THE IMPEDIMENTS TRADE AGREEMENTS POSE TO A SOUTH AFRICAN RENEWABLE ENERGY INDUSTRY

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AIDC
Alternative Information & Development Centre
Strengthening alliances for a wage-led, low-carbon, sustainable and equitable path for Southern Africa

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TABLE OF CONTENTS

INTRODUCTION

The World Trade Organisation (WTO), the African Continental Free Trade Agreement (AfCFTA) and similar international trade agreements are ambivalent, if not hostile, to state-led efforts to mitigate the worst effects of climate change and to resolve the unemployment crisis through a Just Transition.

Proponents of further trade liberalisation argue that the rising tide of increased trade will "lift all boats'', and the increased prosperity and development brought about through trade will enable states and the private sector to spend more money on development initiatives. However, it is more apt to say that "policy space", industrial policy decisions and national sovereignty have been effectively eroded by the ascendant power of the WTO and various trade agreements. Without the legal right to formulate their own environmental and development policies, states are bound by the dominant development paradigm – often known as the "Washington Consensus''. For developing countries such as South Africa, this implies market-led and export-orientated growth and the attraction of foreign direct investment (FDI). This stifles the ability of these countries to make the radical changes necessary for sustainable development and the prevention of climate catastrophe. Deindustrialisation, the declining influence of organised labour, dependence on the Global North, and environmental degradation through fossil fuels and extractive industries are institutionally mandated as Africa's developmental future through the trade, investment, and finance liberalisation paradigm.

The WTO and later plurilateral or bilateral trade agreements are built on the principles of "free trade" and non-discrimination. Proponents of free trade assert that economic development, even of the least developed economies, is best achieved through the lowering of all trade barriers and exploiting comparative advantages. The resulting global economic integration has increasingly turned lower labour costs, financial deregulation, lower corporate tax rates, and weakened environmental protection into competitive factors in attracting foreign investment and manufacturing. As states compete to attract investment by deregulating environmental protection and destroying labour standards, their countries' working classes are pitted against each other in a 'race to the bottom'. The race to the bottom has shifted manufacturing to lower income countries, severely weakened the collective bargaining power of organised labour, and lowered the material circumstances of working classes worldwide.

Late twentieth and early twenty-first century liberals touted free trade as a progressive, even egalitarian agenda of global economic upliftment. Free trade has instead inflated the political and economic power of transnational corporations (TNC), further enriched the already affluent, and endangered working class livelihoods. The backlash to the liberals' free trade compulsion has largely come in the form of crude protectionism and nationalism, which is most obscenely exemplified by xenophobic right-wing populists. In the ever-threatening face of the global climate crisis, the left must reject both free trade and nationalism, instead offering real alternatives that will save the planet from climate crisis and advance the interests of the global working class.

Most-favoured-nation (MFN) treatment requires that WTO or AfCFTA member states treat all other members the same in trade. Member states cannot trade more favourably with certain members over others. If a member gives a certain level of trade treatment to one of its trading partners, it must extend this treatment to all its trading partners. There are exceptions to this in the rules, but they are limited in scope and heavily regulated, meaning that usually states have no policy space for choosing which countries they trade with.

Similarly, the National Treatment principle means that member states cannot discriminate against foreign goods, services, and intellectual property. Foreign products must be given the same treatment as domestic products once they have entered the market. The National Treatment principle's ubiquity in free trade agreements means that import substitution industrialisation, government support to domestic industries, and intentional localisation are effectively banned – in what may be described as developed nations "kicking away the ladder" they themselves had climbed to economic affluence.[1] Particularly in the face of the climate crisis, widespread unemployment, and the economic fallout of the Covid-19 pandemic, policy tools for localisation are required if the state is to successfully lead a Just Recovery.

The earliest states to develop did so through state intervention and support for domestic industries. These developmental states used a mix of industrial and trade policies to support local industries, so protecting them from outside competition. They initially focused on their domestic markets and protected key industries from foreign products or services. Once their industries had become strong enough to compete, states began to gradually open them to free trade, allowing for access to markets broader than the limited domestic market. At this stage, once their industries were strong, states sought "free trade", even pushing for less-developed countries to lower trade barriers. Late-industrialising economies such as various East Asian nations, followed similar paths. They used interventionist industrial and trade policies to protect their industries, only gradually opening them to the vagaries of the global market.

The free trade compulsion of the late twentieth and early twenty-first centuries ignored (wilfully), the developmental stage of economies in the global economic system, instead insisting that "free" trade benefits all countries, regardless of their economic or developmental levels. Free trade became part of the neoliberal package of economic and political reform, included not only in externally imposed structural adjustment programmes, but also in domestically designed reforms such as the South African post-transition liberalisation. South Africa, along with all other countries, must urgently shift to widespread renewable energy provision. In abandoning the fossil fuel industry, new jobs and livelihoods must be created, most of which will come from the manufacturing of technology. A manufacturing industry will require nurturing and state intervention, which will be in opposition to a wide variety of free trade agreements.

The paradigm of free trade has worsened inequality, weakened organised labour, and strengthened TNC. Not only has free trade made the rich even richer, but it has also been used as a weapon of class warfare, further entrenching the division between those with resources and those without. In creating a world in which all of humanity's basic needs are met, including a healthy climate, free trade must be rejected. Meeting basic needs requires trade, but neither "free trade" nor economic nationalism will accomplish this goal. Alternative trade systems based on developmental imperatives, climate change

[1] Ha-Joon Chang, *Kicking Away the Ladder: Development Strategy in Historical Perspective* (London: Anthem Press, 2003), 2-4.

mitigation and adaptation, and improved living standards are necessary in meeting humanity's needs.

The Covid-19 pandemic has made the inequities of the global trade regime increasingly visible, with popular public attention drawn especially to the barriers the trade regime poses to access to vaccines and ventilators. But the pandemic has also highlighted severe inequalities between states in their capacity to respond to crises, provide healthcare, extend their welfare systems, and even maintain a minimal safety net. These issues, although domestic, are deeply affected by trade rules which regulate internal development policies (such as subsidies, SOE, and localisation) and external relations. Much analysis during the pandemic has highlighted the disastrous effects of intellectual property rights (IPR) in relation to access to healthcare, but this report seeks to show that the trade regime's inequities reach far beyond this, and it must be rethought entirely. Ironically, the AfCFTA came into force during the Covid-19 pandemic, intensifying the free trade paradigm. This new regulatory agreement must be challenged.

The following report analyses the broad framework of trade liberalisation agreements that affect South Africa and Africa. It contextualises the AfCFTA, showing that this is not an isolated agreement but a continuation of a much longer trend toward liberalisation and the intensification of free trade. The agreements listed below have been signed by the South African state, and most of them also apply to other African states. Unfortunately, an analysis of all of the agreements affecting Africa is beyond the scope of this report, and hence the focus on South Africa. Nonetheless, the report reviews the vast array of agreements that would hinder a South African Just Transition, lessons that can be applied throughout the continent. The report concludes by addressing the collective action necessary for states and civil society to exercise their 'Right to Say No' to trade and investment agreements that privilege TNC over human rights, climate change, development, and improved living standards.

THE MAIN THREATS

1. WTO: THE GENERAL AGREEMENT ON TRADE IN SERVICES (GATS):

The previous few decades have seen the deindustrialisation of developed and developing countries alike, with manufacturing industries being replaced with service industries.

The trade in services has risen to the fore as a larger share of GDP than the trade in goods. For developed countries, services make up the vast majority of GDP. Observing the rise of the trade in services, the United States (US), and particularly US-based TNC, devised GATS as a 'battering ram' to open up new markets for the services trade. Other developed countries supported the initiative of creating an agreement that would liberalise the services sector. As the manufacturing industries of developed countries continued to decline, TNC wanted to ensure market access for their services in developing countries.[2] GATS proved to be useful in increasing market access for services, as it broadly liberalised the sector in all WTO member states. The agreement is one of the core texts of the WTO and has therefore been automatically binding on all WTO members since 1995. Crucially, an increasing number of transactions are covered under GATS. It seeks to further the liberalisation of services that have long been considered to be public – such as electricity, water, sanitation, health, postal services, telecommunications, transportation, pipelines, and even education. The liberalisation of these industries removes them from the domain of public goods and ensures that the trade in services is for-profit, often adopting a cost-recovery model that treats public services as valuable commodities.[3] Allowing services – even those crucial for human survival – to be allocated through market mechanisms, drastically limits the policy space available to sovereign states for development and environmental protection. Public service delivery has traditionally been a role reserved for the state, but GATS helps to solidify the neoliberal market-driven development model, premised on the supposed benefits of "competition".

Article I:3 of GATS may provide the only possibility GATS allows for its own curtailment. Although highly contested and debated in legal circles, this article limits the scope of GATS. It states that "services supplied in the exercise of governmental authority" are exempt from GATS coverage. It further explains that services can be considered exempt if they are "neither on a commercial basis, nor in competition with one or more service suppliers". This article is intentionally vague and "commercial basis" has never been defined. Numerous, often contradictory interpretations exist. It is possible that Article I:3 could be invoked as a loophole to exempt a socially owned Eskom (providing electricity as a public service) from GATS coverage, but the vague, contested and contradictory nature of the debate about the article ensures that no definite loophole exists.

[2] Jane Kelsey, *Serving Whose Interests? The Political Economy of Trade in Services Agreements* (New York: Routledge, 2008), 58.

[3] *Ibid.*, 2-3.

CASE STUDY:

EU and its Member States – Certain Measures Relating to the Energy Sector. (Request for consultations received 30th April 2014. Panel Report circulated 10 August 2018. Appeals from both sides are ongoing).

An example of the near limitless scope of the services sector is provided by the EU's Third Energy Package (2009), which made significant reforms to the European energy market. Crucially, the new laws required the unbundling of "vertically integrated undertakings" in the energy sector. Under the law, supply and production have to be separate from transmission. Russian state-owned natural gas company Gazprom has long supplied natural gas to the EU, entailing both supply and transmission. The new EU laws require the unbundling of Gazprom.

Russia therefore lodged an official complaint at the WTO, particularly regarding EU Directive 2009/73/EC. The Directive in question provided three unbundling options to choose from. Russia submitted that the EU law gave preferential treatment to natural gas importers that adopted the most stringent unbundling option. As a publicly owned enterprise, Gazprom was not able to unbundle to the same extent as private enterprises (full 'ownership unbundling' is impossible when the separate entities are all owned by the state). Russia therefore claimed injury through discriminatory treatment.[4] However, Russia lost the case, and the EU's forced unbundling was found to be WTO-compliant. The implication for South Africa is that if Eskom ever has a genuine surplus of electricity, it may want to sell this electricity to neighbouring countries, and the EU-Russia dispute shows that states have the legal right to enforce the unbundling of enterprises trading in their markets. Neighbouring states that are signatories of the African Continental Free Trade Agreement (explained in more detail later) may have legal recourse to refuse imports of electricity from Eskom, if the parastatal remains vertically integrated.

[4] Panel Report, European Union and its Member States – Certain Measures Relating to the Energy Sector, WT/DS476/R (10 August 2018), 97.

2. THE AFRICAN CONTINENTAL FREE TRADE AGREEMENT (AFCFTA):

Proponents of the African Continental Free Trade Agreement (AfCFTA) argue that the lifting of trade barriers to create a single African market will drive the formation of continental value chains.

The development of value chains would theoretically loosen Africa's economic and political dependence on the Global North, allowing intra-continental trade to replace many of the higher value imports Africa currently relies on. This would allow the continent to develop its internal capacity to produce higher value-added goods, eventually diversifying beyond primary commodities exports.[5] The development of new value chains could include those necessary for the production of renewable energy technologies. However, even the staunchest supporters of the agreement concur that it does risk opening the continent to 'transshipment'. This is the practice through which goods originating from a non-member state are traded under the preferential rules of the free trade area by first entering through a member state.[6] If transshipment is allowed to occur at a large scale, non-African state are likely to be the primary beneficiaries of the agreement. Through transshipment, outside states with entrenched higher value-added manufacturing capacity could enjoy easier access to the entire African market, hindering the development of the value chains envisioned by the agreement's proponents.

Rules of Origin (ROO) are widely regarded as crucial in preventing transshipment and producing regional value chains. ROO set standards that traded products and services must meet in order to be considered as originating from a specific country or region. In the case of the AfCFTA, if a product meets the agreed criteria, it will legally be allowed to be traded under the preferential tariff regime of the agreement. Raw materials, unprocessed agricultural goods and other primary commodities are typically required to be "wholly obtained" from within the preferential trade area, meaning that their entire value is from within a trading bloc such as the AfCFTA.[7] The wholly obtained rule is relatively simple, given that products requiring wholly obtained status generally do not undergo processing or manufacturing.

For products further along in value chains, especially manufactured goods, there are a wide variety of criteria used globally to determine rules of origin. These include specifications of the minimum percentage of value of manufactured products that must be added within the preferential trade area,

[5] Landry Signé and Payce Madden, "Considerations for Rules of Origin Under the African Continental Free Trade Area", *Journal of African Trade*, November 2020, 6.

[6] Komi Tsowou and Junior Davis, "Reaping the AfCFTA Potential Through Well-Functioning Rules of Origin", *Journal of African Trade*, April 2021, 2.

[7] Landry Signé and Payce Madden, "Considerations for Rules of Origin Under the African Continental Free Trade Area", *Journal of African Trade*, November 2020, 2.

maximum percentage of value of a product that is allowed to be from outside the area, change in the tariff heading (HS classification), or the undertaking of specific industrial processes to transform a product.[8] Once a product meets these criteria it can be traded under the lower tariff levels inherent in the agreement. The AfCFTA has two broad criteria for determining ROO: "wholly obtained" status or products having undergone "substantial transformation".[9] As elaborated above, wholly obtained goods have derived all of their value from within the AfCFTA, making this criterion simple.

Determining the degree to which a product has been 'transformed', however, becomes much more complicated. The agreement sets four criteria, with different tariff headings using one of these four. They are value added, non-originating material content, change in tariff heading, or 'specific processes'.[10] These criteria therefore depend on the product in question, and the requirements can be very technical. For example, for passenger cars to be considered "originating" from the bloc, "floor panels, body sides, and roof panels must be attached to each other and the engine, transmission, axles, radiators, suspension components, steering mechanisms, braking or electrical equipment or instrumentation must be fitted to the floor panels or chassis frame of the vehicle" in member states.[11] Other products have similarly long, technical procedures that must be followed, and such cases fall under the category of "specific processes." Products requiring 'value added' typically specify a percentage of the final value that must be added in the bloc. 'Non-originating material content' requirements are similar, specifying a maximum of the value of the material inputs that can be procured from abroad. For example, steam turbines are originating from the bloc only if the value of materials used in building them does next exceed 60% of their final traded value. Finally, the 'change in tariff' criterion products must be traded under a different tariff classification (HS code). This means that they require such change that their legal tariff code is different from that of the inputs they are made from.

There is also allowance for what is termed "cumulation". This means that inputs or processes can be undertaken in multiple, distinct state parties to the agreement and still qualify for preferential treatment.[12] For example, South African-produced motor vehicles can source parts from other African countries and still qualify for AfCFTA tariff preferences. Cumulation is not included in all trade agreements, but its inclusion in the AfCFTA does create more space for regional value-chain creation by promoting the sharing of inputs and manufacturing processes across national borders in Africa.

These ROO do provide incentives for intra-African trading and hence the promotion of regional value chains. By setting rules that limit the value of a product that can originate from outside the bloc, the AfCFTA forces manufacturers to choose between trying to source inputs locally to trade with preferential tariffs, or to input from abroad and trade without preference. The problem, however, is that African continental manufacturing

[8] *Ibid.*, 3.

[9] Collins Ajibo, "African Continental Free Trade Area Agreement: The Euphoria, Pitfalls and Prospects", *Journal of World Trade* 53(5) 2019, 886.

[10] African Continental Free Trade Agreement, Annex 2: Rules of Origin, Article 6 (1).

[11] African Continental Free Trade Agreement, Annex 2: Rules of Origin, Annex IV, Chapter 87, 9.1.

[12] Komi Tsowou and Junior Davis, "Reaping the AfCFTA Potential Through Well-Functioning Rules of Origin", *Journal of African Trade*, April 2021, 4.

is severely limited. This means that many manufacturers will be unable to source inputs locally unless other measures are adopted to drive regional value-chain creation. The local options for sourcing inputs and processes are limited, and hence many manufacturers will simply choose to trade without the agreement's tariff preferences. If manufacturers choose the least-cost option, the lower tariffs inherent in the AfCFTA will have to be low enough to offset the likely higher cost of local inputs, rather than sourcing cheap inputs from abroad. However, this also assumes that local materials and processing capacities actually exist. With manufacturing only contributing about 10% of the continent's GDP, many manufactured goods and their basic input materials are more likely to be able to be sourced from countries with entrenched manufacturing capacity.[13] While tariff reduction may offer an incentive to trade within the continent, without the necessary manufacturing base most trading entities will likely eschew the agreement and continue to trade with typical tariff rates. This is particularly true in relation to renewable energy technologies, for which there is almost no continental manufacturing capacity.

There is also reason to believe that the porous and overlapping nature of trade agreements will mean that countries with entrenched manufacturing capacity will be able to exploit the single market created through the AfCFTA. African states have signed bilateral trade agreements with a wide variety of outside countries and blocs. This means that if ROO are not effectively implemented, outside countries will use the African states they have bilateral agreements with to enter the African single market, under the pretences of their goods originating from the African state through which they enter. This is one of the primary reasons that the Manufacturer's Association of Nigeria pressured the Nigerian state not to sign the agreement, so delaying its eventual ratification.[14] Without adequate enforcement, ROO will do little to stop transshipment. Most African states do not currently have the capacity to adequately enforce ROO, and this task becomes significantly more difficult with the many overlapping rules affecting the legal origination of various goods.[15] The promised effects of the agreement, especially the growth of regional value chains, are contingent on transshipment not occurring. But without proper enforcement measures and given the numerous bilateral agreements African states have made with non-African states, it is likely that the main beneficiaries of the AfCFTA will be outside countries with pre-existing manufacturing capacity.

To make matters worse, the AfCFTA limits the capacity of the state to actually develop their own value chains, which would potentially increase local trade and produce countless jobs in higher value industries. The agreement locks states into an even more market-driven development path, and hence prevents the state support that would enable the growth of manufacturing. The classical and neoclassical trade and development theories that the AfCFTA relies on suggest that states industrialise through exploiting their 'comparative advantages', thus relying on the market's favouring of certain capabilities in their national economies. For underdeveloped countries, such as most in Africa, this means an initial dependence on raw materials exports, with the hope that low wages will eventually enable new comparative advantages in labour-

[13] Collins Ajibo, "African Continental Free Trade Area Agreement: The Euphoria, Pitfalls and Prospects", *Journal of World Trade* 53(5) 2019, 886.

[14] *Ibid.*

[15] *Ibid.*, 887.

intensive industries.[16] This paradigm solidifies free trade's "race to the bottom", in which low wages become a competitive factor, pitting national working classes against each other to attract investment in manufacturing, and thereby driving wages even lower. However, almost all successful "late industrialising" countries, such as those in East Asia, have rejected this free trade paradigm of exploiting comparative advantages. Instead, they have adopted aggressive industrial and trade policies that have entailed state subsidies, tariff protection for 'infant industries', and intentional localisation measures. A historical perspective suggests that a necessary condition for industrialisation is "systematic and well-coordinated government intervention to promote manufacturing investment".[17] In other words, manufacturing capacity is built not through reliance on comparative advantages, but through direct state intervention and support for value chains. The free trade paradigm, from the adoption of the WTO onwards, has made such measures increasingly difficult, limiting the policy space available to states. The AfCFTA continues this trend, locking states further into a paradigm in which they are banned from imposing tariff protection, their legal subsidy capacity is limited, and localisation is almost entirely prohibited.

The issue of subsidy prohibition is particularly worrying with regard to future equitable economic development. Subsidies have long been a core feature of successful development programmes. Subsidies give states the capacity to "get prices wrong", meaning that they lower production costs from what they would be under an entirely market-driven paradigm, shielding industries from market forces and allowing more affordable technology transfer.[18] The WTO (and subsequent trade agreements) banned a wide variety of subsidy forms, but many states have continued to deploy them in their development projects. The WTO relies on its member states to police such rules, by requiring its members to challenge the subsidy policies of other states if their own industries are adversely affected. This has meant that African states continue to use subsidies, and they have thus far been mostly unchallenged. Given the low level of manufacturing capacity on the continent, these subsidies rarely threaten the domestic industries of non-African countries, which therefore do not have a reason to undergo the formal, arduous WTO procedures for challenging subsidy measures. The AfCFTA, however, is likely to change this. It places new restrictions on subsidies and localises trade rules, making it more likely that states will challenge each other's subsidy policies. The agreement explicitly bans two types of subsidies: those that are contingent upon export performance and those that are contingent upon the use of domestic goods.[19] Both export subsidies and domestic content subsidies have been crucial components of successful development strategies, key methods through which the state can lead and drive the country along a chosen development

[16] Alice Amsden and Takashi Hikino, "Staying Behind, Stumbling Back, Sneaking Up, Soaring Ahead: Late Industrialization in Historical Perspective", in *Convergence of Productivity: Cross-National Studies and Historical Evidence*, ed. William Baumol, Richard Nelson and Edward Wolff (Oxford: Oxford University Press, 1994), 291.

[17] Alice Amsden and Takashi Hikino, "Staying Behind, Stumbling Back, Sneaking Up, Soaring Ahead: Late Industrialization in Historical Perspective", in *Convergence of Productivity: Cross-National Studies and Historical Evidence*, ed. William Baumol, Richard Nelson and Edward Wolff (Oxford: Oxford University Press, 1994), 291.

[18] *Ibid*.

[19] Rhulani Shaun Matsimbi, "An Analysis of the Countervailing Measures Used to Address the Anti-Competitive Effects of Government Subsidies in the African Continental Free Trade Area", Master's Thesis, Rhodes University, 2020, 6.

path. But the free trade paradigm, of which the WTO and AfCFTA are part, considers subsidies to be "trade distortions", and hence their ban.

If South Africa moves away from coal power, replacing it with renewable energy, millions of jobs are at risk. These can be replaced with the production of domestic capacity for manufacturing renewable energy technology – which has enormous potential. But this would require subsidisation. Such a high value industry has enormous cost barriers to entry and subsidies would lower the cost of production and technology transfer, making it possible to create such an industry. Other states have deployed similar measures in creating high value, high barrier to entry industries such as automobile and aircraft manufacturing.[20] But if domestic content subsidies are banned, renewable energy technology will almost certainly come from abroad, given that South Africa does not have a renewables manufacturing base, and any new production would be very expensive.

This places serious new restrictions on the state's policy space, taking away a key tool for industrialisation and economic development. The AfCFTA purports to create regional African value chains and industrialisation, but it takes away a key means of industrialisation. This makes it even more likely that traders will simply source inputs from abroad, rather than trade within the continent. If more subsidies were permitted, states could 'get prices wrong' to grow industries and make local inputs more affordable, but with domestic subsidies largely banned, many manufacturers will have no choice but to trade internationally and ignore the preferential tariff options of the AfCFTA. Similarly, trading in Africa is currently expensive, given the generally weak infrastructure and customs issues. Subsidies that promote localisation and export could be used to incentivise intra-continental trade, by lowering the cost of trading across African borders.[21] Again, this policy tool is banned in the AfCFTA, paradoxically making African continental trade less feasible.

The African Union Commission, predictably, promotes the agreement as a large step forward in women's empowerment. It argues that the household-level benefits of the agreement will be fairly gender neutral, but women can particularly benefit from easier access to international trade. Its research estimates that 70% of informal cross-border traders in Africa are women. Therefore, by reducing barriers to trade through tariff reduction, removal of local content requirements, and simpler customs procedures, women engaged in cross-border trade will be able to increase their volume of trade and do so through more formal channels. What the Commission conveniently ignores is that removing trade barriers will force informal cross border traders to compete against larger, more established trade actors. Integrating the continent into a single market will inevitably intensify market competition, a fact celebrated by the agreement's proponents. But exposure to the vagaries of expanded markets will, as has been observed with previous trade liberalisation, crowd out smaller traders in favour of established industries. In other words, the AfCFTA's market integration effects will greatly enhance the ability of transnational corporations and large industries to sell goods and services across Africa, much to the detriment of the women informally trading across borders, and who have economic protection via tariffs and customs procedures. Therefore, rather than a gender-neutral,

[20] *Ibid.*, 57.

[21] Rhulani Shaun Matsimbi, "An Analysis of the Countervailing Measures Used to Address the Anti-Competitive Effects of Government Subsidies in the African Continental Free Trade Area", Master's Thesis, Rhodes University, 2020, 57.

positive effect, the agreement will significantly worsen gender inequalities in economic activity if the Commission's estimate that 70% of informal traders are women is to be trusted.

The complete removal of tariff barriers poses problems for the state policy space and development. Industrialisation has long relied on 'infant industry' protection, in which states put tariff barriers on small, developing industries in order to allow them to grow. This is premised on the understanding that small, underdeveloped industries cannot compete against foreign industries that can employ economies of scale, often driving the smaller industries to ruin. Local infant industries will be unable to compete against large, entrenched foreign industries, and hence a period of tariff protection allows them to gain enough scale to eventually be opened to global markets. The AfCFTA does offer guidelines on infant industries, with allowance for a limited number of industries to be protected for short periods, so enabling them to grow. This is particularly crucial in relation to employment. It is possible that increased competition through trade liberalisation could lower prices of certain goods for consumers, although this is contested and difficult to predict, as empirical evidence from elsewhere has suggested the opposite. But what is clearer is that trade liberalisation will negatively affect employment, at least in certain locations.[22] Larger industries will outcompete smaller industries, and without any tariff protection the latter will shed jobs. Not only will jobs be lost with the removal of tariff protection, but the state will lose one of its last available tools for driving planned, intentional development.

The above limitations on intentionally driving domestic development and industrialisation are likely to increase inequality between Africa and foreign countries with existing manufacturing capacity. However, there is a high degree of inequality between and within distinct African countries, and these forms of inequality will also likely increase. The AfCFTA almost completely ignores the issue of inequality, focusing instead on growth.[23] By ignoring inequality between states, certain African countries will gain significantly more than others. The larger African economies, such as South Africa, Nigeria and Egypt, will be able to flood the domestic industries of smaller, less developed countries. Without the capacity to protect their industries via tariffs, smaller states will find it almost impossible to avoid job losses and the destruction of domestic capacity.

The AfCFTA theoretically has the potential to enhance continental self-reliance. This would lessen the continent's dependence on trade with the rest of the world, which could result in local industrialisation and equitable development. However, the various issues outlined above point to a more likely outcome: the AfCFTA could weaken the state's ability to bring about development, primarily benefitting foreign countries with entrenched manufacturing industries. The market-driven logic of the agreement is almost certain to increase inequality, aggravate the 'race to the bottom,', and incentivise states to compete for foreign direct investment (FDI) while operating on austerity budgets. In short, the agreement as it currently stands will exacerbate the problems posed by existing trade liberalisation, which has contributed significantly to the deindustrialisation of South Africa and other African countries.

Instead of taking away the state's remaining development tools, any intra-

[22] Dunia Zongwe and Paul Masumbe, "The African Customs Union, Infant Industry Protection, and Self Centred Development", *Speculum Juris* 92(34) 2020, 100.

[23] Franklin Obeng-Odoom, "The African Continental Free Trade Area", *The American Journal of Economics and Sociology* 79 (2020), 185.

continental trade agreement should further empower public investment in industrialisation, equitable development, and decarbonisation. Achieving a low-carbon, employment-generating reindustrialisation of the continent will require intensive state support. Large-scale public investment in infrastructure will be a necessity, as will public investments in producing new industries such as renewable energy-technology manufacturing. Beyond simply investing in infrastructure and industrialisation, the state will be severely limited in its ability to generate employment and achieve industrialisation without the ability to protect infant industries from global markets. Furthermore, a significant portion of government revenue in all countries comes from import tariffs. The loss of this revenue as a result of tariff liberalisation will further entrench austerity budgets, which are common across Africa. For example, for the 2020/2021 financial year, the South African government was expected to raise over R60 million from import tariffs.[24] This revenue pales in comparison to certain other government revenue sources, but it still accounts for a noteworthy portion. In a period of ongoing fiscal austerity, removal of such a portion of the state's revenue is unthinkable.

Overall, the AfCFTA does not mark a new paradigm in trade regulation. Instead, it serves to intensify the liberalisation paradigm that began with the WTO. African states have managed to find ways to continue to attempt localisation and reindustrialisation, albeit with little success. But infant industry protection, subsidisation, and public investment in industrialisation have continued to be deployed as state-led development efforts. The AfCFTA will take away even these few remaining tools, further reducing the state's capacity and policy space for driving industrialisation, decarbonisation and equitable development. Rather than an opportunity for continental economic upliftment, the AfCFTA locks the continent deeper into the market-led 'development' paradigm that for decades had served only to deindustrialise and further the structural underdevelopment of African countries.

[24] National Treasury, "Budget Review: National Budget 2021", Republic of South Africa, 41.

3. WTO: THE AGREEMENT ON TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS (TRIPS)

A rapid shift to renewable energy would require the latest, most advanced renewable energy technology. Even if a domestic industry is created to manufacture the technology, this industry will still have to import certain components, designs, and materials bought on the international market.

TRIPS lays out a global baseline for the intellectual property rights (IPR) of all WTO member states. States may choose to protect IPR for terms longer than those in TRIPS. Many regional and bilateral agreements stipulate stronger and longer intellectual property (IP) protections, often known as "TRIPS-Plus" arrangements. The most important TRIPS provisions to the South African renewable energy case are copyrights (computer programs are archaically considered to be "literary works" covered under copyright) that require 50-year protection, patents (for most technological inventions) which require 20-year protection, and integrated circuit designs (advanced technological inventions that are often not covered under patents) which require 10-year protection. TRIPS also covers "undisclosed information," which includes "trade secrets" and test data. Undisclosed information is often protected indefinitely, but international standards of protection for this information are contested.

A just transition away from coal would require Eskom to roll out renewable energy on a massive scale. The IPR guaranteed under TRIPS make renewable energy technology enormously expensive. This means that Eskom's provision of electricity would be extremely costly, and the cost would have to somehow be funded by the state or the consumer. The licensing and technology to create and nurture a domestic renewable industry would also be unaffordable. The costs are so high due to long IPR, that a domestic renewable energy technology industry would be uncompetitive from the start. The technology to shift away from coal does exist. However, by promoting conditions for profit maximisation, TRIPS and TRIPS-Plus make the technology and thus the changes necessary to mitigate climate change exorbitantly expensive.

Exorbitant pricing of IPR licences aside, the length of patents makes the quick rollout of renewable energy technology almost impossible. A 2009 report from Chatham House determined that because of patents, inventions in the energy sector take two to three decades to reach the mass market, with an average of 24 years for most renewable energy inventions.[25] The global climate crisis is happening now, and the world cannot wait

[25] Bernice Lee, Ilian Iliev and Felix Preston, "Who Owns Our Low Carbon Future? Intellectual Property and Energy Technologies", Chatham House, 2009, 57.

decades for the most advanced renewable energy technology to reach the mass market. The climate emergency necessitates an immediate cessation of IPR licensing, and renewables must be reconsidered as a way of addressing climate change, rather than as a site for capital accumulation.

TRIPS Article 31(b) provides the "national emergency" exception. The Article states that intellectual property may be used by states without authorisation of the rights holder "in the case of a national emergency or other circumstances of extreme urgency". Article 31(b) has been invoked in fighting health epidemics, including South Africa's HIV/AIDS crisis in the early 2000s. Given the clear scientific consensus on climate change and its disastrous effects on human societies, the climate crisis would certainly qualify as an 'emergency or other circumstance of extreme urgency'. This Article should be invoked in order to drastically decrease the rollout time of the most advanced renewable energy technology, without waiting decades for patents to expire.

TRIPS Article 66.2 obliges developed countries to "provide incentives to enterprises and institutions … for the purpose of promoting and encouraging technology transfer to least-developed country Members". This article is often cited in attempts to show that TRIPS does not hamper technology transfer. However, "provide incentives" is vague, and is little more than lip service in respect of technology transfer. Developed countries are required to submit annual reports on how they have incentivised this transfer. States have been known to skip the reporting process with impunity.[26] With no coercive measures to ensure that Article 66.2 is followed and no concrete provisions for how to promote technology transfer, the Article is useless. South Africa is also not officially a 'least-developed country (LDC)', but LDC face similar issues with IPR and must also fight the climate crisis.

[26] Suerie Moon, "Does TRIPS Article 66.2 Encourage Technology Transfer to LDCs? An Analysis of Country Submissions to the TRIPS Council (1999-2007)", UNCTAD-ICTSD Project on IPRs and Sustainable Development, Policy Brief 2, 2008.

CASE STUDY:

China – Certain Measures on the Transfer of Technology
(Request for consultations by the EU 1 June 2018. Ongoing dispute).

In June 2018, the EU complained that EU-based firms were not granted IP protection consistent with international (TRIPS) standards when operating in China. The EU argument centred around allegations that China imposes certain restrictions on foreign firms, involving forced technology transfer – and that domestic Chinese firms are given more favourable treatment. Citing at least seven articles in TRIPS alone, the EU asserts that foreign investment in China is conditioned upon agreement to lower IPR. Foreign firms operating in China are not given the right to "freely negotiate market-based contractual terms … concerning the transfer of technology",[27] whereas domestic firms are given this right.

According to the EU, China is favouring its domestic industries, contrary to its WTO obligations to the National Treatment principle.A domestic South African renewable energy industry or a radical, state-led renewable energy provision programme through Eskom would require the latest technology. Most of this technology is under intellectual property protection owned by foreign private enterprises. China resolved this problem by refusing to provide IPR to foreign firms, forcing the transfer of technology to its domestic industries; it is now facing the consequences through WTO arbitration. South Africa, with significantly less clout and economic might than China, must be prepared for a similar international legal response if it breaks its restrictive TRIPS obligations.

[27] Request for Consultations by the European Union, China – Certain Measures on the Transfer of Technology, WT/DS549/1 (1 June 2018).

4. WTO: THE AGREEMENT ON SUBSIDIES AND COUNTERVAILING MEASURES (SCM):

The SCM Agreement covers the prohibition or allowance of certain types of state subsidies. This includes financial contributions or other measures that benefit the exporting of domestic goods or harm the importing of foreign goods.

The agreement defines "prohibited subsidies" and "actionable subsidies". As the name suggests, prohibited subsidies are outright banned. Prohibited subsidies fall in two categories: those that are granted based on "export performance", and those that require "the use of domestic products over imported goods". Those in the latter category are often referred to simply as "import substitution subsidies". Actionable subsidies are those that may be permitted but are open for challenge by other WTO member states. If a subsidy does not qualify as prohibited, and yet it has provably adverse effects on another WTO member, it is actionable. Subsidies used to 'nurture' an infant renewable energy industry in South Africa, or even a feed-in tariff programme, could be actionable. Such subsidies may not be explicitly connected to import substitution, but if they harm the industries of other countries they may still be challenged. Intentional creation and maintenance of new industries has historically always required state subsidies, which would now be prohibited or actionable.

There may be some national policy space available through the SCM Agreement's "general infrastructure" section in Article 1.1 (a)(1)(iii). This section states that the agreement covers only subsidies granted for goods or services "other than general infrastructure". This ambiguous term was defined more specifically in the dispute European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircraft (Request for consultation October 2004, AB report circulated May 2018). The definition covers infrastructure that is not for a "single entity or limited group of entities but rather is available to all or nearly all entities". Renewable energy provision would be available to all in South Africa, and therefore may be applicable for the general infrastructure exemption.[28] However, use of this potential loophole could be open to legal challenge.

[28] Jaemin Lee, "SCM Agreement Revisited: Climate Change, Renewable Energy, and the SCM Agreement", *World Trade Review* 15(4) 2016: 630–631.

CASE STUDY:

Canada – Measures Relating to the Feed-In Tariff Programme (Request for consultations 11 August 2011. Appellate Body report circulated 6 May 2013)

The Appellate Body found that the feed-in tariff (FIT) programme adopted by the Canadian province of Ontario was illegal. In order to qualify for a FIT, an IPP must source a certain amount of the equipment from the Ontario market. The Appellate Body found this local content requirement breached Canada's National Treatment obligation in the GATT and TRIM. It is important to note that FIT were found to be legal in the Canada dispute, but domestic content requirements (which would probably be involved in an import-substitution industrialisation strategy) were found to be illegal.[29]

[29] Sadeq Z. Bigdeli, "Clash of Rationalities: Revisiting the Trade and Environment Debate in Light of WTO Disputes Over Green Industrial Policy", *Trade, Law and Development* 6 (2014): 187.

5. BILATERAL INVESTMENT TREATIES (BIT):

BIT became enormously popular from the 1980s to early 2000s, particularly for the governments of developing countries.

BIT that are signed between a developing and a developed country generally claim the intention of increasing the developed country's investments into the developing country. The liberalisation of the investment environment and greater protection to foreign investors than they would receive under domestic law are said to increase investor confidence and lead to increased FDI flows (which in turn are said to promote development). If a foreign investor believes the host state breached its obligations under the provisions of a BIT, the investor can lodge a claim against the host state in an international arbitral tribunal. For most BIT this is done through the World Bank's International Centre for the Settlement of Investment Disputes (ICSID). However, South Africa is not a member, so most South African BIT have included a provision allowing the creation of ad hoc tribunals for dispute settlement. International arbitration is also enormously expensive and individual disputes have been estimated to cost many millions of US dollars for states to defend, even when they win.[30] This means that a foreign investor, including a transnational corporation, is given the legal right to challenge a sovereign state's laws and regulations, including climate change regulation, for allegedly breaching a BIT provision. This breach could be simply because the expected profit margin of the investment is lowered. Furthermore, most BIT have 'survival clauses', meaning that existing investors are covered for 10 to 15 years after the expiry of the BIT. The mere threat of a long, costly, and unpredictable dispute can have a chilling effect on a government's willingness to go ahead with policies that foreign companies oppose.

[30] Silvia Karina Fiezzoni, "The Challenge of UNASUR Member Countries to Replace ICSID Arbitration", *Beijing Law Review* 2 (2011): 136.

CASE STUDIES:

South Africa was one of the first countries to realise the potentially disastrous effects of signing BIT.

- After the end of apartheid, the new government began signing BIT with various countries, primarily in the Global North. The public, and activists, largely ignored the signing of these treaties at the time. In 2001 an unnamed Swiss citizen used the Switzerland–South Africa BIT to challenge the South African state for the first time. This dispute is shrouded in secrecy, but it has been revealed that the Swiss investor's game farm was vandalised in the late 1990s. The investor alleged that the South African government had not done enough to protect the investment in the face of significant nationwide crime.[31] The investor won an undisclosed financial award in 2005 after it was found by the offshore arbitral tribunal that the South African government had not done enough to protect the investment.

- BIT became highly controversial in 2006 when Italian and Luxembourgish investors used their countries' respective BIT with South Africa to challenge the Black Economic Empowerment (BEE) provisions of the Mineral and Petroleum Resources Development Act (MPRDA). The same technocrats who had previously advocated the signing of BIT were shocked at the power of private investors to challenge domestic law.[32] The lesson learned is that BIT are a threat to any redistributive measures such as BEE. Given the enormous amounts of FDI that have flowed into South Africa, any redistributive laws will be subject to intense scrutiny and international challenge. Foreign independent power producers (IPP) dominate the renewable electricity sector. A radically reformed, socially owned Eskom providing renewable energy to all South Africans would threaten foreign investment in IPP, and therefore be subject to possible BIT arbitration. Fortunately, South Africa has consciously allowed many of its BIT to expire after the MPRDA incident. Yet, numerous BIT remain in force, including the China–South Africa BIT.

[31] Luke Eric Peterson, "South Africa's Bilateral Investment Treaties: Implications for Development and Human Rights", *Dialogue on Globalization*, Friedrich Ebert Stiftung, Occasional Paper 26, 2006: 35.

[32] Dr Jeff Rudin, personal observation based on his experiences as a trade union representative at Nedlac.

6. WTO RESTRICTIONS ON "STATE TRADING": GATT ARTICLES XVII, II:4:

The WTO, through GATT 1994[33],in theory places restrictions on "state trading" or trade through state-owned enterprises (SOE).

ESKOM is currently an SOE, and a new, socially owned democratic Eskom working in the interests of the public will fall under the WTO's definition of an SOE. SOE have been a contentious issue in the trade community, especially given their effective use by China, Russia and others. WTO members have largely declined to challenge the issue head-on through the WTO's dispute mechanisms. However, the WTO has been the subject of intense debate and conflict in the past few years, particularly the US's assertion that China breaks free-trade rules. It is highly likely that the coming years will see significant debate on the role of SOE in international trade, and this may be a significant agenda item at the WTO's Twelfth Ministerial Conference of June 2020 in Kazakhstan.

The plurilateral Agreement on Government Procurement (GPA) is a 1996 WTO agreement that regulates the state purchase of goods and services. The GPA sets strict limits on the activities of states in purchasing goods and services, particularly in relation to their ability to promote localisation through selective procurement. South Africa's former Minister of Trade and Industry, Dr Rob Davies, fortunately refused to sign the GPA, recognising the restrictions on localisation inherent in the agreement.[34] However, it is not known whether Minister Ebrahim Patel will sign the agreement.

GATT Article XVII specifically addresses "state trading enterprises". The article states that any purchases or sales conducted by an SOE must be done "solely in accordance with commercial considerations" and allow other enterprises to compete for participation "in accordance with customary business practices". SOE must also abide by the general principles of non-discrimination. The requirement that SOE must make sales and purchasing decisions based on commercial considerations suggests that SOE must act in the same manner as private enterprises. "Commercial considerations" would probably also exclude the use of state sales and purchasing for environmental protection and climate change purposes. A socialised Eskom would probably not be a profit-driven enterprise, and it would not retain the current corporatised structure. It would abandon the profit-maximising methods used by Eskom previously (including 'cost-recovery'), in favour of low-cost provision to industry (including agriculture) and households.

[33] The original GATT (General Agreement on Tariffs and Trade) was signed in 1947 between 23 member states, including South Africa. Its formal purpose was to eliminate tariffs and other trade distortions. The GATT 1947 remained in force until 1994 with the signing of the WTO agreements. The GATT 1947 was slightly modified, resulting in the GATT 1994, which is a core and automatically binding agreement of the WTO.

[34] Dr Rob Davies, personal email correspondence, 23 September 2019.

This is a radical departure from "commercial considerations" and could be subject to challenge under GATT 1994 Article XVII. The requirements for competition in accordance with "customary business practices" solidify the primacy of profit motives, not needs-based public service delivery and climate change obligations.

GATT 1994 Article II:4 does not explicitly address SOE. However, the purpose of II:4 is to liberalise import monopolies and commentators often note that this includes state-owned importers.[35] The creation and nurturing of a domestic renewable energy industry would perhaps require a state import monopoly to import certain technologies or materials. Article II:4 states that import monopolies are permitted, but they may not be used to afford protection. This means that a renewable energy technology import monopoly could not legally be used to promote import substitution or localisation.

[35] Andrea Mastromatteo, "WTO and SOEs: Overview of Article XVII and Related Provisions of the GATT 1994", European University Institute, Robert Schuman Centre for Advanced Studies, Working Papers, 2017: 9.

7. WTO: THE AGREEMENT ON TRADE-RELATED INVESTMENT MEASURES (TRIM):

TRIM is one of the core agreements that all WTO members are automatically bound by. The agreement provides a baseline of protection for foreign investments in all WTO member states.

The general WTO principles of national treatment and most-favoured nation apply to TRIM, meaning that investments must be treated equally, regardless of the nationality of the investor. This includes a prohibition on local/domestic content requirements and import substitution measures. TRIM importance has waned with the rise in BIT, which generally contain much more stringent investment protection. However, as we have already seen, South Africa has allowed many of its BIT to expire and has not signed new ones. Thus TRIM will be the most comprehensive investment protection covering many of South Africa's FDI inflows. FDI in the South African electricity sector, particularly the foreign-owned IPP, is protected under TRIM. Any threat, direct or indirect, to or expropriation of these investments, as is currently being demanded by some South African trade unions of privately owned renewable energy developments, could be subject to challenge through WTO dispute settlements.

CASE STUDY:

India – Certain Measures Relating to Solar Cells and Solar Modules **(Request for consultations 6 February 2013. Report circulated 16 September 2016).**

This dispute was in relation to India's programme for renewable IPP, which required solar power developers who were selling electricity to the state to use domestically produced solar cells or modules. The WTO found that this domestic content requirement was a TRIM that violated TRIM Article 2.1 and the non-discrimination (National Treatment) obligation in the GATT. Article 2.1 states that measures must also comply with GATT 1994 Articles III and XI. GATT 1994 Article III prohibits the use of internal taxes and regulations for the protection of domestic production.

GATT 1994 Article XI prohibits "quantitative restrictions", which generally refer to quotas (such as domestic content requirements) and import or export licences. The Indian solar programme required domestically produced solar cells and solar modules. The increasing nature of the requirements meant that solar thin-film modules would eventually have to be domestically produced. The US was the main supplier of solar thin-film modules to India, and the requirements threatened US investments and the US solar export industry. The US thus successfully used TRIM arbitration to prevent the growth of a competitive Indian solar panel industry.[36]

[36] Umair Hafeez Ghori, "Reverse Permissibility in the Renewable Energy Sector: Going Beyond the US–India Solar Cells Dispute", *Asian Journal of International Law* 8(2) 2018: 323.

SECONDARY THREATS

The above-mentioned agreements are those that are most likely to negatively affect the prospects for a Just Transition that would deal with climate change, unemployment and poverty. The AfCFTA, GATS, TRIPS, the SCM Agreement, and various BIT all pose very serious limitations to the policies available to Eskom and the South African state generally in planning a sustainable, just, and environmentally friendly future.

However, there are many other institutions and agreements that make up the global trade legal environment, and these must not be ignored. A variety of other threats are rising to the fore, such as 'e-commerce' deregulation, stronger intellectual property rights, an 'environmental goods and services' agreement, and the rise of plurilateral, rather than multilateral, negotiations and agreements in the WTO.

The following is a list of some of the agreements that may also pose a threat to South African renewable energy, although to a lesser degree than those already mentioned:

i) ECONOMIC PARTNERSHIP AGREEMENT (SADC-EU EPA):

For most of the twenty-first century, the European Union has sought to sign what it calls Economic Partnership Agreements (EPA) with various blocs of developing countries around the world.

Members of the Southern African Development Community (SADC) began signing an EPA in 2016. In 2017, the EPA became active. As with many other regional trade agreements, the EPA serves mostly as an intensification of WTO commitments, often known as a 'WTO-Plus' arrangement. The main purpose is to increase market access for the EU into the SADC. The trade liberalisation of the WTO is increased, with lower tariffs and the removal of many non-tariff barriers. The SADC EPA currently only covers goods, but services are to be negotiated in the future. Although general import substitution is prohibited, this EPA includes provisions for temporary safeguard measures in cases of serious injury to domestic industries. There is also cause for concern that the EPA may be used as a channel for European manufactured goods to enter the AfCFTA trading bloc – essentially providing a means for transshipment.

ii) WTO: NON-AGRICULTURAL MARKET ACCESS (NAMA):

The NAMA negotiations began in 2002 as a part of the Doha Round of WTO talks, with the intention of eliminating remaining tariffs on goods

Manufactured goods, mining, fishery and forestry products are all included in the talks, but not agricultural products. The mainstream view within the NAMA negotiations is to apply a formula to all countries' tariffs, which will ostensibly provide an equal cutting of tariff barriers across the world. Developed countries are proposing a formula known as the "Swiss Formula", which will substantially cut tariff barriers. Developing countries want a more progressive tariff reduction schedule and have proposed various other formulae.[37] Some developed countries, particularly the US, have pushed a "sectoral approach" through which different sectors of goods will have their tariffs removed or reduced. Individual sectoral negotiations could potentially have

[37] Moonsung Kang, "Formulas for Industrial Tariff Reduction and Policy Implications", Asia-Pacific Research and Training Network on Trade, Policy Brief 5, 2005: 2.

a drastic impact on existing tariff systems. The NAMA-11 group of states (which includes South Africa) is actively fighting to protect the interests of developing countries in the negotiations, mostly through the promotion of alternative formulae and opposition to the sectoral approach. If the NAMA negotiations conclude with an agreement that severely cuts tariffs for developing countries, either through the Swiss Formula or sectoral cutting, it may have detrimental impacts on South Africa's industries. The creation and protection of a domestic renewable energy technology industry would require substantial tariffs and developing countries such as South Africa would be the ones to cut their tariffs the most under most NAMA proposals.[38]

Exemplary of the level of liberalisation of South Africa's trade policy, the country currently affords no protection for the domestic manufacturing of solar photovoltaic (PV) technology. In March 2019, the Department of Trade and Industry's International Trade Administration Commission received an application from a private Durban-based solar PV manufacturer, ARTsolar. The application states that the import of crystalline silicon photovoltaic modules or panels (tariff subheading 8541.40.10) should be protected under a 10% tariff, as they are currently imported duty free.[39] In providing reasoning for this application, ARTsolar asserts that inexpensive imports of foreign solar panels have forced numerous solar PV technology manufacturers to close in the SACU region. South Africa does not have anti-dumping duties on solar technology, allowing state-subsidised Chinese solar PV companies to dominate the South African market.

ARTsolar has claimed that all solar panels in the fourth round of the Renewable Energy Independent Power Producer Programme (REIPPP) were sourced from China, but that ARTsolar and ILB Helios (a similar company) together have the capacity to supply the entire round – were it not for the complete exposure to foreign competition.[40] The company also claims that inexpensive Chinese imports have caused it to lay off 220 workers, which in turn triggered aluminium provider Hulamin to lay off 250 workers.[41] ARTsolar's struggling business has shown that free trade and the lack of tariffs on solar modules, prevent the creation of a domestic renewable energy manufacturing industry. A state-led effort to produce renewable energy technology would also be economically inviable, and ARTsolar's request for a 10% tariff protection on solar technology must be treated as a starting point for a progressive trade strategy.

The South African tariff rates on almost all renewable energy equipment parts are quite low. Cross referencing a 2008 list of renewable energy technology tariff-line codes with the South African Revenue Service's 2021 tariff rates, reveals that of about 75 tariff lines, only one has any tariff protection from EU imports (insulated wiring not exceeding 8 V).[42] Most of the tariffs on imports from non-EU destinations are levied on technology that is not renewable energy-specific, such as roller bearings and electrical transformers. In comparison, China currently levies a 30% general duty tariff and an 8% MFN tariff on wind-powered generating sets (HS 8502.31). China also has a 30% general import tariff on solar PV cells, and the country

[38] Ha-Joon Chang, "Why Developing Countries Need Tariffs? How WTO NAMA Negotiations Could Deny Developing Countries' Right to a Future", The South Centre, 2005: 2.

[39] Government Gazette No. 42337, Department of Trade and Industry, International Trade Administration Commission, Customs Tariff Applications, List 02/2019, 29 March 2019, 779.

[40] Emiliano Bellini, "ARTsolar: South Africa Must Preserve its Solar Module Industry", *PV Magazine*, 27 May 2019.

[41] *Ibid*.

[42] Izaak Wind, "HS Codes and the Renewable Energy Sector", International Centre for Trade and Sustainable Development, 2008.

is one of the world leaders in producing solar PV technology.

It is clear from South Africa's tariff rates that almost no protection is given to the renewable energy industry, particularly compared to leading renewable energy technology manufacturers such as China. The NAMA negotiations could threaten to take away what little tariffs are currently in place and prevent the imposition of more.

iii) WTO: ENVIRONMENTAL GOODS AGREEMENT (EGA):

The WTO's "environmental goods agreement" (EGA) talks officially began in 2014 as plurilateral negotiations between 46 WTO members, after years of informal discussions.

The negotiations mainly involved developed country states, including the US and the EU (the EU generally negotiates as a unified bloc). China was also involved in the EGA negotiations. However, these talks halted in 2016 as the parties could not agree on what goods should be covered. The main list of goods was borrowed from an Asia-Pacific Economic Cooperation (APEC) list of 54 products. China, and possibly others, introduced competing lists and the ensuing complications ended official talks. Roughly speaking, "environmental goods" are those that can be used for the mitigation of climate change, and the proposed EGA's purpose is to further liberalise the trade in these. Renewable energy technology and technology that increases energy efficiency are considered to be environmental goods. Although it appears that the talks have broken down, they could be revived. Total liberalisation of the trade in environmental goods would hinder any attempts at creating a South African industry to produce such technology. It could reinforce the current global division of labour in renewable energy technology, solidifying the dominant role of the current producers.

iv) AFRICAN GROWTH AND OPPORTUNITY ACT (AGOA):

AGOA is domestic US legislation that was passed in 2000 and extended in 2015 for a further ten years, ostensibly intended to increase African countries' market access in the US.

The Act lowers trade barriers for eligible African countries (including South Africa) in a non-reciprocal manner, meaning that African countries do not have to lower their own trade barriers. However, strict eligibility criteria must be met for states to attain this preferential market access. To be eligible, African states must be officially unopposed to

US foreign policy, must have a market-based economic system that "minimizes government interference in the economy", strong property rights, and other economic and political policies that are deemed by the US executive to be acceptable. If the President of the US decides that an African state no longer meets these criteria, the country will be ineligible. African states build whole industries around access to the large US market, but the US president may arbitrarily decide to terminate or severely limit this access. The US is South Africa's third largest single-country export market, and accounted for 6.8% of export value in 2018.[43] It is a particularly important market for the South African automobile industry. Radical changes to the South African energy sector, including import substitution or state provision of electricity from renewable sources, would be unacceptable under US criteria for AGOA, and would threaten market access. Many of the drastic measures necessary to prevent the worst effects of climate change would have to be done outside the grasp of market forces, which makes them inherently unacceptable for AGOA eligibility.

[43] Tralac, South Africa Merchandise Trade Update: 2018.

v) WTO: THE TECHNICAL BARRIERS TO TRADE AGREEMENT (TBT):

The TBT Agreement mostly affects labelling requirements, technical regulations, and conformity assessments.

The purpose is to ensure that such "technical barriers" do not negatively affect trade. It attempts to distinguish between legitimate standards that will protect the public interest and standards that are a form of disguised protectionism or trade distortion. Processes and Production Methods (PPM) are liberalised, as the WTO has recognised that these could be used as disguised "green protectionism". PPM are the regulation of how a product is sourced or produced to adhere to set standards, for health, environmental, labour, safety or other reasons. These could be as basic as ensuring that a product is not made via the exploitation of child labour, or it could entail requiring that a product be manufactured using only renewable energy. The implication for a South African renewable energy industry is that inputs bought on the international market would not be able to be thoroughly regulated. It may be beneficial for a technology importer to have standards and conformity requirements, especially for environmental protection, but these could be open to challenge in the WTO.

CASE STUDIES:

Madagascar is one African state that has previously been removed from AGOA eligibility, with a detrimental effect.

- Madagascar was removed from AGOA eligibility in January 2010, following a change of power that was deemed unacceptable by the US executive. The country's economic growth had mostly been driven by textile exports to the US, largely due to AGOA's provision of preferential market access. Removal of AGOA benefits in 2010 crippled the textile industry and severely damaged Madagascar's economy. It is estimated that tens of thousands of jobs were lost.[44]
- South Africa has had its AGOA eligibility threatened. In order to maintain eligibility after 2015, South Africa agreed to allow the US to sell American poultry products (mostly chicken of such low quality that it cannot be sold in the US) in the South African market. This has been referred to by some as "dumping", an offence under WTO rules. However, it is a perfect illustration of the lengths South Africa will go to in order to remain eligible for AGOA.

[44] International Centre for Trade and Sustainable Development, "Madagascar's AGOA Benefits Reinstated, Swaziland Loses Status", July 2014.

CASE STUDY:

United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products
(DS381, Request for consultations October 2008, final Appellate Body report December 2018).

Mexico lodged this dispute with the complaint that the US use of "dolphin-safe" labelling on tuna products discriminated against the Mexican tuna industry. Mexican tuna was not granted a dolphin-safe label, as US authorities believed that the tuna procurement methods used by Mexican fishermen were not in line with dolphin protection standards. Mexico argued that Mexican tuna faced much more stringent requirements than US tuna or tuna from other regions, and therefore the measure was illegally discriminatory.

The US label was originally found to be discriminatory and it was forced to change its rules in 2013. In 2016 the revised rules were still found to be discriminatory, and a second rule change followed. In December 2018, US dolphin-safe labelling rules were finally found to be WTO-compliant. Avoiding such challenges means that production method qualifications must be regulated with extreme caution, for "free trade" comes before environmental protection.

vi) EFTA-SACU FREE TRADE AGREEMENT:

The European Free Trade Association (EFTA) and the Southern African Customs Union (SACU) signed a free trade agreement that entered into force in 2008.

EFTA is composed of Iceland, Liechtenstein, Norway, and Switzerland – all of which are non-EU countries. The agreement covers only binding engagement for the trade in goods, although future negotiations for binding engagements on services, investment, intellectual property, and SOE are called for in the agreement. EFTA states have significant investments in South Africa, and one of the declared aims of the agreement is to "substantially increase investment opportunities". This gives further impetus and legal justification for investors to bring legal challenges against states behaving in a manner that threatens their investments. The agreement also provides for the creation of an arbitral tribunal in cases of dispute, being another forum through which South African import substitution or other measures could be challenged.

vii) US-SOUTH AFRICA TRADE AND INVESTMENT FRAMEWORK (TIFA):

The TIFA was originally signed in 1999, but was slightly renegotiated, updated and re-signed in 2012.

The main purpose of the TIFA is to create a "Council on Trade and Investment". The council's purpose is to provide a forum through which further cooperation and engagement can occur. Rather than being a binding treaty, the TIFA is a commitment to improve trade and investment relations between the US and South Africa. Like AGOA, the TIFA has the ability to threaten South Africa's exports to the US. South Africa exports large numbers of vehicles and vehicle parts, and large amounts of minerals to the US, and a deterioration of relations through the TIFA forum could imperil these exports. If South Africa implements measures that are unacceptable to the US, the TIFA could be used as a place of dialogue through which exports and investment would be hindered.

Under WTO provisions, countries can investigate if the industries of other countries are harming their domestic industries. These investigations can continue if a foreign state is unlawfully subsidising exports that harm the investigating state's industries up to 1%. Developing states are given more leeway, and investigations must be terminated if the subsidies harm industries below 2%. In early February 2020, the US revised its list of developing countries, removing South Africa from the list (along with various other countries such as China).

South Africa's as yet unpassed Copyright Amendment Bill has been vocally opposed by various domestic and international lobby groups, including the International Association for the Protection of Intellectual Property (AIPPI), as they claim that is threatens the property rights of domestic and foreign intellectual property holders. The AIPPI represents US corporate entities that own copyrights, and it lobbied the US state to withdraw South Africa's preferential trade terms due to the Copyright Amendment Bill – succeeding in having South Africa removed from the developing countries' list in February 2020.

RESISTANCE

"The problem is not that international trade is inherently opposed to the needs and interests of the poor, but that the rules that govern it are rigged in favour of the rich." [45]

-Trevor Manuel, Minister of Finance 1996–2009

It is clear from the analyses of all trade and investment agreements listed above that any significant attempt by the state to develop a local manufacturing industry for renewable energy technology should expect to eventually be faced with legal challenge. There are dozens of agreements, signed by the post-apartheid government, which could be used by investors as a legal ground for challenging the right of the South African state to assert its sovereignty in nurturing industry, providing electricity, and dealing with the twin problems of climate change and poverty. Under the rules-based international trade and investment system, state sovereignty has been eroded, hindering efforts to fight climate change and to promote economic development.

It is thus imperative that an international movement arises to confront the agreements and institutions imposing this unjust system of rules. The future depends on it; trade agreements cannot be allowed to prevent the radical actions necessary to avert climate change and to address urgent socio-economic problems. The UN's Intergovernmental Panel on Climate Change (IPCC) has made it clear that if the world

[45] Trevor Manuel, *Mail & Guardian*, 21 January 2005.

does not radically alter many aspects of society by 2030, it will be impossible to keep global warming below 1.5 degrees Celsius. Even warming of 1.5 degrees may be disastrous, and without radical changes the world – Africa in particular – will warm significantly more than 1.5 degrees. Trade and investment agreements serve to solidify the extreme ecological degradation inherent in capitalist accumulation, and these agreements cannot be allowed to hinder the changes in our mode of production that are necessary to address the potentially disastrous effects of climate change while creating large numbers of climate jobs.

Trade agreements need to be resisted through a multilateral approach by both civil society and states. However, there are unilateral actions that African states can take, such as terminating existing BIT and refusing to sign further trade or investment agreements that work only in favour of the rich and damage the environment. An effort to withdraw from or significantly reform the WTO may be necessary, but such an effort would be impossible unilaterally. A multilateral movement to restructure the global trade regime away from neoliberalism and in favour of economic development will require a strong international coalition, and a unilateral withdrawal from the WTO would do more harm than good.

African countries must also create coalitions with other states, especially in the Global South, that may be willing to help confront the injustices of the existing trade system. Civil society, organised labour, and ordinary citizens can involve themselves in pressuring their states to do this. The following are examples that states and civil society can learn from:

STATE AND REGIONAL RESISTANCE:

ARGENTINA:

Argentina restructured its economy in the early 2000s, much to the resentment of large TNC and other private investors and was therefore subject to large numbers of ISDS complaints.

Azurix (a US water company) brought Argentina to court at ICSID regarding cancellation of a water contract. Argentina refused to comply. There were multiple other ISDS awards that Argentina refused to pay. In 2013, Argentina negotiated an agreement to pay almost half a billion US dollars (plus interest) in ISDS awards, but it did manage to resist for years. Argentina has been involved in roughly 60 ISDS claims, amounting to about US$65 billion in damages, but it has been combative and may even leave ICSID. Argentina's refusal to pay many of the fines is exemplary of the power of state sovereignty in the face of the corporate capture of international legal institutions.

UNION OF SOUTH AMERICAN NATIONS (UNASUR):

The regional bloc of UNASUR has launched an alternative to the currently dominant forum of ICSID, called the Centre for the Settlement of Investment Disputes.

UNASUR has largely fallen apart in recent years, particularly with Ecuador's exit from the bloc, Venezuela's political/economic crises, and Bolivia's coup. However, the new Centre is a useful idea that could be emulated elsewhere. ICSID has a very close connection to the World Bank, and arbitrators are sometimes chosen directly by the President of the World Bank Group. By 2007 there had been 232 ISDS cases in ICSID, 230 of which went in favour of the investor.[46] UNASUR therefore recognised a conflict of interest and sought a more impartial dispute-settlement body. If investment disputes are to be entertained, a cost-effective, impartial, and fully independent body should be created as a forum for their hearing.

[46] Silvia Karina Fiezzoni, "The Challenge of UNASUR Member Countries to Replace ICSID Arbitration", *Beijing Law Review* 2 (2011): 138.

GATT ARTICLE XX: GENERAL EXCEPTIONS:

Article XX in the GATT 1994 provides general exceptions to GATT provisions. Article XX (b) and Article XX (g) provide exceptions for measures "necessary to protect human, animal or plant life or health" and exceptions for measures "relating to the conservation of exhaustible natural resources" respectively.

In order to qualify for exception through Article XX, measures must be compatible with the Article's "chapeau". The chapeau states that a measure cannot be "a means of arbitrary or unjustifiable discrimination between countries" or a "disguised restriction on international trade". Furthermore, for a measure to be exempt from GATT provisions, it must be "necessary" – meaning that no "alternative measures either consistent or less inconsistent" with the GATT exist. A brief examination of the Article suggests that perhaps it could be used as a legal loophole through which a state could legally take radical economic action to prevent climate change. Climate change is definitely a grave threat to human, animal and plant life or health, as well as a threat to the conservation of natural resources. Unemployment and poverty crises could also be considered as grave threats to human life and health. So far, the Article has been interpreted in a way that excludes climate change or widespread poverty. However, the past few years have seen the production of even more scientific literature outlining the threats posed by climate change. The overwhelming and constantly growing evidence (in the UN's 2018 IPCC Special Report on Global Warming, mention of an increased temperature of 1.5° Celsius, for example) that climate change is a serious threat to human well-being could potentially be used to argue for exemption under Article XX, especially because Africa will face roughly double the global average temperature increase.

By 2015 there had been 44 attempts to apply the General Exception to certain state measures. Of these 44, 43 were rejected. Through the EC-Asbestos dispute, Canada complained in 1998 that France was breaking its WTO obligations by banning asbestos, a long-known health hazard and proven carcinogen. In 2001, the Appellate Body ruled that despite being trade distorting, the French ban on asbestos was WTO-compliant, given that the ban was justified solely for the protection of human life or health. Unfortunately, this is the only time that the General Exception has been successfully invoked. The "intent" behind measures is looked at when being analysed for Article XX exemption. The measure must be solely intended to protect health, life, animals, plants, the environment or natural resources. This means that measures meant for both environmental protection and economic development would be ineligible for exemption.[47] The creation of a renewable energy industry, or even Eskom's provision of electricity from renewable sources, would not be solely focused on environmental protection – they would also assist in economic development. These programmes would therefore not be exempt from GATT rules according to how Article XX has thus far been interpreted. Challenges to previous GATT Article XX interpretations should be made, as it is clear that climate change is a serious and immediate threat to human life.

[47] Virginia R. Hildreth, "Renewable Energy Subsidies and the GATT", *Chicago Journal of International Law* 14(2) (2014): 715.

TREATMENT ACTION CAMPAIGN (TAC) AS AN EXAMPLE OF EFFECTIVE CIVIL SOCIETY MOBILISATION:

The TAC's struggle is analogous to that of the various struggles against corporate-led trade agreements. In the case of the TAC's struggle against the HIV/AIDS epidemic, activists were fighting a state that actively denied that a problem existed.

President Mbeki and Minister of Health Tshabalala-Msimang were open AIDS denialists. Similarly, South African politicians in the late 1990s and early 2000s favoured increased trade liberalisation through multilateral, regional, and bilateral trade or investment agreements. A public-sector roll out of antiretroviral treatment (ARVs) in the early 2000s was impossible when politicians at the highest level denied the link between HIV and AIDS, just as a state-assisted struggle against corporate globalisation is impossible today without official acknowledgement of the link between this form of globalisation and the triple obscenities of poverty, inequality and anthropogenic climate change.

Much of the opposition to the TAC, and HIV/AIDS activism in general, came from transnational corporations. In 1997, the South African government introduced a bill that would allow for less expensive provision of prescription medicine to citizens. This measure was strongly condemned by developed countries, particularly the United States and transnational corporations, as a threat to intellectual property rights. Brazil, faced with a similar problem, began to domestically produce generic ARVs, dramatically improving the lives of Brazilians living with HIV and AIDS. Thailand attempted to imitate Brazil's actions but was stopped by a US threat to impose tariffs on Thai goods imported into the US.[48]

In the early 2000s, the TAC was adept at using all legal options at its disposal. It lobbied for the South African state to use the "national emergency exception" in the TRIPS Agreement, so as to issue compulsory licences for domestic drug manufacturers to produce ARVs without authorisation from the licence holders. Although controversial and contested, the TACs opposition to the IPR regime through TRIPS exceptions allowed them to directly challenge the injustice of transnational pharmaceutical companies profiting from the HIV/AIDS crisis. A similar situation exists today, in which privately held renewable energy technology patents allow for massive capital accumulation but prevent the radical cutting of greenhouse gases.

In October 2000, the TAC openly and illegally imported 5000 capsules of a generic AIDS drug. Not only was the importing of generic medicine a way to directly support those suffering from HIV/AIDS, but it was also a powerful political statement that human life should not be monetised. The TAC defended its illegal importing by using the terms 'patent abuse' and 'AIDS profiteering' to describe the activities of TNC.[49] The TAC followed this direct

[48] Deborah Halbert, "Moralized Discourses: South Africa's Intellectual Property Fight for Access to AIDS Drugs", *Seattle Journal for Social Justice* 1(2) (2002): 271.

[49] Ibid., 276.

action by mobilising a network of medical professionals to provide free healthcare to those suffering during the epidemic. The TAC was also successful in mobilising powerful, popular support internationally.

Any new struggles against corporate-led globalisation should follow the example set by the TAC. Despite sustained and well-funded opposition to the TAC's demands, the organisation managed to create a moral consensus around the issue it was campaigning for. Pharmaceutical companies and Western states were arguing that strong intellectual property rights promote 'innovation' and drive economic growth, and thereby work within the logic of capitalist accumulation. The TAC managed to frame their argument as one of basic human rights over capitalist logic, thereby rendering the arguments of their opponents irrelevant and inconsequential. The TAC made it clear that although the provision of generic ARVs may lower profit margins, there was a moral imperative to do so. A movement fighting against free trade agreements or in favour of more just trade agreements, could make similar moral claims. The 'moral embarrassment' of the AIDS-denialist government of the early 2000s could be replicated with the current government's reliance on FDI, denial of the harmful effects of free trade agreements, and wilful concession of sovereignty.

Civil society can play a crucial role in pressuring the government and monitoring the status of trade agreements or trade negotiations. For example, many investment agreements automatically renew themselves if not terminated within a given time. Civil society and social movements can be useful in ensuring that these agreements are not renewed, as well as applying pressure to make sure that new agreements are not signed. Finally, a campaign that simultaneously addresses climate change and corporate unaccountability is likely to attract a large measure of powerful international support.

The recent uncertainty and questioning of the international trade regime must be used as an opportunity to promote a new system of global trade based on providing for the needs of all of humanity. Development, climate-change mitigation, sovereignty, and the improvement of living standards must be valued as objectives of international trade – which entails rejecting both "free trade" and economic nationalism. A shift to renewable energy has the potential to create huge numbers of jobs, increase living standards, and mitigate climate change. Most of the jobs will be in the manufacturing sector, in which there is currently very little renewable energy technology produced. The creation of such a manufacturing industry would require radical trade and industrial policies which would contravene a plethora of international trade agreements. States must work multilaterally to formulate such trade and industrial policies in order to meet the current global crises, but the threat of legal challenge through the existing trade regime must be recognised and considered.

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