariffs on energy products are relatively low with the average tariff for fuels bound at 25.3 % in the WTO.⁹ Applied tariffs are even lower and averaged just 0.5 % for developed countries and 6.7 % for developing countries in 2007 (World Trade Report 2010; Yanovich 2011).

From an energy deficit countries' perspective, it is export restrictions whether quantitative or price based that may be more of a concern. Quantitative export (and import) restrictions are prohibited and subject to the disciplines of Article XI of GATT 1994. However, as noted earlier, there are exceptions and exemptions that may provide valid grounds for export prohibitions, bans, licensing requirements, or other restrictions on energy products.

As for price-based measures, the WTO's World Trade Report 2010 has highlighted that the incidence of export taxes is greater in the natural resources (and energy) sector vis-à-vis other sectors. 5–10 % of world trade in fuels is subject to export levies. While revenues from export taxes accrue to the exporter, energy deficit countries have been levying internal consumption taxes to manage demand and regulate use of fossil fuels (see also Yanovich 2011).

The GATT/WTO has historically focused more on the import side with provisions and disciplines such as the WTO Agreement on Import Licensing. There are no equivalent disciplines on the export side such as an agreement on export licensing. Similarly, import duties have been the subject of successive rounds of tariff negotiations in the GATT/WTO. Export duties, on the other hand, are seldom bound let alone reduced. Strengthening WTO disciplines on export restrictions and any future commitments or bindings made on export duties are issues that could be on the radar for energy deficit countries.

Chapters 4 and 5 of this book sum up issues that may be tackled in any future negotiation on energy security. There are, of course, 'grey' areas or issues like export duties, export licensing, or (dual) pricing policy that are not covered in detail in the WTO framework. Energy producers and energy consumers may wish to tackle these issues differently in the WTO setting. Just as the definition of energy security differs, trade and energy security linkages at the WTO would be viewed differently by energy surplus and energy deficit countries. For the energy majors, securing market access and adequate policy space for trade in energy products may well be brought up in future WTO negotiations. On the other hand, energy deficit countries or large consumers such as India may view energy security from a different viewpoint and seek disciplines that ensure predictability and securing energy supply with minimal export restrictions or trade disruptions.

⁹ There are, however, members who have not bound tariffs on crude oil at the WTO.