



# Trade Remedies: Targeting the Renewable Energy Sector





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## Contents

Note .....	ii
Acknowledgements.....	iv
<b>I. INTRODUCTION.....</b>	<b>1</b>
A. Clash between trade remedies and environmental goals .....	1
B. Outline of the report.....	1
<b>II. OVERVIEW OF TRADE REMEDIES.....</b>	<b>1</b>
<b>III. TRADE IN RENEWABLE ENERGY PRODUCTS AFFECTED BY AD/CVD CASES .....</b>	<b>3</b>
A. Methodology for the trade remedy survey .....	4
B. Findings from the survey.....	5
<b>IV. RENEWABLE ENERGY COSTS.....</b>	<b>13</b>
<b>V. WTO DISPUTES RELATING TO RENEWABLE ENERGY .....</b>	<b>13</b>
<b>VI. POLICY OPTIONS AND CONCLUSIONS .....</b>	<b>15</b>
<b>VII. APPENDIX.....</b>	<b>17</b>
References .....	36
Notes.....	39

## Tables

Table 1	Comparative statistics of countries that impose anti-dumping (AD) and countervailing measures (CVD) targeting renewable energy products .....	4
Table 2	Estimated trade affected by AD/CVD cases in the renewable energy sector, 2008-12 .....	6
Table 3	Estimated trade reduced by AD/CVD cases in the renewable energy sector, 2008-12.....	8
Table 4	Estimated renewable energy trade reduced by country for AD/CVD cases .....	10
Table 5	Renewable energy products targeted in AD/CVD investigations .....	10
Table 6	Average tariffs of major importers on selected renewable-energy products.....	11
Table 7	World renewable electricity generation and capacity, 2011-18.....	11
Table 8	Renewable energy generation by source for select countries, 2012.....	12
Table A1	AD measures in the renewable energy sector (preliminary decisions), 2008-12.....	17
Table A1.1.	AD measures in the renewable energy sector (final decisions), 2008-12 .....	23
Table A2	CVD measures in the renewable energy sector (preliminary decisions), 2008-12 .....	28
Table A2.1.	CVD measures in the renewable energy sector (final decisions), 2008-12 .....	32

## Boxes

Box 1.	Challenging AD/CVD cases targeting renewable energy .....	14
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The study and the meeting are part of a larger effort by UNCTAD to analyze issues arising at the interface of trade policy and green economy, more specifically renewables, which is shorthand for goods and services used in conjunction with renewable energy sources.

In recent years, trade remedies - anti-dumping and countervailing duties - have increasingly been directed towards renewables - solar panels, wind turbines and biofuels. A priori, this puts these measures at cross purposes with national and international climate and environment policies.

The geopolitics and political economy are more complicated though. The developed as well as the developing countries are using these measures. And while one can argue that a given amount of environmental expenditure would go further in the absence of trade remedies, it is not clear that the amount of public support would remain at the same level.

There can be little doubt that trade remedies are a sensitive area. Trade remedies may have a significant effect on value and job creation throughout the supply chain as a whole. Trade remedies are bound to have competitive implications. Trade remedies against renewables provide a counterpoint to the initiative to reduce tariffs on environmental goods, particularly since some of the most active users of trade remedies participate in the initiative. Trade remedies shatter the alliances among interest groups. On the dispute settlement front, clearly what we see there is disputes on trade remedies that happen to involve renewables rather than disputes about renewables that happen to involve trade remedies. These disputes are about how trade remedies work and in many ways are a continuation of discussion and negotiations that have been going on for the past 12 -13 years about issues such as public interest test, lesser duty etc., which suddenly become relevant again in the context of renewables.

The study is far from an exhaustive examination of these issues, of course. In many areas, the analysis is speculative, aimed at raising questions and suggesting areas where policy makers and analysts may need to consider undertaking further analysis. Whether any given governmental measure is consistent with WTO rules is a highly contextual question that may well depend on the exact design features of that particular measure, and its broader context – regulatory, technological and commercial. Thus, nothing in this study should be considered as a judgment that any actual measure of any particular government violates WTO rules.

What are the actual or potential effects of trade remedies involving renewables? What kind of conclusions can be drawn from trade remedies cases since 2008? Are there alternative approaches that might lessen the impact of trade remedies on the deployment of renewable energy? What is the impact of trade remedies on jobs and value added? Are competitors with different supply chain using trade remedy cases to “raid” each other? Can aligning the anti-dumping rules with the competition or anti-trust rules help make sure they only remedy truly anti-competitive behavior - as opposed to undesired competition? Are there ways of providing more robust, empirically sound and predictable outcomes in trade remedies investigations and better connect trade law to the “real world”? Do trade remedies constitute a problem for the liberalization of trade in environmental goods and services? How can countries, individually and collectively, manage the interface between two deeply held goals: “fair international trade” and “GHG control”? These questions still remain open.

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## I. INTRODUCTION

Since the Great Recession erupted in 2008, the rise of protectionist measures has been worrying. Anti-dumping (AD) and countervailing duties (CVD), along with tariff increases, accounted for nearly 40 percent of the global total of discriminatory measures imposed (see Evenett 2013).<sup>1</sup> AD and CVD penalty duties are imposed by national authorities, without prior authorization from the World Trade Organization (WTO). Provided the duties respect WTO rules, they will not be overturned by the WTO Dispute Settlement Body, if contested in subsequent WTO litigation.

AD and CVD trade remedies<sup>2</sup> are no longer limited to a core group of traditional user countries, but have been widely imposed by new users, especially developing countries. AD and CVD remedies are defended as a means to level the playing field against “unfair” trade practices. However, these measures are often intended to protect domestic firms, regardless of the “fairness” of trade practices abroad.

### A. Clash between trade remedies and environmental goals

By our count, some 41 AD and CVD cases have been initiated since 2008 on biofuels, solar energy and wind energy products. Notably, almost half of these measures target solar energy products. The trade remedy trend accelerated during 2012-2013 among major producers of renewable energy, including Australia, China, European Union, India, and the United States.

The use of trade remedies in the renewable energy space exemplifies the clash between two deeply-held goals: the control of green-house gases and fair international trade. In 2011, around 20 percent of total electricity generation came from renewable sources and about 115 gigawatts of new installed capacity was powered by renewable energy in 2012. Globally, in 2012, new global investment in renewable energy was \$240 billion (IEA 2013a). Developed and developing countries alike are implementing green policies that aim to lower the cost of renewable energy production in the medium-term and improve the competitiveness of renewables relative to fossil fuels.<sup>3</sup>

Such efforts are often coupled with the goal of creating manufacturing jobs, thereby ensuring a short-term payoff for domestic constituencies and promoting support for green policies. This is where AD and CVD

measures enter the picture: to further the protection of manufacturing jobs. Since the overwhelming majority of green technologies are subsidized, public support for spending taxpayer money might be weakened if too much money “leaked out” of the country to “unfair” imports. However, the growing use of penalty duties against renewable imports not only disrupts trade but also restricts access to competitively priced goods and services that could accelerate the deployment of green energy. Moreover, the spurt of trade remedies seems at odds with efforts to dismantle barriers to environmental goods and services trade, particularly the launch of plurilateral talks to liberalize environmental goods trade by 14 countries.<sup>4</sup>

### B. Outline of the report

An extensive body of literature has assessed the general economic impact of trade remedies, but few studies have assessed their specific impact on the renewable energy sector. Our study aims to help fill that gap. We conduct a global survey of AD and CVD cases in the renewable energy sector from the onset of the Great Recession in 2008 through early 2014, and offer rough estimates of their impact on bilateral and global trade. Section II sketches the literature on trade remedies and the case for and against such policy measures in the renewable energy sector. Section III reports the estimated impact on renewables trade of AD and CVD penalties. Section IV summarizes cost estimates for renewable energy generation. Section V profiles recent disputes over green trade policies brought to the WTO. Section VI concludes by outlining policy options moving forward.

## II. OVERVIEW OF TRADE REMEDIES

The WTO refined the procedural rules governing the use of AD and CVD remedies in the Uruguay Round.<sup>5</sup> Agreed procedures permit member countries to levy AD and CVD penalties on imported products when domestic firms can establish the existence of dumping or subsidization, and can prove that, as a result, the domestic industry suffers “material injury” (a low threshold of adverse effects). Penalty duties are intended to offset the margin of dumping or subsidization; initially they can be in place no longer than 5 years, but they can be extended following a “sunset review.”

The use of trade remedies has evolved significantly in the past two decades. Until the 1990s, the “traditional” users centered around a core group of countries, namely the United States, the European Union, Canada, and Australia. But new users, especially developing countries have accounted for the substantial growth in recent trade remedy cases (Bown 2011; Prusa 2005). Bown and McCulloch (2012) report that major developing countries more than doubled their use of trade remedies between 2004 to 2011, and that, by 2011, about 3 percent of their imports (at the 6-digit level) were subject to trade remedies. By contrast, developed country usage remained around 2 percent of imports over the past decade. China’s emergence as a major trader player shaped the landscape of trade remedies. By 2011, China was a dominant target of penalty duties: nearly 11 percent of China’s exports to developing countries and 5 percent of exports to developed countries were subject to trade remedy duties (Bown and McCulloch 2012, 21). Trade remedies on renewables have broadly followed these trends, but in a more compressed timeframe over the past 5 years.

An important reason for the growth of trade remedies has been the evolution of more relaxed rules for their imposition. As Mavroidis, Messerlin and Wauters (2008, p. 6) note, “this drift has always been in one direction, making it easier to prove the existence of dumping and injury and of a causal link between dumping and injury.”<sup>6</sup> Before the Second World War, AD laws were designed to thwart “predatory pricing”, namely the use of cut rate prices to bankrupt foreign firms and then monopolize the market. But gradually, over the past 50 years, AD laws were relaxed to allow penalty duties against almost any form of below cost or discriminatory pricing, including forms that are perfectly acceptable when practiced within a national territory.<sup>7</sup> As a result, trade remedies (especially ADs) have become increasingly flexible for dealing with the pressures of trade liberalization and for buttressing industrial policies (Bown and McCulloch 2012, p. 14).

As anti-dumping has become the most frequently used remedy measure – and the most skeptically viewed by economists – the academic literature has focused on AD practice.<sup>8</sup> In basic economic analysis trade remedies are portrayed as similar to tariffs, with well known effects. Tariffs increase domestic prices and reduce the volume of imports, thereby generating gains for domestic producers and tariff revenues for governments, but imposing losses in the form of higher

prices both on domestic consumers and downstream industries. The net effect is almost always a loss for the importing country.<sup>9</sup>

The net costs of remedy measures often go beyond the immediate impact on production and consumption. We briefly summarize a few of the main findings here; for a more detailed overview see Bown and McCulloch (2012); Bown (2011); Mavroidis, Messerlin and Wauters (2008); and Blonigen and Prusa (2003).

Broadly speaking, the direct effect of AD and CVD measures is to reduce imports by raising their price. Empirical studies more closely examine channels of influence. Staiger and Wolak (1994) find that the dampening of trade is most significant during the filing and investigation phases of an AD case. Prusa (1997) analyzed industry-level data for US AD cases from 1980 to 1988, and found that AD protection caused substantial trade diversion: as imports fell from the countries targeted by the investigation, imports increased from third countries competing in the US market (such diversion potentially undermines the restrictiveness of AD duties). Bown and Crowley (2007) estimated the impact of US AD and safeguard measures on Japanese imports between 1992 and 2001. They found that US duties caused a diversion of Japanese exports of the sanctioned products to third countries (a deflection effect). These mentioned studies focused on trade effects at the product level. Vandebussche and Zanardi (2010) also found evidence that AD measures exert a chilling effect on aggregate bilateral imports, owing to various “spillover” channels. The authors used gravity model analysis and found that for countries that systematically use AD measures, so-called “tough users,” the annual reduction of global imports is about 6 percent, or \$14 billion imports. They outline the various spillover channels through which AD measure can effect trade and conclude that “AD policy can have ambiguous effects on trade” and that the “various effects can play at once” (Vandebussche and Zanardi 2010, p. 4). These channels include: (1) trade destruction effect, i.e., the suppression of trade in the specific products targeted; (2) trade diversion effect, i.e., the increase of imports from other trading partners not targeted by the AD measure; (3) downstream effects, i.e., the suppression of trade for downstream producers that rely on intermediate inputs; (4) deterrent effect on trading partners seeking to sell into the markets of frequent users of AD measures; (5) anti-competitive effects, i.e., AD measures that can serve as a collusive

device for firms and suppress trade; (6) foreign direct investment effects, i.e., prompting exporters to avoid AD measures and directly invest in the protected market, for example setting up production plants; and (7) retaliation effects, i.e., the empirical observation that new users of AD measures generally target traditional users.

Theoretical analyses of trade remedies center on the strategic behavior of petitioning firms. Some studies argue that, rather than correcting for anti-competitive behavior, AD protection can instead facilitate collusion between domestic and foreign firms (see Prusa 1992; Zanardi 2004; Blonigen and Prusa 2003).<sup>10</sup> “Strategic dumping,” designed to promote collusion or achieve economies of scale, may affect the calculations of both domestic and foreign firms (see Staiger and Wolak 1994; Bown and McCulloch 2012). Retaliatory motives may prompt complaints against countries that instigated petitions in past investigations (see Finger 1993; Prusa and Skeath 2002). One important conclusion from these investigations was that the spread of AD protection cannot be solely explained by an increase in unfair trade practices.

A few studies narrowly examined trade remedies in the renewable energy space. The Swedish National Board of Trade (2013) assessed AD and CVD investigations by the European Union, highlighting recent measures that target environmental products. The Board found that trade remedies on renewable energy affect an import value of EUR 14 billion, representing about 75 percent of the total import value for all trade remedy cases currently in force. Three of the recently imposed measures -- the AD/CVD penalties on solar panel imports from China, biodiesel imports from Argentina and Indonesia, and biodiesel imports from the United States -- rank among the EU's five largest measures in terms of affected trade. As for solar panels, Prognos

sumers (Swedish National Board of Trade 2013);

- The consequent likelihood that trade remedies will increase the price of renewable electricity, eroding its competitiveness with fossil fuels to the detriment of the environment;
- The possibility that AD and CVD measures affecting intermediate inputs will raise costs incurred by downstream firms in supply chains, thereby undermining “supply chain optimization” (Bown and McCulloch 2012); and
- The possibility that trade remedies will foster retaliatory behavior among targeted countries.

### III. TRADE IN RENEWABLE ENERGY PRODUCTS AFFECTED BY AD/CVD CASES

We conducted a global survey of AD and CVD cases in the renewable energy sector from the onset of the Great Recession in 2008 through early 2014. The quality of trade remedy data varies widely across countries. Our analysis is largely based on data compiled in the Global Antidumping Database (GAD) and the Global Countervailing Duties Database (GCVD), which form parts of the Temporary Trade Barriers database created by Chad Bown at the World Bank. These databases offer the most comprehensive data documenting AD and CVD investigations from the 1980s through 2012, giving detailed information on relevant dates, outcome of each case (affirmative, negative, withdrawn), the products under investigation (classified at the 8-digit or 10-digit level), the domestic and foreign firms involved, and the preliminary and final duties imposed.<sup>11</sup> Our survey also consulted supplemental sources including the Global Trade

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