A Never-Ending U.S.–China Solar Trade War? The Uyghur Forced Labor Prevention Act and International Trade Law

Mandy Meng Fang*

Abstract

The past decade has witnessed a persistent escalation of trade tensions between the United States ("U.S.") and China in the solar photovoltaic ("PV") sector. A recent move by the U.S. was to enact the Uyghur Forced Labor Prevention Act ("UFLPA") to prevent goods, including PV products, produced in the Xinjiang Uyghur Autonomous Region ("XUAR") of China from entering the U.S. market. Considering Xinjiang's large production capacity in polysilicon—a key raw material for the manufacturing of solar PV products—the enforcement of UFLPA is likely to profoundly implicate the U.S.–China trade relation in this area or even the global solar supply chain as a whole. While the UFLPA has a regulatory objective to promote respect for human rights and dignity, its impacts on international trade, especially solar products and their components, raise an important question with regard to the Act's compatibility with the U.S. trade obligations under the World Trade Organization ("WTO") regime. This article provides one of the first critical and in-depth analyses of the interface between UFLPA and the multilateral trade rules, highlighting potential contraventions and proposing recommendations for the United States and China, respectively. Facing the imperative to facilitate the low-carbon energy transition, the world's two largest greenhouse gas emitters—China and the United States—need to find more common ground to accelerate renewable energy development.

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* Assistant Professor, School of Law, City University of Hong Kong, email: mengfang@cityu.edu.hk. An earlier version of this Article was presented at the Hong Kong Institute of Clean Energy (HKICE) Faculty Seminar at the City University of Hong Kong. The author is grateful to Professor Alex Jen and the participants at the seminar for useful feedback from materials science, engineering, and public policy perspectives. The author also wants to thank Simon Lester for his insightful comments. All errors remain her own.

Key Words: Solar, UFLPA, U.S.–China, WTO, Trade War, Xinjiang Uyghur Autonomous Region

I. INTRODUCTION

The enactment of the Uyghur Forced Labor Prevention Act ("UFLPA") has further deteriorated the already strained U.S.–China relationship. The UFLPA prevents goods produced in the Xinjiang Uyghur Autonomous Region ("XUAR") from entering the U.S. market unless it can be shown that they were not produced using forced labor.[1] Of particular concern is the trade relationship between the two countries in the solar sector given that the Act bans the entry of XUAR–provisioned polysilicon—a critical component for the manufacturing of solar photovoltaic (PV) products. Such a ban thus makes the sector one of the four high-risk sectors that are subject to highly stringent enforcement.[2] Given that XUAR's production accounts for approximately 45% of the world's supply of solar-grade polysilicon, the reach of Xinjiang-based raw materials and intermediate processing companies within the solar panel production value chain is extensive.[3] Since the UFLPA came into

1. *See generally* Uyghur Forced Labor Prevention Act, Pub. L. No. 117–78., 135 Stat. 1525 (2021) (adopted by Congress in December 2021 and signed into law by the President on December 23, 2021) (ensuring that goods made with forced labor in the Xinjiang Uyghur Autonomous Region of the People's Republic of China do not enter the United States market); 19 U.S.C. §§ 1307, 468; 22 U.S.C. §§ 2656, 6901, 7101, 7107.

2. *See* DEP'T OF HOMELAND SEC., OFF. OF STRATEGY, POL'Y, AND PLANS, STRATEGY TO PREVENT THE IMPORTATION OF GOODS MINED, PRODUCED, OR MANUFACTURED WITH FORCED LABOR IN THE PEOPLE'S REPUBLIC OF CHINA: REPORT TO CONGRESS (June 17, 2022), https://www.dhs.gov/sites/default/files/2022-06/22_0617_fletf_uflpa-strategy.pdf [hereinafter REPORT TO CONGRESS] (The interagency, Forced Labor Enforcement Task Force (FLETF), identified in total three high-risk sectors—cotton, tomatoes, and silica-based products, such as polysilicon, glass, etc.); Richard A. Mojica et al., *Trade Compliance Flash: Prepare for CBP's UFLPA Enforcement Against Aluminum Products*, MILLER & CHEVALIER (Jan. 13, 2023), https://www.millerchevalier.com/publication/trade-compliance-flash-prepare-cbps-uflpa-enforcement-against-aluminum-products (It has been suspected that a new addition to the list of high-risk sectors would be the aluminum sector because the U.S. Customs and Border Protection (CBP) recently provided specific guidance on how to prove aluminum goods are admissible to the United States, and started targeted enforcement of the UFLPA against aluminum products).

3. Dan Murtaugh, *Why It's So Hard for the Solar Industry to Quit Xinjiang*, BLOOMBERG, (Dec. 9, 2021, 12:10 AM),

effect on 27 June 2022, more than 1,000 solar shipments of solar PV products worth nearly 500 million USD were impounded as a result of withhold release orders ("WROs") issued by the U.S. border agents in just over five months.[4]

As an internationally traded commodity with an expansive supply chain across different countries and regions, solar PV products can help potentially reduce carbon emissions and accelerate the energy sector to a low-carbon energy transition.[5] The benefits arising from the growing global trade in the solar sector should therefore be assessed from socioeconomic and environmental perspectives. Nevertheless, trade frictions in the solar sector have persisted throughout the past decade, particularly among major producer countries.[6] Since the early 2010s, China and the United States have experienced an escalation of solar trade conflicts featuring the frequent use of trade restrictive measures, such as trade remedies, local sourcing requirements, and tariff increases enforced by the two countries.[7] Most of these measures were imposed by the United States against China, given the latter's rapid rise as the global solar manufacturing powerhouse, which has undermined the competitiveness of the former's solar industry.[8]

Unlike the previous U.S. solar measures against Chinese imports, which were primarily aimed at economic benefits, the UFLPA has a distinct regulatory objective, i.e., to promote respect for human rights and dignity. However, the impacts of

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https://www.bloomberg.com/news/articles/2021-02-10/why-it-s-so-hard-for-the-solar-industry-to-quit-xinjiang?leadSource=uverify%20wall.

4. Nichola Groom, *Exclusive: U.S. Blocks More than 1,000 Solar Shipments Over Chinese Slave Labor Concerns*, REUTERS (Nov. 12, 2022, 11:33 AM), https://www.reuters.com/world/china/exclusive-us-blocks-more-than-1000-solar-shipments-over-chinese-slave-labor-2022-11-11/.

5. *See generally* INT'L RENEWABLE ENERGY AGENCY & CLEAN ENERGY MINISTERIAL, THE SOCIO-ECONOMIC BENEFITS OF SOLAR AND WIND ENERGY (2016).

6. Mandy Meng Fang, *Old Wine in a New Bottle? Green Industrial Policy and the Use of Safeguards in the Solar Sector*, 55 J. WORLD TRADE 573, 577–79 (2021).

7. *See infra* Section 2.

8. Nevertheless, China also imposed a number of countermeasures as retaliation to the U.S. restrictive measures on Chinese solar products. *See China: Extension of Definitive Antidumping Duties on Solar-grade Polysilicon from the United States and the Republic of Korea*, GLOB. TRADE ALERT (July 18, 2013) [hereinafter *China: Extension of Definitive Antidumping Duties*], https://www.globaltradealert.org/intervention/16490/anti-dumping/china-extension-of-definitive-antidumping-duties-on-solar-grade-polysilicon-from-the-united-states-and-the-republic-of-korea.

the UFLPA on international trade in solar products and components are likely to be far-reaching, which raises an important question about the Act's compatibility with U.S. trade obligations under the World Trade Organization ("WTO") regime. While an expanding body of scholarship has examined the U.S.–China trade conflicts in the solar sector, a critical analysis of the UFLPA in relation to its implications on global solar trade and its relationship with WTO law is still missing.[9] This article aims to close the gap by offering a thorough analysis of the impact of UFLPA and applying relevant WTO rules to examine the consistency of the Act with the multilateral trading system. It is essential to understand whether the Act conflicts with WTO rules, and if so, how—which provides valuable lessons for the regulating state as well as others that plan to regulate to respect their trade obligations. Meanwhile, from a climate change perspective, the tight restriction on the importation of critical low-carbon energy products pursuant to the UFLPA could exacerbate the existing supply constraints in the United States and hinder its ability to achieve its energy transition targets.[10] In a time when the development and deployment of renewable energy to mitigate climate change is fraught with different, and potentially competing interests, it is crucial not to overlook the urgency to steer the world away from an environmentally dangerous path.

Methodologically, the article argues that merely relying on legal analysis is not sufficient in addressing the research questions. Instead, this article develops its arguments from law and policy perspectives. This article is split into four sections. Section Two sets the broad background against which the United States and China have experienced a contentious trade relationship in the solar sector and introduces the UFLPA,

9. Fang, *supra* note 6; *see* Joanna Lewis, *The Rise of Renewable Energy Protectionism: Emerging Trade Conflicts and Implications for Low Carbon Development*, 14 GLOB. ENV'T POL. 10, 16–18 (2014) (discussing U.S.–China trade frictions in the solar sector). *See generally* Mandy Meng Fang, *A Crisis or An Opportunity? The Trade War Between the U.S. and China in the Solar PV Sector*, 54 J. WORLD TRADE 103 (2020). Scholarly analysis of the UFLPA has been scant so far. *But see, e.g.*, TIBISAY MORGANDI, INT'L LAW. ASSISTING WORKERS NETWORK, WTO LAW ASPECTS OF IMPORT PROHIBITIONS ON PRODUCTS AND SERVICES MADE USING FORCED LABOUR (2022).

10. Matt Solomon & David E. Bond, *The Uyghur Forced Labor Prevention Act–Potential Impact on Critical Minerals Supply for Clean Energy Technologies*, WHITE & CASE (Dec. 5, 2022), https://www.whitecase.com/insight-alert/uygher-forced-labor-prevention-act-potential-impact-critical-minerals-supply-clean#article-content.

focusing on its distinctions from the previous U.S. trade law regulating forced labor. Section Three applies the trade rules as administered by the General Agreement on Tariffs and Trade ("GATT") to the UFLPA to examine the Act's compatibility with the WTO regime. Of relevance are the U.S. commitments under the GATT Article XI (general elimination of quantitative restrictions) and Article I (most-favored-nation treatment) and exceptional clauses that may be available to exonerate any potential breach of GATT obligations. Section Four concludes and lists recommendations for the United States and China.

II. THE U.S.–CHINA SOLAR TRADE WAR AND UFLPA

It is essential to fully grasp the decade-long conflicts between the United States and China in the solar sector to understand UFLPA and its implications on the two countries' solar trade relations. This Section starts by setting out the causes, origins, and evolution of the turbulent relationship between the United States and China in the solar sector prior to the enactment of the UFLPA.

A. AN OVERVIEW OF THE U.S.–CHINA SOLAR TRADE CONFLICT IN THE PAST DECADE

The rapid growth of China's solar PV manufacturing capacity—in particular, its massive amount of exports for the past one and a half decades—has greatly contributed to the continuous trade frictions between China and the United States in the solar sector.[11] Around the same time, the United States, once a world leader in solar manufacturing, gradually lost its industrial competitiveness.[12] As a result, U.S. solar companies have asserted that Chinese solar firms received government subsidies in the form of low-cost capital and cheap land, and have dumped their products in overseas markets.[13]

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11. Fang, *supra* note 6, at 578, 583.

12. David Feldman, *To Understand Why Biden Extended Tariffs on Solar Panels, Take A Closer Look at Their Historical Impact*, CONVERSATION (Apr. 6, 2022, 8:23 AM), https://theconversation.com/to-understand-why-biden-extended-tariffs-on-solar-panels-take-a-closer-look-at-their-historical-impact-177528.

13. *See id.*; Keith Bradsher & Diane Cardwell, *U.S. Slaps High Tariffs on Chinese Solar Panels*, N.Y. TIMES (May 17, 2012), https://www.nytimes.com/2012/05/18/business/energy-environment/us-slaps-tariffs-on-chinese-solar-panels.html.

In the year 2011, the U.S. Department of Commerce initiated investigations against Chinese solar firms and imposed countervailing duties ("CVD") ranging from 2.9% to 4.73% and anti-dumping duties ("ADD") ranging from 31% to 250% on Chinese solar cells and modules in 2012, marking the beginning of the decade-long saga between the two countries.[14] As a counter-action, China introduced provisional ADD with the rate varying between 12.3% and 57% on all U.S. imports of polysilicon, which is a critical input for solar panels.[15] In 2014, the United States imposed another round of tariff increases in the form of ADD ranging from 26.71% to 78.42% on imports of most solar panels made in China, and new tariffs (between 11.45% and 27.55%) on imports of solar cells made in Taiwan to close the previous loophole.[16] In addition, the U.S. CVDs on Chinese solar modules reached anywhere between 27.64% and 49.79%.[17] In early 2018, then-President Trump initiated a sweeping-scale trade war with China, the first move of which was to impose safeguard measures on a range of products, including Chinese solar PV products.[18] The escalation of trade tensions between the United States and China in the solar PV sector throughout the 2010's was notable.[19]

The change of the U.S. administration to a Democratic party-led government in 2020 did not make a difference to the trade policy crafted by the previous White House, as President Biden decided to retain the Trump-era tariffs on Chinese

14. Gary Clyde Hufbauer & Martin Vieiro, *U.S. Anti-Dumping Duties on Chinese Solar Cells: A Costly Step*, PETERSON INST. INT'L ECON. (May 25, 2012, 6:45 AM); s*ee* Doug Palmer & Matt Daily, *U.S. Sets 'Surprisingly Low' China Solar Panel Duties*, REUTERS (Mar. 20, 2012, 7:33 PM), https://www.reuters.com/article/us-usa-china-solar/u-s-sets-surprisingly-low-china-solar-panel-duties-idUKBRE82J0Z420120321. Although the preliminary CVD rate was much lower than initial expectation, the ADD rate was set at a high rate since the United States used the costs and prices of solar products in Thailand as a proxy to calculate AD margin. *See also* Matt Daily, *U.S. sets new tariffs on Chinese solar imports,* REUTERS (May 17, 2012, 2:56 PM), https://www.reuters.com/article/us-china-trade-idUSBRE84G19U20120517.

15. *See China: Extension of Definitive Antidumping Duties*, *supra* note 8.

16. Bradsher & Cardwell, *supra* note 13.

17. Diane Cardwell, *U.S. Imposes Steep Tariffs on Chinese Solar Panels*, N.Y. TIMES (Dec. 16, 2014), https://www.nytimes.com/2014/12/17/business/energy-environment/-us-imposes-steep-tariffs-on-chinese-solar-panels.html.

18. *See* Press Release, President Trump Approves Relief for U.S. Washing Machine and Solar Cell Manufacturers, Off. of the U.S. Trade Representative (2018), https://ustr.gov/about-us/policy-offices/press-office/press-releases/2018/january/president-trump-approves-relief-us.

19. *See generally* Feldman, *supra* note 12.

products, including solar cells and modules, despite the opposition from U.S. firms, such as these in the downstream solar installation sector.[20] Although the Biden administration waived the anti-circumvention tariffs on solar panels manufactured in four Southeast Asian countries—Cambodia, Malaysia, Thailand, and Vietnam—after the Commerce Department's preliminary investigation with affirmative findings, still the halt of tariff increases is only valid for two years.[21] Meanwhile, the full investigation, which is expected to be completed in May 2023, might yield different findings from the preliminary ones that call for even steeper tariff increases at a sooner date.[22] As the U.S. firm petitioning in the circumvention investigation has threatened to challenge Biden's waiver decision in courts, the kinds of restrictions faced by Chinese firms relocated to Southeast Asia remains unclear.[23]

B. THE U.S. REGULATION OF FORCED LABOR AND UFLPA

While the past decade of the U.S.–China solar trade was fraught with the pervasive use of all forms of trade remedies, particularly by the United States against Chinese solar products, the enactment of the UFLPA contributed additionally as a new form of trade restriction.[24] Before delving into the new law, it is useful to review the United States' practice of using trade law and policy as a tool to tackle supply chain risks concerning forced labor, which highlights the distinctions of the

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20. *See* Eric Martin & Mackenzie Hawkins, *U.S. Firms Renew Plea for Biden to End Trump-Era China Tariffs*, BLOOMBERG (Jan. 20, 2023), https://www.bloomberg.com/news/articles/2023-01-19/us-firms-renew-plea-for-biden-to-end-trump-era-china-tariffs#xj4y7vzkg.

21. *See* Declaration of Emergency and Authorization for Temporary Extensions of Time and Duty-Free Importation of Solar Cells and Modules from Southeast Asia, 87 Fed. Reg. 35067 (June 6, 2022), https://www.govinfo.gov/content/pkg/FR-2022-06-09/pdf/2022-12578.pdf.

22. Ella Nilsen, *Feds Find Four Chinese Solar Panel Companies Have Been Evading U.S. Tariffs*, CNN, (Dec. 2, 2022, 12:47 PM), https://edition.cnn.com/2022/12/02/politics/china-solar-tariff-investigation-climate/index.html.

23. *See* Timothy Puko & Phred Dvorak, *Biden Invokes Emergency Power in Bid to Resolve Solar Import Dispute*, WALL ST. J., (June 6, 2022), https://www.wsj.com/articles/biden-administration-to-waive-solar-import-tariffs-for-two-years-11654525408.

24. *See infra* Section 2.2 (The United States already used forced labor allegations to restrict solar imports from the XUAR before the pass of the UFLPA, but these restrictions were based on executive orders and by nature ad-hoc).

UFLPA.

1. The History of the U.S. Regulation of Forced Labor

In the early 1930's, the United States enacted Section 307 of the Tariff Act of 1930, banning the importation of all goods mined, produced, or manufactured wholly or in part using forced labor, which also included convict labor, forced child labor, and indentured labor.[25] Along with implementing regulations, the law authorized U.S. Customs and Border Protection ("CBP") to issue a Withhold Release Order ("WRO") whenever the information "reasonably but not conclusively," indicates that such goods are entering the United States.[26] Nevertheless, the ban had an important carveout, the Clause of consumptive demand, which exempted any product that was not produced in sufficient quantities inside of the United States to satisfy the existing demand.[27] As a result, importers could claim that domestic production capacity was simply not adequate to block the imported products that were allegedly made with forced labor,[28] and for decades, Section 307 had been rarely applied to block imports into the United States.[29]

A notable change was made in 2016 when then-President Obama signed the Trade Facilitation and Trade Enforcement Act of 2015, repealing the "consumptive demand" clause.[30] In 2021, the Biden administration issued an expansive region-wide WRO against products such as solar PV containing materials from Chinese silicon manufacturers in the XUAR.[31] In 2022, the

25. *See* Tariff Act of 1930, 19 U.S.C. § 1307.

26. *See* 19 C.F.R. § 12.4(e) (2023).

27. *See* Tariff Act of 1930, *supra* note 25.

28. *See* CHRISTOPHER A. CASEY & CATHLEEN D. CIMINO-ISAACS, CONG. RSCH. SERV., IF11360, SECTION 307 AND IMPORTS PRODUCED BY FORCED LABOR (2022) (This is cited as one of the difficulties in enforcing Section 307 because "as more goods were manufactured exclusively abroad, it became easier for importers to make use of the exception.").

29. *See id.* For instance, between 1930 and the mid-1980s there were around 60 to 75 instances when either interested parties requested or Customs considered the application of Section 307. CBP also argues that limited resources and a lack of sufficient evidence, caused in part by the infeasibility of spot inspections restricted the use of the law to block imports. *Id.*

30. *Id.*

31. *See* PRESIDENTIAL STATEMENT ON FACT SHEET: NEW U.S. GOVERNMENT ACTIONS ON FORCED LABOR IN XINJIANG 2021 (Jun. 24, 2021) (targeting cotton and tomato at first but expanded to cover Hoshine Silicon Industry and its subsidiaries).

enforcing authority–CBP– issued an increasing number of WROs.[32] All imports from the XUAR had to be adjudicated through the WRO process, prior to the enforcement of the UFLPA.[33]

2. The Enactment and Enforcement of the UFLPA

With strong bipartisan support in Congress, the ULFPA was signed into law on December 23, 2021, and further came into full force on June 21, 2022.[34] As the latest in a series of U.S. efforts to address allegations of forced labor issues in XUAR, the ULFPA bears a key distinction from the previous law–the creation of a rebuttable presumption–that all goods manufactured even partially in the XUAR are the product of forced labor and therefore prohibited from entering into the U.S. market.[35] The presumption also extends to goods, wares, articles, and merchandise produced by a variety of entities identified by the interagency Forced Labor Enforcement Task Force ("FLETF") as a part of its strategy to implement the Act.[36] Therefore, the scope of UFLPA can potentially be very broad to cover products imported from China and third-party countries. Even goods originating outside the XUAR would likely still be banned from importation due to their raw materials, some components originating in the XUAR, or a specific supplier's presence on the UFLPA Entity List.[37] Unlike in the past when the importation of goods produced with forced labor could be prevented only after the issuance of WROs, CBP can now prohibit traded products' entry into the United States in the absence of a WRO or any specific evidence of forced labor in the supply chain.[38]

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32. *See id.* (CBP issued 37 WROs and China became a main target of WROs).

33. Carl A. Valenstein et al., *Uyghur Forced Labor Prevention Act Takes Effect in United States*, MORGAN LEWIS (Jun. 23, 2022), https://www.morganlewis.com/pubs/2022/06/uyghur-forced-labor-prevention-act-takes-effect-in-united-states.

34. *Id.*

35. *See* Uyghur Forced Labor Prevention Act, *supra* note 1, § 4(a).

36. *See generally id.*

37. Jonathan Cross et al., *U.S. Issues Guidance for Importers on the Enforcement of the Uyghur Forced Labor Prevention Act*, HERBERT SMITH FREEHILLS (Jun. 27, 2022), https://hsfnotes.com/sanctions/2022/06/27/u-s-issues-guidance-for-importers-on-the-enforcement-of-the-uyghur-forced-labor-prevention-act/.

38. Judith Alison Lee et al., *The Uyghur Forced Labor Prevention Act Goes*

Seeking compliance with the UFLPA becomes critical for an importer to avoid their products being detained or seized. The U.S. government published new guidance for importers concerning the implementation and enforcement of the UFLPA, including an Operational Guidance document published by CBP, and an enforcement strategy issued by the FLETF.[39] According to the guidance documents, importers have two options to facilitate a determination that an importation is not subject to UFLPA. An importer must demonstrate: (i) Their goods are outside the UFLPA's scope; or (ii) To rebut the presumption with "clear and convincing evidence" that goods within the UFLPA's scope were not made implementing forced labor.[40]

The following part examines in detail the legal standard in terms of fulfilling the two requirements.

Under the first option of demonstrating that importation is outside the UFLPA's scope, importers must prove that the goods and any of their inputs are sourced completely from outside the XUAR and possess no connection whatsoever to companies on the UFLPA Entity List.[41] This is the so-called "applicability" review which requires importers to present substantial documentary evidence. The Guidance Document provides a non-exhaustive list of the types of information an importer is required to establish that importation is outside the UFLPA's scope, including "a detailed description of supply chain including imported merchandise and components thereof, including all stages of mining, production, or manufacture; the roles of the entities in the supply chain; . . . a list of suppliers associated with each step of the production process; . . . and affidavits from each company . . . involved in the production process".[42]

The second option becomes unavoidable in circumstances where companies cannot diversify but must use products or inputs with a connection to the XUAR. Otherwise, without successfully obtaining an exception to the rebuttable presumption, seizure of the goods and penalties will occur. The

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into Effect in the United States, GIBSON DUNN (Jan. 14, 2022), https://www.gibsondunn.com/the-uyghur-forced-labor-prevention-act-goes-into-effect-in-the-united-states/.

39. REPORT TO CONGRESS, *supra* note 2; U.S. CUSTOMS AND BORDER PROTECTION, CBP PUBL'N NO. 1793-0522, UYGHUR FORCED LABOR PREVENTION ACT OPERATIONAL GUIDANCE FOR IMPORTERS (2022) [hereinafter CBP OPERATIONAL GUIDANCE].

40. *Id.* at 4.

41. *See id.* at 14.

42. *Id.*

so-called "admissibility" review sets out three requirements for importers: (i) To present "clear and convincing" evidence that the imported "goods were not mined, produced, or manufactured wholly or in part" by forced labor (within 30 days of any detention); (ii) To respond "completely and substantively" to all related requests for information from CBP; and (iii) To "fully comply with" the CBP Operational Guidance and the FLETF Strategy.[43]

Among the three requirements, the first one is particularly challenging for an affected importer to meet for two reasons. One, the newly introduced criterion "clear and convincing" evidence sets a considerably higher standard of proof than "a preponderance of the evidence" which "generally means a claim or contention is highly probable."[44] What constitutes "clear and convincing" evidence can be found in the CPB's Operational Guidance and FLETF Strategy that lay out lengthy and onerous requirements in relation to the due diligence standard, including effective supply chain tracing and supply chain management practices.[45] Nevertheless, it is noted that the required documentation evidence as listed in the CPB's Operational Guidance and FLETF Strategy is not exhaustive to preclude the admissibility of products being detained. In other words, there is no "safe harbor mechanism" or due diligence procedures that

43. Lars-Erik A. Hjelm et al., *International Trade and Customs Alert: New UFLPA Compliance Guidance: An Overview for U.S. Importers and Supply Chain Partners*, AKIN (June 27, 2022), https://www.akingump.com/en/news-insights/international-trade-and-customs-alert-new-uflpa-compliance-guidance-an-overview-for-us-importers-and-supply-chain-partners.html.

44. *See* DEP'T OF HOMELAND SECURITY, COUNTERING AMERICA'S ADVERSARIES THROUGH SANCTIONS ACT FAQS (Feb. 11, 2021), https://www.dhs.gov/news/2021/02/11/countering-america-s-adversaries-through-sanctions-act-faqs (imposing the 'clear and convincing evidence' standard which is a substantially higher evidentiary standard compared to the 'satisfactory evidence' requirement for products coming from other countries).

45. *See* CBP OPERATIONAL GUIDANCE, *supra* note 39, at 13–15 (indicating that in addition to providing detailed information with respect to the due diligence an importer conducts to "address forced labor risks" and impacts and supply chain tracing information, importers will need to provide information on their supply chain management practices (i.e., "internal controls to prevent forced labor risk"), as well as "information on the workers at each entity involved in the production of the goods" in China (i.e., "wage payments and production output per worker," worker recruitment practices, and the results of "credible audits to identify forced labor indicators")). The FLETF Strategy provides more detailed guidance on the due diligence, supply chain tracing (and chain of custody), and supply chain management measures importers would be expected to implement to demonstrate compliance with the Strategy. *Id.*

are sufficient to corroborate compliance with the UFLPA.[46] An importer may provide all the information as listed in the CPB's Operational Guidance and FLETF Strategy yet still be held as failing to comply with the UFLPA. Considering the fact that supply chains nowadays can involve several layers of entities, importers would face an onerous hurdle to solicit and submit the information that meets the required and applicable legal standards of the UFLPA.[47] The cost of obtaining some of the evidence from "unrelated entities in foreign jurisdictions" can be unavoidably high.[48] Another obstacle lies in the explicit prohibition recently instituted by the Chinese government to prevent Chinese firms from sharing certain information with U.S. authorities in order to comply with U.S. law.[49]

Two, the lack of clarity regarding the "in part" standard can be problematic since it is entirely possible that goods, where only a tiny fraction has any connection to XUAR or covered entities, can also be seized.[50] The fact that the manufacturing of solar modules and cells involves various raw materials adds to the complexity of giving meaning to the "in part" standard. For instance, an unexpected move by the CPB requires proof that a key ingredient of polysilicon, quartzite, was not mined in XUAR either.[51] Quartzite miners may not be accustomed to providing

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46. Michael E. Leiter et al., *As Key Element of Uyghur Forced Labor Law Goes Into Effect, U.S. Agencies Set Out Implementation Strategy and Guidance*, SKADDEN (Jun. 23, 2022), https://www.skadden.com/insights/publications/2022/06/as-key-element-of-uyghur-forced-labor-law-goes-into-effect.

47. David E. Bond, *U.S. Authorities Begin Enforcement of Uyghur Forced Labor Prevention Act and Issue Guidance for Importers*, WHITE & CASE, (June 28, 2022), https://www.whitecase.com/insight-alert/us-authorities-begin-enforcement-uyghur-forced-labor-prevention-act-and-issue.

48. Jessica Lynd & David E. Bond, *WROs, UFLPA and Revised CTPAT*, WHITE & CASE (Jan. 3, 2023), https://www.whitecase.com/insight-alert/wros-uflpa-and-revised-ctpat.

49. *See* Zhonghua Renmin Gongheguo Fan Waiguo Zhicai Fa (中华人民共和国反外国制裁法) [Anti-Foreign Sanctions Law of the People's Republic of China] (promulgated by the Standing Comm. Nat'l People's Cong., June 10, 2021) art. 12, 2021 STANDING COMM. NAT'L PEOPLE'S CONG. GAZ. (China) http://www.npc.gov.cn/npc/c30834/202106/d4a714d5813c4ad2ac54a5f0f78a5270.shtml [https://perma.cc/GP59-8SMW], unofficial translation available at: https://www.chinalawtranslate.com/en/counteringforeignsanctions [https://perma.cc/MC5U-ZQXC] (last visited Sept. 24, 2023).

50. Jonathan C. Drimmer et al., *The Countdown to the UFLPA*, PAUL HASTINGS (May 9, 2021) https://www.paulhastings.com/insights/client-alerts/the-countdown-to-the-uflpa.

51. Phred Dvorak & Katherine Blunt, *U.S. Solar Shipments are Hit by Import Ban on China's Xinjiang Region*, WALL ST. J. (Aug. 9, 2022),

this level of specific information to customers, also companies would lack the leverage to demand information from firms that are beyond their direct suppliers in the supply chain.[52] Even when companies have created sophisticated and robust compliance systems that integrate human rights, they may still find it challenging to overcome the UFLPA's rebuttable presumption.[53] CBP can presume that any shipment is potentially linked to the XUAR, and even after being presented with proof that there is none, CBP remains at liberty to presume that the presented evidence is not complete and thus does not satisfy the legal requirements.[54] The excessive discretion that the CBP has to enforce the opaquely drafted UFLPA provisions can be a cause for concern.[55] As testified by Lowry, CBP's current process for the detention or release of goods presumed to be linked to forced labor is "opaque" and "undermines the very concept of partnership that CBP has historically maintained with the trade associations."[56] As a result, in the first few months since the enforcement of UFLPA, not a single application for "admissibility" review was filed, which reflects the challenges of an importer to rebut the presumption.[57]

The level of stringency in terms of enforcing the UFLPA can be even higher in silicon and products using silicon, which is listed as one of the high-priority sectors.[58] The CBP intends to take a "risk-based" enforcement approach with respect to the high-priority sectors as the U.S. government is convinced that

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https://www.wsj.com/articles/u-s-solar-shipments-are-hit-by-import-ban-on-chinas-xinjiang-region-11660037401?mod=hp_lead_pos5.

52. *Id.*; Ana Swanson et al., *U.S. Effort to Combat Forced Labor Targets Corporate China Ties*, N. Y. TIMES, (Dec. 23, 2021), https://www.nytimes.com/2021/12/23/us/politics/china-uyghurs-forced-labor.html.

53. Bond, *supra* note 47; Carl Li & Yang Cao, *Recommendations for FIEs in China to Cope with the UFLPA,* ALLBRIGHT (July 7, 2022), https://www.allbrightlaw.com/EN/10475/7135d213e94820c6.aspx.

54. John Foote, *I Can't Believe It's Not From Xinjiang*, FORCED LABOR & TRADE (July 16, 2022), https://forcedlabortrade.substack.com/p/i-cant-believe-its-not-from-xinjiang#footnote-2-64093994.

55. *Id.*

56. *Lowry Testifies at Forced Labor Enforcement Task Force Hearing on the Uyghur Forced Labor Prevention Act*, U.S. COUNCIL FOR INT'L BUS. (Apr. 8, 2022), https://uscib.org/lowry-testifies-at-forced-labor-enforcement-task-force-hearing-on-the-uyghur-forced-labor-prevention-act/.

57. *See* Inside Trade, *CBP's Trade Chief: New Forced-labor Ban Already Spurring Supply Chain Shift* (Aug. 26, 2022), https://insidetrade.com/share/174857 (interviewing U.S. Customs and Border Protection Trade Chief, AnnMarie Highsmith).

58. *Id.*

their supply chains would present "a high risk of forced labor."[59] As discussed briefly in the Introduction section, hundreds of millions worth of solar imports were detained at the border or shipped back to China. The world's largest solar panel producers from China, Longi, JA Solar, and Jinko Solar have had their products detained by the CBP at the U.S. border in 2022.[60] It appears as though larger suppliers can be more susceptible to border detention than midsize and small-sized suppliers, which is primarily due to the risk-based methodology applied by CBP that increased the likelihood of top suppliers being scrutinized much more strictly.[61] Unsurprisingly, companies engaged in cross-border trade between the United States and China have remained largely concerned about the stringency of the UFLPA that would make the burden of proof too high.[62]

C. UFLPA AND WTO LAW: CONSISTENT OR NOT?

As discussed above, the disruptive impacts of the UFLPA on international trade in the solar sector raise an important question concerning the Act's compatibility with U.S. trade obligations under the WTO regime. Among a range of trade agreements, as administered by the WTO, this article focuses on the GATT, both its obligatory and exceptional clauses. It is essential to closely examine whether the UFLPA contravenes the GATT rules, and if so, can it be justified by any available exceptions?

1. UFLPA and GATT Article XI

Article XI of the GATT, entitled "General Elimination of

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59. Bond, *supra* note 47.

60. Murtaugh, *supra* note 3; John Liu & Luz Ding, *China Solar Giant Sees Yet More Uncertainty for U.S. Imports*, BLOOMBERG LAW (Nov. 3, 2022), https://news.bloomberglaw.com/international-trade/china-solar-giant-sees-yet-more-uncertainty-for-us-imports-1?utm_source=rss&utm_medium=ITNW&utm_campaign=00000184-3f57-db14-a5ad-3fd790190001.

61. *See* Clean Energy Associates, *Navigating the UFLPA: Geopolitical Risk in the PV Supply Chain*, (July 21, 2022), https://www.cea3.com/cea-blog/navigating-the-uflpa-geopolitical-risk-in-the-pv-supply-chain.

62. Jing Zhang et al., *Public Comments on the Uyghur Forced Labor Prevention Act*, MAYER BROWN (APR. 25, 2022), https://www.mayerbrown.com/en/perspectives-events/publications/2022/04/public-comments-on-the-uyghur-forced-labor-prevention-act#Nine.

Quantitative Restrictions" is the primary provision governing the use of quantitative restrictions.[63] Article XI states:

> No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licenses or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.[64]

The scope of measures covered by Article XI can be broad as the Article applies to all "prohibitions or restrictions . . . whether made effective through quotas, import or export licenses or other measures."[65] Given that the UFLPA only applies at the border without targeting domestic products sold in the U.S. market, Article XI becomes relevant in examining the Act's WTO compatibility. Since the UFLPA effectively serves as an import restriction ban, it is a clear-cut case that the Act violates Article XI, which, in general, prohibits quantitative restrictions unless the measure at issue meets the requirements set in the exceptional clauses.

Exceptions that are generally available for quantitative restrictions prohibited by Article XI are Articles XI:2, XII, and XX of the GATT. Since Article XX will be discussed in detail in Part 3.3, this part examines the applicability of Articles XI:2 and XII.

Article XI:2 sets out several specific exceptions:

> (a) Export prohibitions or restrictions temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party; (b) Import and export prohibitions or restrictions necessary to the application of standards or regulations for the classification, grading, or marketing of commodities in international trade; (c) Import restrictions on any agricultural or fisheries product,

63. General Agreement on Tariffs and Trade, Oct. 30, 1947, art. XI, 55 U.N.T.S. 194 [hereinafter GATT].

64. *Id.*

65. SIMON LESTER ET AL., WORLD TRADE LAW: TEXT, MATERIALS AND COMMENTARY 243 (Hart 3d ed. 2018).

> imported in any form, necessary to the enforcement of governmental measures.[66]

It is evident that the objective of the UFLPA is not in line with any of the three listed exceptions. In other words, the applicability of Article XI:2 does not exist in this case.

Article XII provides for restrictions to be used to address the balance of payment difficulties as follows: "[A]ny contracting party, in order to safeguard its external financial position and its balance of payments, may restrict the quantity or value of merchandise permitted to be imported, subject to the provisions of the following paragraphs of this Article . . . ."[67]

It is also clear that the UFLPA has little to do with the balance of payment difficulties.

Therefore, the only possible justification(s) the United States can rely on to exempt the UFLPA's violation of the GATT Article XI lies in Article XX.

2. UFLPA and GATT Article I

A second relevant obligation is the GATT Article I, known as the most-favored-nation ("MFN") principle, which states,

> With respect to customs duties and charges of any kind imposed on or in connection with importation or exportation or imposed on the international transfer of payments for imports or exports, and with respect to the method of levying such duties and charges, and with respect to all rules and formalities in connection with importation and exportation, and with respect to all matters referred to in paragraphs 2 and 4 of Article III,* any advantage, favor, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.[68]

As one of the pillars of the WTO trading system, the MFN

66. GATT, *supra* note 63, art. X1:2
67. *Id.* art. XII.
68. *Id.* art. I.

principle sets out a straightforward non-discrimination requirement, obliging a country to treat other countries at least as well as it treats the most favored country.[69] The object and purpose of Article I is "to prohibit discrimination among like products originating in or destined for different countries."[70] Given the broad scope of Article I, which covers border measures and internal measures, the UFLPA clearly falls within the scope of application of this Article. The following inquiry to make regarding discrimination consists of two parts (1) are the products at issue "like products"; and (2) is the "advantage, favor, privilege, or immunity" accorded to imported products from one country granted "immediately and unconditionally" to "like" imported products from another country. [71]

First, whether solar panels that are prohibited from entering the U.S. market according to the UFLPA are "like products" to imported solar panels that are permitted to be placed in the United States should be examined. As a key concept of the WTO law, "like product" in the GATT Article I and other provisions are primarily geared toward supporting the non-discrimination principle.[72] Notwithstanding the lack of a precise definition of "like product" in the treaty text, the concept has been frequently interpreted in the WTO panel and Appellate Body reports. The Appellate Body has explained that a like product analysis must always be performed "on a case-by-case basis."[73] The evolving jurisprudence concerning "likeness" has yielded four general criteria such as "(i) the properties, nature, and quality of the products; (ii) the end-uses of the products; (iii) consumers' tastes and habits–more comprehensively termed

69. *See* Appellate Body Report, *European Communities–Measures Prohibiting the Importation and Marketing of Seal Products*, ¶ 5.86, WTO Doc. WT/DS401/AB/R (adopted June 18, 2014) [hereinafter *EC–Seal Products*].

70. *See* Appellate Body Report, *Canada–Certain Measures Affecting the Automotive Industry*, ¶¶ 83–84, WTO Doc. WT/DS139/AB/R (adopted June 19, 2000) [hereinafter *Canada–Autos*].

71. GATT, *supra* note 63, art. I:1.

72. *See* WON-MOG CHOI, LIKE PRODUCTS' IN INTERNATIONAL TRADE LAW: TOWARDS A CONSISTENT GATT/WTO JURISPRUDENCE, at 91 (Oxford Univ. Press 2003). For a discussion of the differences in meaning of 'like product' in GATT Articles, *see also*, Robert E. Hudec, *'Like Product': The Differences in Meaning in GATT Articles I and III, in* REGULATORY BARRIERS AND THE PRINCIPLE OF NON-DISCRIMINATION IN WORLD TRADE LAW, at 101–23 (Thomas Cottier and Petros Mavroidis eds., Univ. of Mich. Press, 2000).

73. Appellate Body Report, *Japan–Taxes on Alcoholic Beverages*, 20, WTO Doc. WT/DS8/AB/R (adopted Nov. 1, 1996) [hereinafter *Japan–Alcoholic Beverages II*].

consumers' perceptions and behavior–in respect to the products; and (iv) the tariff classification of the products."[74] Nevertheless, another approach adopted by the WTO panel and the Appellate Body to determine the likeness of the products is to assume that two like products exist in the marketplace when one of the two situations arises–the first concerns origin-based distinction and the second refers to the one where a comparison with the like product was not possible because of–for example–a ban on imports.[75] When a difference in treatment between domestic and imported products "is based exclusively on the products' origin", the complainant did not need to apply the traditional criteria "to make a prima facie case of likeness."[76] In other words, when the origin is the sole criterion distinguishing the products, it has been sufficient for a complainant to demonstrate that there can or will be domestic and imported products that are "like." Therefore, solar PV products produced in the XUAR or outside the XUAR but with inputs from the XUAR are "like products" to those that have no connection with the XUAR.

Second, since the UFLPA is a stand-alone ban on imports from the XUAR and no other country is subject to the prohibition that the Act has imposed on China. This means China is the only WTO Member that is denied the advantage as identified above, i.e., the opportunity to export solar PV products which have a connection to the XUAR. As a result, the UFLPA discriminates against China with respect to other WTO members by denying the above-mentioned advantage–U.S. market access, and this discriminatory treatment suggests that the United States is not extending an advantage "immediately and unconditionally" to China.[77] Therefore, the UFLPA constitutes a breach of the MFN principle.

3. UFLPA and GATT Article XX

Both a violation of GATT Articles XI and I could potentially

74. Appellate Body Report, *European Communities–Measures Affecting Asbestos and Products Containing Asbestos*, ¶ 101, WTO Doc. WT/DS135/AB/R (adopted Mar. 12, 2001) [hereinafter *EC–Asbestos*].

75. Panel Report, *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products*, ¶¶ 7.1445–7.1446, WTO Doc. WT/DS363/R (adopted Jan. 19, 2010) [hereinafter *China–Publications and Audiovisual Products*].

76. *Id.*

77. *EC–Seal Products, supra* note 69, ¶ 5.86.

be justified provided that the measure at issue could meet the requirements set out in GATT Article XX "General Exceptions." Covering a broad range of policy justifications, Article XX can be used to exempt otherwise GATT-inconsistent measures that aim at protecting public morals, human health, animal welfare to the environment, and labor conditions.[78] Trade obligations, therefore, are not unlimited but only extend to the point where they do not unduly intrude on the policy areas carved out by Article XX. Nevertheless, abusing or misusing the exceptions of Article XX will compromise the substantive treaty rights of WTO members and undermine the rules-based international trade order. For that reason, each of the subparagraphs of Article XX should be perceived as a "limited and conditional" exception from the GATT obligations.[79] The need is to strike a delicate balance between the right of a WTO Member to invoke an exception under Article XX and the duty of that same Member to respect the treaty rights of the other WTO Members.[80]

Any WTO Member that wishes to avail itself of Article XX as a defense must prove that the challenged measure can pass the two-tier test of (1) falling into the scope of one of the enumerated exceptions contained in GATT Article XX and (2) to meet the requirements of the Chapeau clause.[81] Therefore, the first step is to examine whether the UFLPA can be provisionally justified by a specific Article XX exception, which requires the measure to address the interest specified in any subparagraph and there is "a sufficient nexus between the measure and the interest protected."[82] The second step is to examine whether the UFLPA can comply with the Chapeau requirements.

This article contends that GATT Article XX (a), (b), and (d)

> (a) Necessary to protect public morals; (b) Necessary to protect the human, animal, or plant life or health; . . . (d) Necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to customs

78. *See* GATT, *supra* note 63, art. XX.

79. Appellate Body Report, *U.S.–Import Prohibition of Certain Shrimp and Shrimp Products*, WTO Doc. WT/DS58/AB/R ¶ 157 (adopted Oct. 12, 1998) [hereinafter *U.S.–Shrimp*].

80. *See id.* ¶ 156; Panel Report, *United States–Measures Affecting the Cross-Border Supply of Gambling and Betting Services*, WTO Doc. WT/DS285/R ¶¶ 6.452, 6.575 (adopted Apr. 20, 2005) [hereinafter *U.S. –Gambling*].

81. *U.S.–Shrimp*, *supra* note 79, ¶ 118.

82. *EC–Seal Products*, *supra* note 69, ¶ 5.169.

> enforcement, the enforcement of monopolies operating under paragraph 4 of Article II and Article XVII, the protection of patents, trademarks, and copyrights, and the prevention of deceptive practices.

could be potentially relevant as a defense for the United States.[83]

a. Can the UFLPA Meet the Requirements of Article XX(a)?

The first step under Article XX(a) is to determine whether the claimed policy of the UFLPA has a "public morals" objective within the meaning of Article XX(a) and then assess whether the measure is designed to protect the public morals objective, and if so, whether it is "necessary" to achieve the objective.

As a key concept of Article XX(a), "public morals" is one example illustrating the evolutionary interpretive approach adopted by the WTO panels and the Appellate Body to give generic terms meanings that are in line with evolving societal values and the law in force at any given time.[84] Undefined in the text of Article XX(a), the concept of public morals has been consistently interpreted to denote "standards of right and wrong conduct maintained by or on behalf of a community or nation."[85] The past jurisprudence confirms the potentially broad scope of public morals.[86] The content and scope of the concept of public morals can widely vary from Member to Member, as they are influenced by each Member's "prevailing social, cultural, ethical, and religious values."[87] WTO Members are entitled to a certain degree of deference in delineating the boundary of public morals with respect to the values prevailing in their respective societies

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83. GATT, *supra* note 63, art. XX.

84. Rachel Harris and Gillian Moon, *'GATT Article XX and Human Rights: What Do We Know from the First 20 Years?'* 16 MELB. J. INT'L L. 432, 453 (2015).

85. *U.S.–Gambling*, *supra* note 80, ¶ 6.465; *see, e.g.*, *China–Publications and Audiovisual Products*, *supra* note 75, ¶ 7.759.

86. *See, e.g.*, Panel Report, *United States–Tariff Measures on Certain Goods from China*, WTO Doc. WT/DS543/R, ¶ 7.118 (circulated Sept. 15, 2020) [hereinafter *U.S.–Tariff Measures* (*China*)] ("Prior WTO adjudicators have found the following policies as pertaining to public morals: prevention of underage gambling and the protection of pathological gamblers; restricting prohibited content in cultural goods, such as violence or pornographic content, as well as protection of Chinese culture and traditional values; protecting animal welfare; combatting money laundering; or bridging the digital divide within society and promoting social inclusion.").

87. *U.S.–Gambling, supra* note 80, ¶ 6.461; *see, e.g.*, *China–Publications and Audiovisual Products*, *supra* note 75, ¶ 7.759.

at a given time.[88]

What seems to be controversial is whether the United States can pursue the policy purpose of protecting public morals beyond its own territory. Although the Appellate Body avoided ruling on whether a measure with extraterritorial purposes and effects can be justified under Article XX, WTO Members have successfully defended such measures with the general exceptions.[89] In a more recent dispute between the United States and China, the panel concluded that "norms against theft, misappropriation, and unfair competition could, at least at a conceptual level, be covered by the term public morals."[90] In this vein, the distinction between United States public morals concerns in relation to practices taking place in the United States and practices taking place in China can be removed.[91] Arguably, measures that fall within the scope of public morals of Article XX(a) have "the necessary connection" to a regulating state's domestic territory because the content regulation can be deemed as "territorial".[92] Therefore, it would not be difficult for the UFLPA claiming to protect the human rights of the Uyghur minority and eradicate forced labor in XUAR to fall into the scope of public morals.

The second step is to analyze whether the UFLPA is designed to protect the public morals objective, which examines "the design of the measure at issue, including its content, structure and expected operation," intending to ensure that the

88. Panel Report, *European Communities–Measures Prohibiting The Importation and Marketing of Seal Products*, ¶ 7.381, WTO Doc. WT/DS401/R (adopted June 18, 2014) [hereinafter Panel Report, *EC–Seal Products*]; Panel Report, *Brazil–Certain Measures Concerning Taxation and Charges*, WTO Doc. WT/DS472/R, ¶ 7.520 (adopted Jan. 11, 2019) [hereinafter *Brazil–Taxation*]; *EC–Seal Products*, *supra* note 69, ¶ 5.199; *See, e.g.*, Panel Report, *Colombia – Measures Relating to the Importation of Textiles, Apparel and Footwear*, WTO Doc. WT/DS461/R, ¶¶ 5.58-.85 (adopted June 22, 2016) [hereinafter *Colombia–Textiles*] (discussing the boundaries of public morals within a system).

89. For instance, in *EC—Seal Products* and *U.S.—Shrimp*, the challenged measures were justified on the basis of domestic regulatory concerns such as protecting public morals within the regulating member's own territory, although the measures had extraterritorial effects. *See EC–Seal Products*, *supra* note 69; *U.S. Shrimp*, *supra* note 79.

90. *U.S.–Tariff Measures (China)*, *supra* note 86, ¶ 7.140.

91. Morgandi, *supra* note 9, at 7.

92. NILS STOHNER, *Importestriktionen aus Grunden des Tier-und Artenschutzes im Recht der WTO* [Import Restrictions for Reasons of Animal and Species Protection in WTO Law] 93 (Max Gmur Fortgesetzt durch et al. eds., 2006).

measure is "not incapable of protecting public morals."[93] If a challenged "measure is incapable of protecting the values considered by the responding Member as public morals, there is no [significant and close] relationship between the measure and the protection of public morals that would meet the requirements of the 'design' step."[94] In other words, it is necessary to closely examine the effectiveness of the challenged measure to achieve the claimed objective. In this case, it is relatively feasible to identify the nexus between the products subject to the import restrictions of the UFLPA and the public morals objective underlying the Act. By prohibiting the products allegedly made with forced labor, the United States' measure is expected to contribute to the protection of public morals.

The third step is to assess whether the UFLPA is necessary to protect the public morals objective. The key term, "necessary" has been the subject of evolving GATT and WTO jurisprudence over the years.[95] In the prevailing interpretative approach, "necessary" entails a "weighing and balancing" test. Unless a measure is patently indispensable, it will be assessed of its necessity by reference to its trade restrictiveness, the criticality of the aims it pursues, the extent to which it contributes to the achievement of the aim, and whether a less trade-restrictive measure that makes at least an equivalent contribution is reasonably available.[96] Ortino posits that the test essentially encompasses two parts, where the first one is to assess whether the measure's level of trade restrictiveness is "strategically proportionate" to the importance of the measure's objective and the degree to which the measure contributes to that objective.[97] The other is to assess whether the measure is "tactically

93. Appellate Body Report, *Colombia–Measures Relating to the Importation of Textiles, Apparel and Footwear*, WTO Doc. WT/DS461/AB/R, ¶¶ 5.68–5.69 (adopted June 22, 2016).

94. *U.S.–Tariff Measures* (*China*), *supra* note 86, ¶ 7.145.

95. Up to the release of the 2000 Appellate Body Report in *Korea–Measures Affecting Imports of Fresh, Chilled and Frozen Beef,* the prevailing standard was the least trade-restrictiveness test. For a thorough discussion of the standard, see Jan Neumann & Elisabeth Turk, *Necessity Revisited: Proportionality in World Trade Organization Law After* Korea–Beef, EC–Asbestos *and* EC–Sardines, 37(1) J. OF WORLD TRADE 199 (2003).

96. *See* Appellate Body Reports, *Korea—Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, WTO Docs WT/DS161/AB/R, ¶ 164 (adopted Jan. 10, 2001) [hereinafter *Korea—Beef*]; *EC—Asbestos*, *supra* note 74, ¶¶ 155-81; *EC—Seal Products*, *supra* note 69, ¶ 5.169.

97. Federico Ortino, *GATT in* THE OXFORD HANDBOOK OF INTERNATIONAL LAW 143 (Daniel Bethlehem et al. eds., 2009).

proportionate," that is, whether a less trade-restrictive measure is reasonably available which would make no less a contribution to the same goal.[98]

Therefore, whether there is an alternative measure reasonably available to the United States that is as effective as the UFLPA but less trade-restrictive becomes the key issue. Clearly, the degree of trade restrictiveness of import/export ban is higher than almost all other trade measures, which, therefore, leaves ample room for less trade-restrictive alternatives. Nevertheless, it is not uncommon for countries to use trade bans to tackle environmental and social issues, such as conflict diamonds.[99] To establish the "necessary" nexus between trade bans and policy objectives such bans aim to pursue within the meaning of Article XX remains feasible. While the UFLPA import ban can contribute to the claimed objective that is of significant importance, its rebuttable presumption has excessively stringent implementation and enforcement rules, which impose a prohibitively high cost on importers to seek compliance with. For instance, the lack of explicitly formulated standards such as "in part" and "clear and convincing" has provided the enforcing authorities nearly unlimited discretion which in turn, casts an enormously chilling effect on the U.S.–China trade across the entire solar supply chain. The excessively intrusive scope of the UFLPA that even products without any connection with the XUAR can still be detained and obliged to provide lengthy documentation evidence has already deviated from the legislative purpose to protect human rights. Arguably, in the absence of clear and sound evidence that all, or at least the vast majority of products from XUAR are produced using forced labor, the UFLPA's rebuttable presumption serves as an overly simplified and blanket ban without flexibility and thus, becomes unnecessarily trade restrictive.[100]

b. Can the UFLPA Meet the Requirements of Article XX(b)?

The justification of the UFLPA under GATT Article XX(b) depends provisionally on whether the measures are "necessary

98. *Id.*

99. *E.g.*, European Commission Press Release IP/02/1955, EU implements Kimberley Scheme to block blood diamonds (Dec. 20, 2002). For instance, the EU has implemented Kimberley Scheme to block blood diamonds to ensure consumers will not unknowingly contribute to the continuation of wars. *Id.*

100. Morgandi, *supra* note 9, at 9.

to protect the human, animal or plant life or health." The first step is to determine whether the claimed policy of the UFLPA holds an objective to protect "human, animal or plant life or health." The phrase "human, animal or plant life or health" has a potentially broad scope as this may include measures that protect physical and psychological health and wellbeing.[101] Nevertheless, whether a regulating state can take legislative or regulatory efforts to protect remains highly debatable; for instance, human health in a different jurisdiction since such a measure has an extraterritorial effect.[102] Given the disputable geographical limits of GATT Article XX(b), it is unlikely that an import ban on products allegedly made of forced labor of a different country should be deemed as protecting human health in that country.[103] The jurisdictional limit of GATT Article XX(b) should not be entirely ignored or any WTO Member can easily intrude into another's domestic policymaking. Since the UFLPA does not have an objective in line with GATT Article XX(b), there is no need to continue the legal analysis of this provision.

c. Can the UFLPA Meet the Requirements of Article XX(d)?

An examination of whether the UFLPA can meet the requirements of GATT Article XX(d) includes three components– whether there are in existence "laws or regulations" that are not inconsistent with the GATT; whether the measure found to

101. Harris & Moon, *supra* note 84, at 454.

102. For discussions arguing for the permissibility of extraterritorial measures taken to protect human and animal health in a different jurisdiction, see SARAH JOSEPH, BLAME IT ON THE WTO? A HUMAN RIGHTS CRITIQUE 106–07 (2013); Roger Alford, *Extraterritorial Regulation of Human Rights and the Environment Under the WTO General Exceptions*, OP. JURIS (Nov. 2, 2010), http://opiniojuris.org/2010/11/02/extraterritorial-regulation-of-human-rights-and-the-environment-under-the-wto-general-exceptions/. For discussions arguing against the permissibility of extraterritorial measures taken to protect human and animal health in a different jurisdiction, see Lorand Bartels, *Article XX of GATT and the Problem of Extraterritorial Jurisdiction: The Case of Trade Measures for the Protection of Human Rights*, 36(2) J. OF WORLD TRADE 353 (2002).

103. The territorial limits of the GATT Article XX subparagraphs can vary in the sense that some exceptions permit WTO members to take actions to prevent foreign harms while others do not. For instance, protecting public health in a foreign country can be intrusive. For scholarly discussions on this issue, see Simon Lester, *Roger Alford on GATT Article XX and Extraterritoriality*, INT'L ECON. L. & POL'Y BLOG (Nov. 6, 2010), https://ielp.worldtradelaw.net/2010/11/roger-alford-on-gatt-article-xx-and-extraterritoriality.html.

breach GATT is designed to secure compliance with these laws or regulations; and whether the measure found to breach GATT is necessary to secure such compliance.

To begin with, any member state that wishes to avail itself of Article XX(d) has to identify specific rules, obligations, or requirements with which a challenged measure is to secure compliance, rather than simply listing laws and regulations.[104] It is useful to review U.S. domestic legislation and/or international law ratified by the United States with the objective of tackling forced labor.

At the domestic level, the U.S. Congress has passed several bills in an effort to eliminate forced labor within and beyond its territorial borders. For instance, The Trafficking Victims Protection Act of 2000 ("TVPA") equipped U.S. agencies with tools and resources to eradicate modern forms of slavery both domestically and internationally.[105] The Frederick Douglass Trafficking Victims Prevention and Protection Reauthorization Act strengthened reporting obligations regarding the prohibition of goods produced through forced labor.[106] At the international level, the United States has ratified 14 out of 189 International Labor Organization Conventions, including No. 105 on the Abolition of Forced Labor.[107] The No. 105 Convention mandates ratified members to "take effective measures to secure the immediate and complete abolition of forced labor."[108] The national legislation and international convention listed above have a high level of normativity and enforceability and thus, can qualify as "laws or regulations" under Article XX(d).[109]

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104. Panel Report, *Indonesia–Importation of Horticultural Products, Animals and Animal Products*, ¶¶ 7.594–7.595, WTO Doc. WT/DS477/R (adopted Nov. 22, 2017) [hereinafter *Indonesia–Import Licensing Regimes*].

105. Modern prohibitions of human trafficking in the United States can be traced back to the 13th Amendment of the United States Constitution, which barred slavery and involuntary servitude in 1865. During the 20th century, the United States also enacted several federal statutes related to involuntary servitude and slavery.

106. *See* The Frederick Douglass Trafficking Victims Prevention and Protection Reauthorization Act of 2017, H.R. 2200, 115th Cong. (2d Sess. 2017).

107. INT'L LABOUR ORG., *The U.S.: A Leading Role in the ILO*, https://www.ilo.org/washington/ilo-and-the-united-states/the-usa-leading-role-in-the-ilo/lang--en/index.htm#:~:text=The%20US%20has%20ratified%2014,and%20events%20throughout%20the%20year (last visited Sept. 6, 2023).

108. *See* Abolition of Forced Labour Convention (C105) art. 2, June 25, 1957, 320 U.N.T.S. 291.

109. *See* Appellate Body Report, *India–Certain Measures Relating to Solar Cells and Solar Modules*, ¶5.113, WTO Doc. WT/DS456/AB/R (adopted Sept. 16,

Furthermore, these laws and conventions are not inconsistent with the GATT as they do not entail blatantly discriminatory trade elements.

The following step is to examine whether the UFLPA is designed to "secure compliance with" the national law and international convention and if so, whether it is necessary to secure such compliance. Since the above-mentioned U.S. laws and international conventions that the United States has ratified have set clear mandates to eradicate forced labor and prohibit goods allegedly produced with forced labor, the UFLPA and its enforcement rules can be deemed as to "secure compliance with" the laws.

Although the enactment of the UFLPA is to secure compliance with U.S. domestic laws and international obligations, it is still essential to analyze if the UFLPA is "necessary" to secure such compliance. Since the WTO jurisprudence has consistently applied the same standard regarding "necessary" under Article XX, the "necessity" analysis conducted in Part 3.3.1 is applicable here. Therefore, the UFLPA, for the same reason discussed in Part 3.3.1 fails to meet the "necessary" standard under Article XX(d). To sum up, the UFLPA would fail on the subject matter/scope threshold since the measure is not designed for the protection of human health within the meaning of Article XX(b). The UFLPA also would fail on the "necessary" threshold as required by Articles (a) and (d).

Despite arguments that the UFLPA cannot be provisionally justified under GATT Article XX (a), (b), and (d), the possibility that a WTO panel would show high deference to a regulating state's measure that deals with politically sensitive issues cannot be ruled out. The evolving WTO jurisprudence testifies to the fact that a large number of trade-restrictive measures can survive the scrutiny of subparagraphs under Article XX as being "necessary" or "relating to" the legitimate policy objectives.[110]

2016) [hereinafter *India—Solar Cells*]. The Appellate Body identified: "(i) the degree of normativity of the instrument and the extent to which the instrument operates to set out a rule of conduct or course of action that is to be observed within the domestic legal system of a Member; (ii) the degree of specificity of the relevant rule; (iii) whether the rule is legally enforceable, including, e.g. before a court of law; (iv) whether the rule has been adopted or recognized by a competent authority possessing the necessary powers under the domestic legal system of a Member; (v) the form and title given to any instrument or instruments containing the rule under the domestic legal system of a Member; and (vi) the penalties or sanctions that may accompany the relevant rule." *Id.*

110. In particular, since the new standard regarding 'necessary' was created by the Appellate Body in *Korea — Beef*, the difficulty for a measure to meet the

The reluctance of the WTO adjudicating bodies to question or criticize the "necessity" of a trade-related measure instituted by a regulating member to achieve non-trade objectives clearly exists. Furthermore, in several recent WTO disputes involving the United States as a defendant, the panel decisions showed an unprecedentedly high level of deference to the challenged measures.[111] Against this background, it is worthwhile to analyze the scenario when the UFLPA would be deemed as "necessary" to achieve the objectives set in Article XX(a) or (d). The following step is to examine if the UFLPA and its enforcement rules can meet the Chapeau requirements under GATT Article XX.

d. Can the UFLPA Meet the Requirements of Article XX Chapeau?

GATT Article XX starts with a paragraph establishing the overarching criteria that apply to any measure invoking any subparagraph of this article. GATT Article XX states, "such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade."[112] The Chapeau focuses on the application of a measure already deemed as incompliant with an obligation of GATT but falling into the scope of one or several paragraphs of Article XX.[113] The Chapeau "requirements

necessity requirement has been considerably reduced. *See* Neumann & Turk, *supra* note 95; *Korea—Beef, supra* note 96.

111. For instance, in the *United States–Safeguard Measure on Imports of Crystalline Silicon Photovoltaic Products*, the panel agreed with nearly every argument put forward by the United States, which made the case the first ever in the WTO history that a defending member can prevail in a safeguard dispute (except for another case about the U.S. special safeguard on imports of tires from China). In particular, the panel in this dispute chose to depart from the standard relating to one provision under the WTO Safeguard Agreement – 'unprecedented development' that has been consistently followed by the WTO adjudicating bodies in previous disputes. For scholarly discussion, see Weihuan Zhou & Mandy Meng Fang, *'Unforeseen Developments' Before and After U.S.–Safeguard on PV Measures: High Standard or New Standard?* World Trade R. 1, 15–17 (2023); Mandy Meng Fang, *Shedding Any New Light? The WTO's Latest Ruling in the U.S.-China Solar Battle*, 17(1) ASIAN J. OF WTO & INT'L HEALTH L. & POL'Y 239, 253–54 (2022).

112. GATT, *supra* note 63, art. XX.

113. Appellate Body Report, *U.S.–Standards for Reformulated and Conventional Gasoline*, ¶ 22, WTO Doc. WT/DS2/AB/R (adopted Apr. 29, 1996) [hereinafter *U.S. – Gasoline*].

are two-fold."[114] First, "a measure provisionally justified under one of the paragraphs of Article XX must not be applied in a manner that would constitute arbitrary or unjustifiable discrimination between countries where the same conditions prevail." Secondly, "this measure must not be applied in a manner that would constitute a disguised restriction on international trade."[115]

Given the Chapeau uses generic terms and concepts rather than precisely defined requirements, it is essential to take into account the objective underlying the Chapeau when interpreting it.[116] The Appellate Body in *U.S.–Shrimp* stated that the Chapeau reflects " . . . the need to maintain a balance of rights and obligations between the right of a Member to invoke one or another of the exceptions of Article XX [. . .] on the one hand, and the substantive rights of the other Members under the GATT 1994, on the other hand."[117] Focusing on the manner in which a measure is used, the purpose of the Chapeau is to prevent measures justified by the general exceptions from being misused or abused.[118] In invoking exceptions to justify otherwise WTO-inconsistent measures, a Member "must act in good faith" and not circumvent its obligations towards other WTO Members.[119]

Nevertheless, the broadly drafted language of the Chapeau renders the differences between "arbitrary or unjustifiable discrimination" and "a disguised restriction" difficult to delineate, which poses challenges to interpretation.[120] The Appellate Body also pointed out that the actual contours and contents of the legal standards regarding arbitrary or unjustifiable discrimination and disguised restriction can vary as the kind of measure under scrutiny varies.[121] While "arbitrary discrimination" and "unjustifiable discrimination" have been the subject of increasing jurisprudential interpretation, what

114. Annual Report, *Brazil–Measures Affecting Imports of Retreaded Tyres*, ¶ 215, WTO Doc. WT/DS332/AB/R (adopted Dec. 3, 2007).

115. *Id.*

116. Donald McRae, *GATT Article XX and the WTO Appellate Body*, *in* NEW DIRECTIONS IN INTERNATIONAL ECONOMIC LAW: ESSAYS IN HONOUR OF JOHN H. JACKSON 235 (Marco Bronckers & Reinhard Quick eds. 2000).

117. *U.S.–Shrimp*, *supra* note 79, ¶ 156.

118. *U.S.–Gasoline*, *supra* note 113, ¶ 22.

119. *Id.*

120. CHRISTIANE R. CONRAD, *Processes and Production Methods (PPMs)*, *in* WTO LAW: INTERFACING TRADE AND SOCIAL GOALS 247, 350–51 (2011).

121. *U.S.–Shrimp*, *supra* note 79, ¶ 120.

constitutes "disguised restriction" remains less explored.[122] This part starts with examining whether the UFLPA constitutes "arbitrary or unjustifiable discrimination" where the same conditions prevail and then whether it is a "disguised restriction on international trade." Not all discrimination would be prohibited by the Chapeau, but only discrimination between countries where the same conditions prevail, and these conditions correspond to the policy objective of the measure at issue.[123] In order for a measure to be applied in a manner that constitutes "arbitrary or unjustifiable discrimination between countries where the same conditions prevail," three elements must exist.[124] First, the application of the measure must result in discrimination.[125] Second, the discrimination must be arbitrary or unjustifiable in character.[126] Third, this discrimination must occur between countries where the same conditions prevail.[127]

The UFLPA, as the name suggests, is a region-specific import ban that is not applicable to all countries with similar forced labor issues. This is ostensibly discriminatory since the United States has made allegations against numerous countries for having forced labor over the years.[128] In fact, the U.S. approach to tackling alleged forced labor in jurisdictions, such as Burma, Bolivia, Peru, and others is to maintain a list of suspected goods and their source countries to raise public awareness about forced labor and to promote efforts to combat them.[129] The "soft" approach adopted by the United States to tackle alleged forced labor in several jurisdictions with no

122. Michael Gavin Johnston, *Meaning of the Terms "Arbitrary or Unjustifiable Discrimination" in the Chapeau of GATT Article XX* 6 GLOB. J. OF POL. AND LAW RSCH.1, 6–8 (2018).

123. *EC Seal Products*, *supra* note 69, ¶ 5.300.

124. *U.S.–Shrimp*, *supra* note 79, ¶ 150.

125. *Id.*

126. *Id.*

127. *Id.*

128. For instance, the U.S. Department of State issued the 2022 Trafficking in Persons Report criticizing the government of the Democratic Republic of the Congo for not fully meeting the minimum standards for the elimination of trafficking. *See* U.S. DEP'T OF STATE, 2022 TRAFFICKING IN PERSONS REPORT: DEMOCRATIC REPUBLIC OF THE CONGO, U.S. DEP'T OF STATE (2022).

129. *List of Goods Produced by Child Labor or Forced Labor*, BUREAU OF INT'L LAB. AFFS., https://www.dol.gov/agencies/ilab/reports/child-labor/list-of-goods?combine=&field_exp_exploitation_type_target_id_1=All&tid=All&field_exp_good_target_id=All&items_per_page=10&page=0 (Sept. 28, 2022) (listing 159 goods from 78 countries and areas produced by child labor or forced labor).

punitive measures stands in stark contrast to the UFLPA. Particularly in the absence of sound and clear evidence pointing at the XUAR as the place with the world's worst or most despicable labor rights conditions, the U.S. law imposing the harshest treatment of products that are connected to the XUAR appears to be overly discriminatory with no justification. As Howse posits, not targeting any geographical area or economic actor would be crucial to avoid "arbitrariness or discrimination in the application of an import restriction."[130] By focusing exclusively on one specific geographical area, the UFLPA constitutes arbitrary and unjustifiable discrimination between countries where the same conditions prevail and, thus, fails to meet the Chapeau requirement. Furthermore, the implementation timeline was extremely tight, leaving limited time for the industry to adequately determine the requirements it must comply with.[131] Without sufficient guidance provided by the U.S. administration before implementation, Chinese producers and U.S. importers feared a highly unpredictable environment would arise, further worsening the already strained supply chains.[132] The absence of diligent disclosure of the basis upon which authorities detain goods in forced labor content has also undermined the transparency of enforcement.[133] Taken together, the implementation of the UFLPA is arbitrarily and unjustifiably discriminating against China which fails to meet the Chapeau requirements.[134]

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130. Robert Howse, *The World Trade Organization and the Protection of Workers' Rights*, 131 J. SMALL & EMERGING BUS. L. 131, 145 (1999); CÉCILE JACOB ET AL., TRADE-RELATED POLICY OPTIONS OF A BAN ON FORCED LABOR PRODUCTS 38 (2022).

131. Notice Regarding the Uyghur Forced Labor Prevention Act Entity List, 88 FR 38080 (June 12, 2023); U.S.-China Business Council, Comment Letter on the Enforcement of the Uyghur Forced Labor Prevention Act (Mar. 10, 2022), https://www.regulations.gov/comment/DHS-2022-0001-0167.

132. US-China Business Council, *supra* note 131; Marti Flacks & Madeleine Songy, *The Uyghur Forced Labor Prevention Act Goes into Effect*, CENTER FOR STRATEGIC & INT'L STUD. (June 27, 2022), https://www.csis.org/analysis/uyghur-forced-labor-prevention-act-goes-effect.

133. *See A Recent (Non-Uyghur Forced Labor Prevention Act) Federal Circuit Decision and Its Potential Impact on UFLPA Enforcement Efforts*, SIDLEY AUSTIN LLP (August 10, 2023), https://www.sidley.com/en/insights/newsupdates/2023/08/a-recent-non-uflpa-federal-circuit-decision-and-its-potential-impact-on-uflpa-enforcement-efforts.

134. There is no need to examine whether the implementation of the UFLPA constitutes "a disguised restriction on international trade" because it has failed to meet the Chapeau requirements by arbitrarily and unjustifiably discriminating against China. GATT, *supra* note 63, art. XX.

e. Reflections

The UFLPA addressing the allegations of forced labor in the XUAR breaches the United States' obligations under the GATT Article XI and Article I, which leaves GATT Article XX as the potential defense. The above analysis found the UFLPA and its enforcement rules do not bear a sufficiently high degree of necessity to the claimed objectives under GATT Article XX (a) or (d). However, the evolving WTO jurisprudence featured growing deference to a Member's attempt to defend a trade-restrictive measure under Article XX subparagraphs indicates the chance for the UFLPA to be provisionally justified.[135] In addition, in recent WTO disputes involving the United States as a defending party, the panels have been particularly deferential to the U.S. counterclaims.[136] Therefore, the likelihood that the UFLPA is found to meet the requirements of a GATT Article XX subparagraph is not insignificant. Nevertheless, even if the UFLPA can rely on one of the GATT Article XX clauses to be provisionally justified, it still needs to pass the scrutiny of the Chapeau requirements. Targeting a specific geographical area to address an issue commonly known to be widespread, the UFLPA by nature is arbitrarily and unjustifiably discriminating against China. Therefore, the UFLPA constitutes a violation of GATT obligations and cannot be exonerated by Article XX.

The incompatibility of the UFLPA with the U.S. trade obligations under the WTO does not suggest the multilateral trade regime has no policy space for members to tackle forced labor with trade restrictions. Instead, the requirements set in the WTO obligatory and exceptional clauses are essential to follow to preclude trade-related measures that are unduly restrictive or discriminatory because they could be easily hijacked by other interests. Human rights-based trade restrictions may have "true motives" fueled by economic or political reasons, such as the interest to protect domestic industries against foreign competition.[137] In particular, unilaterally imposed trade sanctions are often guided by political goals rather than genuine human rights concerns and

135. *Korea—Beef, supra* note 96, at 48–50.

136. *See* Zhou & Fang, *supra* note 111, ¶ 3.2–3.3; see *also* Fang, *supra* note 111, at 253–54.

137. Gudrun M. Zagel, *WTO & Human Rights: Examining Linkages and Suggesting Convergence*, 2 IDLO VOICES DEV. JURIST PAPER SERIES 1, 23 (2005).

have been limited in their effectiveness at protecting human rights.[138] While the Article does not aim to second guess the genuine motivations of the UFLPA, it remains skeptical of the Act's excessively stringent enforcement rules and concerned about its implications on the solar sector and the United States' decarbonization trajectory.

As research shows, the new solar panel installations in the United States declined by approximately 23% in 2022 to 18.6 gigawatts due to the limited access to key low-cost solar parts and materials supplied by China.[139] Particularly in the large utility-scale PV sector, which makes up the largest part of the U.S. solar market, the installation rate dropped by 40%.[140] This shift starkly contrasts the country's installation record in the previous two years, with a 19% increase in 2021 and 43% in 2020.[141] Such a sudden decline in the U.S. solar installation capacity in 2022 cannot be viewed in isolation from the UFLPA. The highly disruptive ramifications of UFLPA to the market entities may have eroded the confidence of U.S. solar developers and, thus, caused them to cancel or delay their projects. The U.S. Solar Energy Industries Association ("SEIA") recently expressed concern that the UFLPA's heightened requirements would further limit the country's solar deployment in the coming years.[142] Despite the increasing climate ambition along with the passage of the Inflation Reduction Act ("IRA"), many of the IRA's intended solar capacity benefits are undermined by the UFLPA and other trade tensions the United States has with large clean energy technology suppliers, including China.[143]

The slowing down of U.S. solar deployment jeopardizes the country's ability to achieve its updated commitments under the Paris Agreement, particularly when U.S. emissions spiked in the

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138. *Id.*, at 23.

139. Ryosuke Hanafusa, *U.S. Solar Installations Fall 23% in 2022 on China Trade Curbs*, NIKKEI ASIA, (Dec. 31, 2022), https://asia.nikkei.com/Business/Energy/US-solar-installations-fall-23-in-2022-on-China-trade-curbs.

140. *Id.*

141. Alan Neuhauser, *Trade Disputes are Chocking the Solar Industry*, AXIOS (Dec. 14, 2022), https://www.axios.com/pro/climate-deals/2022/12/13/solar-market-q3-seia-woodmac-trade-disputes.

142. *Trade and Supply Chain Barriers Delay Impact of Historic Clean Energy Law*, SEIA (Dec. 13, 2022), https://www.seia.org/news/trade-and-supply-chain-barriers-delay-impact-historic-clean-energy-law.

143. Carl Valenstein & Casey Weaver, *Solar Energy Caught in Crosshairs of New Legislation*, POWER (Mar. 14, 2023), https://www.powermag.com/solar-energy-caught-in-crosshairs-of-new-legislation/.

past two years.[144] Leading energy-economic models of U.S. energy supply and demand demonstrate that annual capacity additions of solar energy should increase by two to seven times its historical level in the past decade to meet the country's 2030 target.[145] In fact, bolstering the share of solar energy in the U.S. power mix is integral to decarbonizing its electricity grid, which currently only runs on 40% of clean energy.[146] However, the highly restrictive U.S. trade policies in the solar sector have undermined the country's capacity to accelerate renewable energy deployment with much-needed speed and therefore, threatened its credibility to reduce carbon emissions.

III. RECOMMENDATIONS AND CONCLUSIONS

As the latest confrontation between the United States and China in the solar sector, the enactment of the UFLPA has exacerbated the already contentious relationship between the world's two largest economies. While the use of different forms of trade remedies by the United States against Chinese solar exports has persisted throughout the past decade, it remained possible for these products to enter the U.S. market as long as the tariffs were paid. However, enforcement of the UFLPA represented the beginning of a new era in which trade barriers faced by Chinese solar exporters may have effectively taken the most restrictive form, i.e., a total ban.[147] As the Act currently stands, the legal hurdle for solar exporters within China and outside, as long as they have connections with the XUAR to overcome, is simply too daunting. Viewed from a broader and more systematic perspective, the enactment of the UFLPA signals the United States' willingness to adopt measures that

144. In 2021, the United States raised its climate pledges under the Paris Agreement, committing to cut its greenhouse gas emission to 50% to 52% below 2005 levels by 2030. John Bistline et al., *Actions for Reducing U.S. Emissions at Least 50% by 2030*, 376 SCI. 922, 922–33 (2022). However, research shows that the U.S. greenhouse gas emissions increased by 6.5% in 2021 and 1.3% in 2022. *Id.*; *see also* Benjamin Storrow, *U.S. Greenhouse Gas Emissions Went Up Again in 2022*, SCI. AM., (Jan. 10, 2023), https://www.scientificamerican.com/article/u-s-greenhouse-gas-emissions-went-up-again-in-2022/#:~:text=US%20greenhouse%20gas%20emissions%20grew,under%20the%20Paris%20climate%20accord.

145. Bistline et al., *supra* note 144, at 923.

146. PAUL DONOHOO-VALLETT ET. AL., ON THE PATH TO 100% CLEAN ELECTRICITY 5 (U.S. Dep't of Energy, 2023).

147. *See* Inside Trade, *supra* note 57.

have profoundly disruptive implications for US-China trade flows, even potential economic "decoupling."[148]

Persistent conflicts in the solar sector between the United States and China have not only threatened the rules-based multilateral trading system but have also cast a shadow on the race towards carbon neutrality given the two countries' role in fighting the climate crisis. While it is never the intent of the Article to argue addressing climate change should triumph over other policy objectives, it is far from ideal to render carbon emission reduction efforts collateral damage in the use of highly restrictive trade measures to defend forced labor rights. When the common ground between the United States and China has been precipitously narrowed to limited issues that are of universal concern, such as climate change and anti-terrorism, it is highly counterproductive to keep market barriers deeply embedded in the solar trade.[149] As the world's two largest carbon emitters, China and the United States need to make concerted efforts to facilitate the low-carbon transition, in which a rapid development and deployment of renewable energy can play an essential role. Therefore, how to reduce the negative ramifications of the UFLPA on solar development is a significant matter for both the trade and climate regimes. This Part advances two sets of recommendations for China and the United States, respectively.

Recommendations for China are primarily oriented toward Chinese solar PV manufacturers. First, it is crucial to diversify the supply chain away from the XUAR, especially when an increasing number of countries have indicated the inclination to follow the United States' path of legislation against alleged forced labor in this region.[150] This does not suggest that solar

148. Julian G. Ku, *Can a New U.S. Law Prevent Uyghur Forced Labor?*, CHINAFILE, (July 26, 2022), https://www.chinafile.com/conversation/can-new-us-law-prevent-uyghur-forced-labor; Jeremy Friedman & David Lane, *The Uyghur Forced Labor Prevention Act: Forced Labor and Genocide in U.S.–China Relations*, HARV. BUS. SCH., Sept. 15, 2022, at 10, https://www.hbs.edu/faculty/Pages/item.aspx?num=62895.

149. Chermaine Lee, *China, U.S. Can Cooperate on Climate Issues Despite Tensions, Experts Say*, VOICE OF AM. NEWS, (Nov. 27, 2022, 3:32 PM), https://www.voanews.com/a/china-us-can-cooperate-on-climate-issues-despite-tensions-experts-say/6852225.html.

150. Canada already has started enforcing the Customs Tariff Act, its own version of Section 307. Australia, the EU, and the UK are also considering wide-reaching forced labor import bans. *See* Emilio Casalicchio, *UK Hints at Banning Chinese Imports with Forced Labor Links*, POLITICO, (Dec. 20, 2021, 6:00 AM), https://www.politico.eu/article/uk-could-impose-chinese-forced-labor-import-

manufacturing firms should move every production line entirely out of the XUAR, but it is more secure to develop a supply chain free of any connection to the region in the case that other countries institute legal provisions similar to the UFLPA. Second, from a technological perspective, it is highly desirable to accelerate progress in developing and commercializing polysilicon-free solar PV products.[151] Recent years have experienced notable R&D advancement in organic solar cells, which use "carbon-based materials and organic electronics" instead of silicon as a semiconductor to convert solar radiation into electricity.[152] As the third generation of solar PV technologies, organic solar cells can be lower in both production cost and carbon emissions compared with those made of silicon.[153] A growing list of solar firms in China have invested in the development of organic solar cells in recent years.[154] Producing organic solar cells at scale will enable Chinese firms to not only remove the reliance on the XUAR-produced polysilicon, but also to facilitate the technological breakthroughs that are urgently needed to increase the efficiency of solar energy conversion.

For the United States, it is important to uphold the objectives of preventing and eradicating forced labor without blatantly violating fundamental trade rules. While trade restrictive measures are permitted under the WTO regime to tackle labor rights-related issues, they must be designed and implemented in a manner that respects the principles of the multilateral trading system. There are three options for modifying the existing U.S. law. First, the United States can avoid violating WTO law by fundamentally revising the UFLPA to make it no longer exclusively target the XUAR in an arbitrarily and unjustifiably discriminatory manner. As discussed above, the U.S. government has openly criticized or

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ban/.

151. The author thanks Professor Alex Jen for pointing out this technology-oriented option.

152. *Everything You Need to Know About Organic Solar Cells*, SOLARREVIEWS, (Oct. 3, 2022), https://www.solarreviews.com/blog/organic-solar-cells.

153. *Organic Solar Cells Could Transform Renewable Energy Storage*, EUR. RSCH. COUNCIL, (Feb. 24, 2020), https://cordis.europa.eu/article/id/413548-organic-solar-cells-could-transform-renewable-energy-storage.

154. *See e.g.*, Yuki Misumi, *China Startup Makes Large, Flexible Solar Panels In Industry First*, NIKKEI ASIA, (July 19, 2022, 2:00 PM), https://asia.nikkei.com/Business/Startups/China-startup-makes-large-flexible-solar-panels-in-industry-first.

alleged the existence of forced labor in several countries. Narrowly focusing on products connected with the XUAR, but nowhere else, with strict enforcement rules casts doubt on the motive as claimed by the United States in legislating the UFLPA to tackle forced labor. It is recommended that the United States take a more global approach to address alleged forced labor issues. Second, given it would not be easy for the United States to revise the scope of the UFLPA to avoid exclusively targeting China, the United States could modify the enforcement strategies to provide clearer instructions for importers instead of leaving too much discretion to the enforcing authorities.[155] For instance, it is important to explicitly define what constitutes a "clear and convincing evidence" standard needed to rebut the presumption that goods from XUAR are made with forced labor.[156] In the absence of agreed standards or greater clarity on CBP's expectations, the admissibility of imports will be entirely left to the discretion of CBP officers who have unguided interpretation, which can be highly unpredictable and uncertain.[157] The United States should offer clearer rules regarding what constitutes "in part" and preferably, provide a "clearly defined *de minimis* exception" based on the quantity of the alleged problematic components and or on how critical they are to the finished product.[158] For products such as solar panels

155. It is noted that since early 2023, U.S. imports of solar panels from China finally increased after a few large Chinese solar companies, such as Trina, Jinko, and Longi were able to provide detailed documentation upon request by U.S. Customs and had their shipments released from detention. However, the released solar panels only accounted for not more than a quarter of electronics shipments detained by the U.S. border authority, despite a White House official's contention that UFLPA compliance rules were clearer. *See* Nichola Groom & Richard Valdmanis, *Exclusive: U.S. Solar Panel Imports from China Grow, Alleviating gridlock, Officials Say*, REUTERS, (Mar. 7, 2023, 10:13 PM), https://www.reuters.com/business/energy/us-solar-panel-imports-china-grow-alleviating-gridlock-officials-say-2023-03-06/.

156. Before the UFLPA entered into force, the public had an opportunity to provide input to the implementation rules of the Act. The U.S. Council on International Business underscored this issue. US COUNCIL FOR INT'L BUS., USCIB SUBMISSION: FORCED LABOR ENFORCEMENT TASK FORCE [DOCKET NO. DHS-2022-001] NOTICE SEEKING COMMENTS ON METHODS TO PREVENT THE IMPORTATION OF GOODS MINED, PRODUCED, OR MANUFACTURED WITH FORCED LABOR IN THE PEOPLE'S REPUBLIC OF CHINA, ESPECIALLY IN THE XINJIANG UYGHUR AUTONOMOUS REGION, INTO THE UNITED STATES, 23–26 (2022).

157. *Id.*, at 34.

158. Jonathan C. Drimmer, Tom Best & Quinn Dang, *The Countdown to the UFLPA*, PAUL HASTINGS, (May 9, 2022), https://www.paulhastings.com/insights/client-alerts/the-countdown-to-the-uflpa.

that use a diverse range of raw materials as inputs, setting the standard of "in part" to avoid unduly expansive scrutiny becomes crucial. Third, the United States could allow the use of a prior determination to streamline the importation process and permit importers to cite prior shipments with identical supply chains that have been reviewed and determined to be admissible.[159] These recommendations are also applicable to other countries that plan to follow the example set by the UFLPA.

The continuous politicization of trade policies by the U.S., particularly since Trump took office, to achieve non-trade objectives has severely undermined the rules-based trading regime and set a negative example for other countries.[160] The political rhetoric of bringing manufacturing jobs back to the United States and achieving a made-in-America future, despite its increasing popularity, might lead the United States to embark on a risky path fraught with anti-globalization and nationalistic sentiments. Considering the solar sector as an example, a new study published in Nature alerts that the price of solar panels would have skyrocketed had the United States decided to produce them domestically.[161] Without efficient globalized renewable energy supply chains, it may be difficult or even impossible for countries, especially large carbon emitters, to achieve climate pledges under the Paris Agreement. The past few years demonstrate that the United States' integration with China in low-carbon energy technologies, such as solar, wind, and batteries has led to rapid improvement along the cost curve and contributed to alleviating air pollution and reducing carbon emissions.[162] It would be a missed opportunity if the United States and China fail to make a concerted effort to accelerate the development and deployment of solar energy to achieve the low-carbon transition within the targeted timeline.

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159. This approach right now is exercised by the CBP on a case-by-case analysis. *See* Leiter et al., *supra* note 46.

160. Meredith Crowley & Dan Ciuriak, *Weaponizing Uncertainty: Trade Policy under the Trump Administration* C.D. HOWE INST., June 19, 2018, at 4–8, https://www.cdhowe.org/public-policy-research/weaponizing-uncertainty-trade-policy-under-trump-administration.

161. Research shows that the price would have risen 107 percent higher for the United States. *See* John Paul Helveston, Gang He & Michael R. Davidson, *Quantifying the Cost Savings of Global Solar Photovoltaic Supply Chains*, 612 NATURE 83, 84–85 (2022).

162. Michael R. Davidson et al., *Risks of Decoupling from China on Low-Carbon Technologies* 377 SCI. 1266, 1268 (2022).