

➤ Health, wealth, and growth: why lowering cookstove trade barriers makes sense

*The World Bank's ACCES initiative &
Dalberg Global Development Advisors*

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A good advocacy strategy can determine the evidence and analyses that policymakers will want to see and can act upon

Consideration

Description

Example tool

1



Start with the 'what'

- Identify the policies you seek to change
- Determine the policy changes that should be pursued in a **given country**

Political Economy Analysis

- What process is used to make legislation or executive policies, and how sensitive is it to party politics?
- How centralized is political decision-making?

2



Be grounded in an understanding of the 'who'

- Establish who are the individuals within government **who can champion the policy change**
- Anticipate policymaker **questions and concerns**

Power mapping

- Who are the decision-makers who *really* determine the policy?
- Are there unelected bureaucrats who help shape and convert legislation into actual policy?

3



Make an informed decision on the 'how'

- Diagnose **the kind of advocacy that is needed**
- Use **examples from other countries or industries** and/or model the effect of policy changes

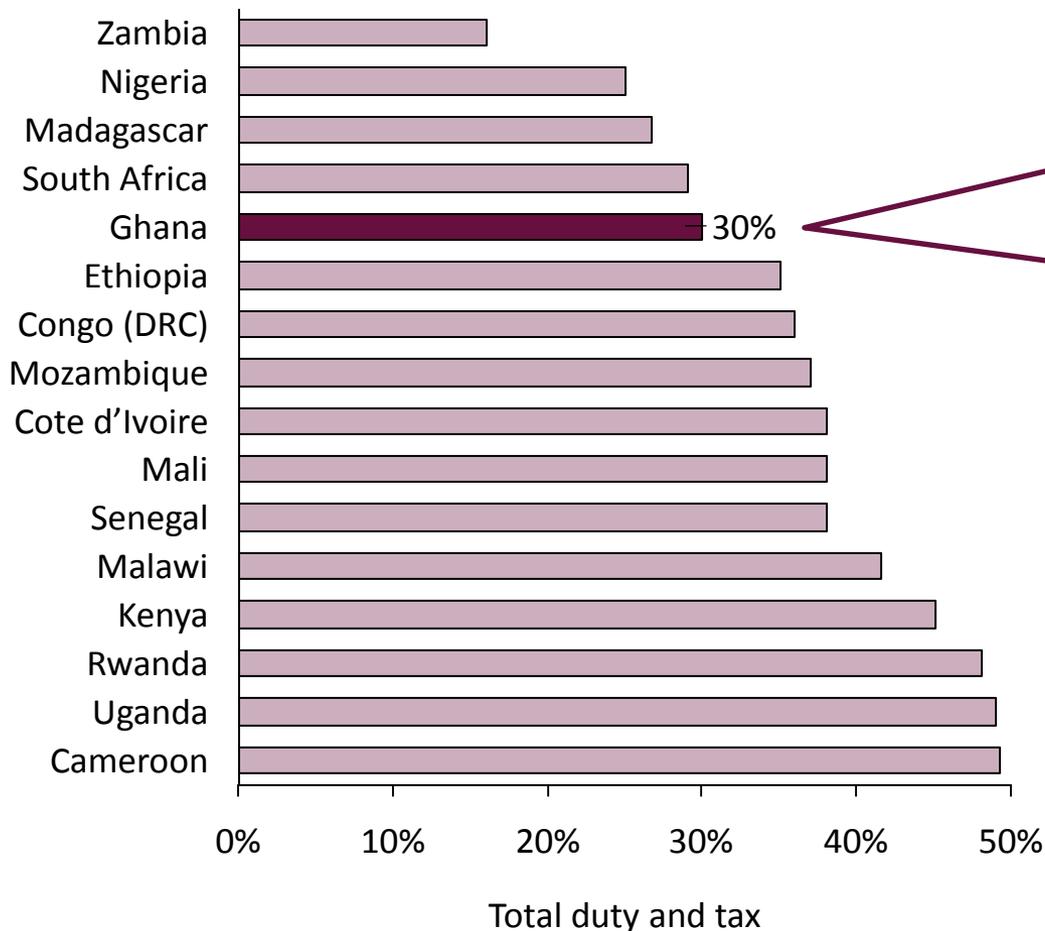
Advocacy Organization Landscaping

- What organizations in-country are working to influence the identified policies?
- Where do they play along the advocacy value chain?

Our research suggests that tariffs and taxes together can account for up to nearly 50% of the cost of the stoves themselves

Total duty and tax burden on finished cookstoves

Subset of 16 SSA nations, reflecting duties + taxes, 2015



Ghana ranks near the top in supporting access to clean and improved cookstoves through trade policy

There are a number of advantages to lowering tariffs and taxes

①

Consumers will buy more improved and clean cookstoves, resulting in **savings** and tremendous **health and environmental benefits**

②

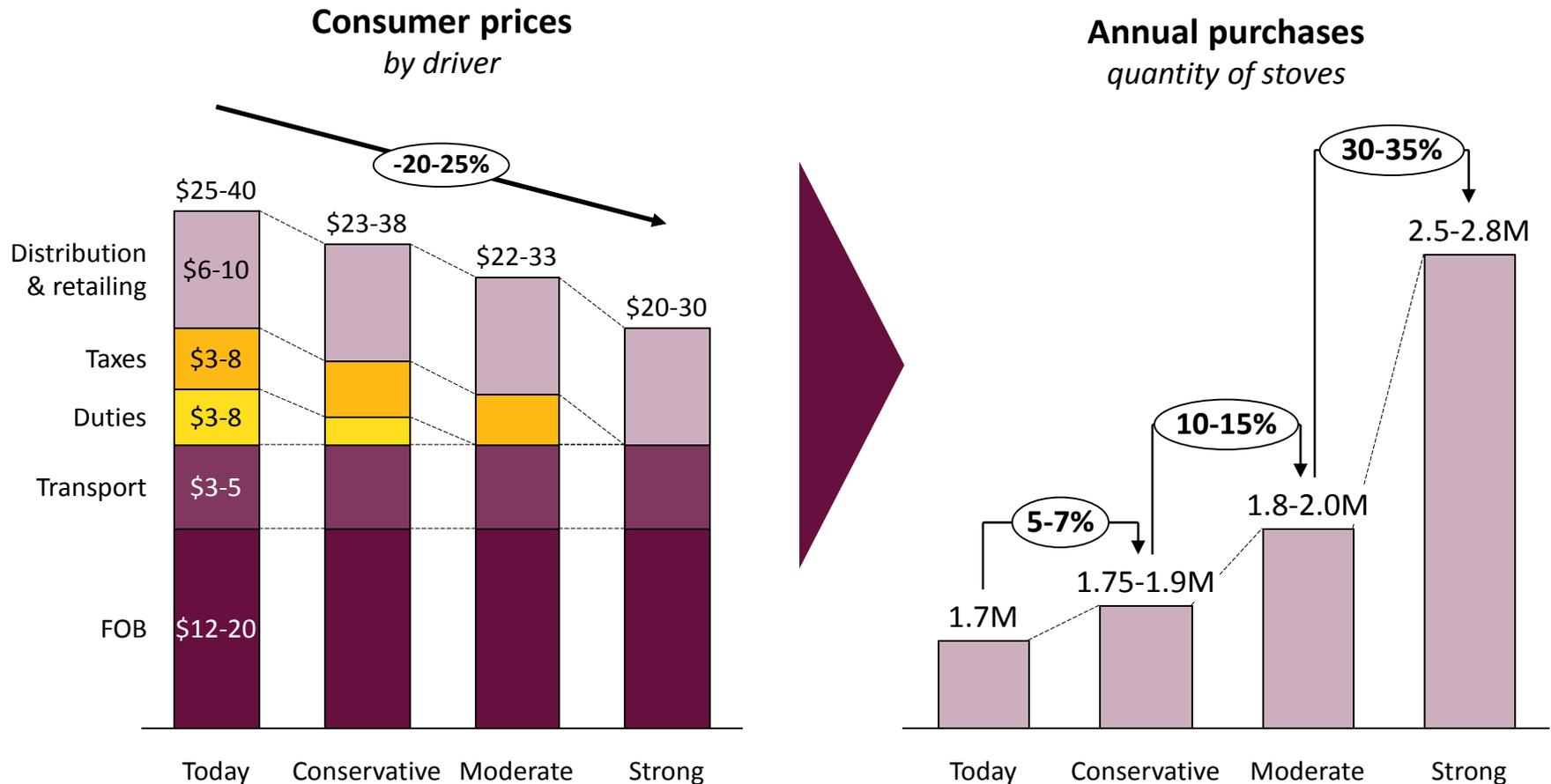
Government revenues would see a negligible decline, thanks to increased quantities

③

Jobs will be created through increased distribution networks – enough to largely counteract any potential negative effects on local manufacturing

Consumers will buy more improved and clean cookstoves due to reduced stove prices...

Projected demand impact of lowering clean and improved cookstove trade barriers for a mid-sized SSA nation; Tier 2+ stoves

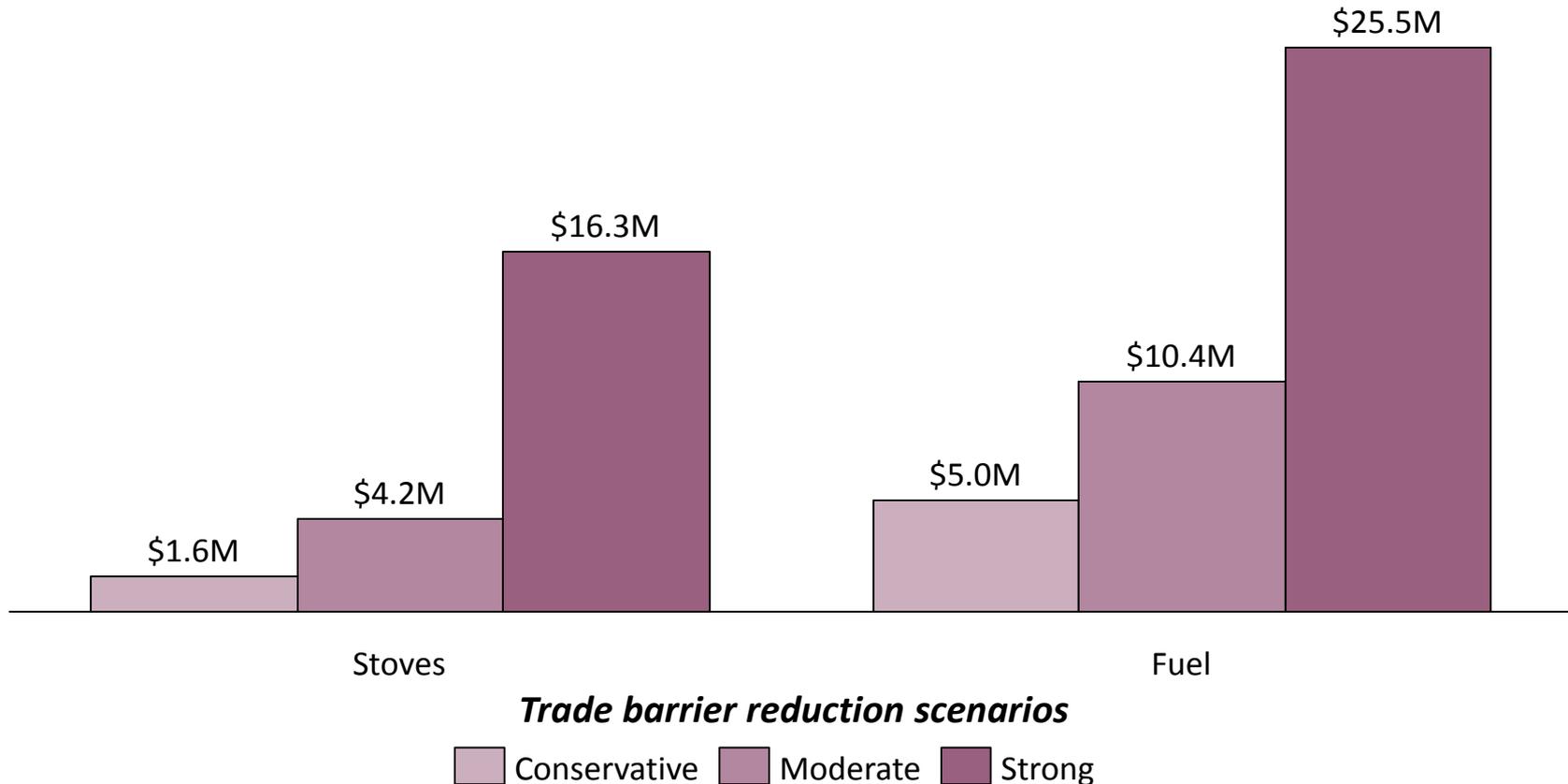


Note: Uptake calculated using an import substitution model for a mid-sized SSA nation with ~50% traditional stove usage based on empirical observations of stove demand elasticities.

Source: Cookstove trade barriers model; Dalberg analysis

... resulting in a savings windfall for consumers, most of which will be spent on domestic goods ...

Projected aggregate consumer savings from lowering clean and improved cookstove trade barriers *US\$ for a mid-sized SSA nation*



Note: Fuel savings estimated as nationwide savings on wood and charcoal purchases across households upgrading cookstove technologies as a result of lower cookstove trade barriers, aggregated over the ~5-6 year lifespan of a typical stove

Source: Dalberg analysis

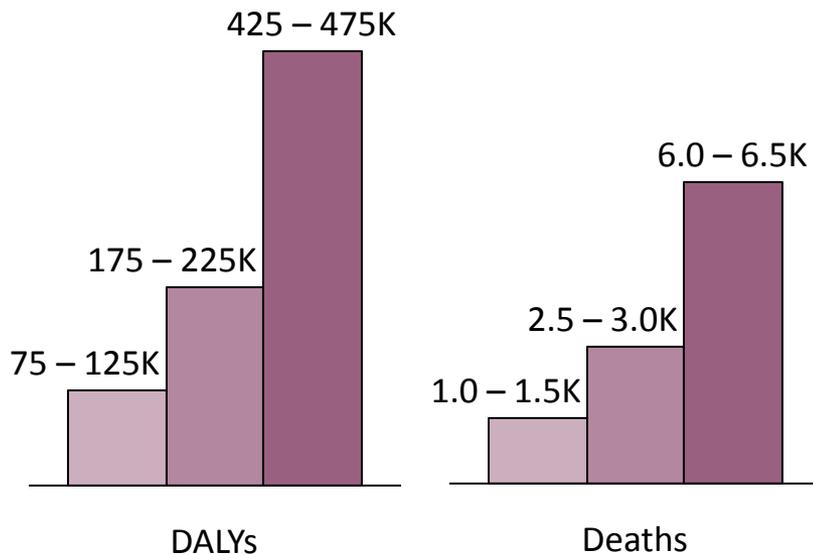
...and tremendous health and environmental benefits

Lowering cookstove tariffs would save the lives of thousands of citizens and reduce up to 475K DALYs lost to household air pollution

Lowering cookstove tariffs could also reduce your country's greenhouse gas emissions by hundreds of thousands of tons

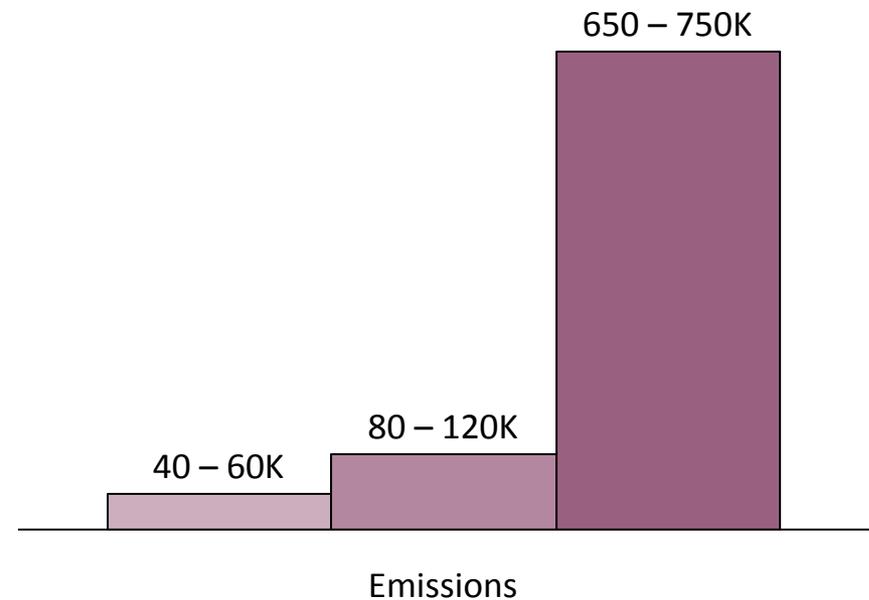
Projected DALYs and deaths prevented as a result of cookstove trade barrier reductions

Five-year cumulative effects, mid-sized SSA nation



Projected GHG prevented (metric tons)

Five-year cumulative effects, mid-sized SSA nation



■ Marginal ■ Moderate ■ Aggressive

Note: Changes in DALYs and deaths modeled based on projected change in household emissions as a result of ICS/ACS adoption from lower cookstove trade barriers. Uptake calculated using an import substitution model for a mid-sized SSA nation with ~50% households using traditional stoves as their primary cooking stove.

Source: GACC/Kirk Smith HAPIT model; Dalberg analysis

Government revenues will see a negligible decline, thanks to increased quantities

Annual government budgets compared to projected revenue losses from cookstove trade barrier changes

Selected SSA nations

	Loss in government revenue by scenario (US\$)	2015 National Budget (US\$)	Short-term budget loss
	Moderate		
Malawi	0.2 – 0.3M	1,630M	.01% to .02%
Uganda	0.5 – 1.0M	6,590M	.01% to .02%

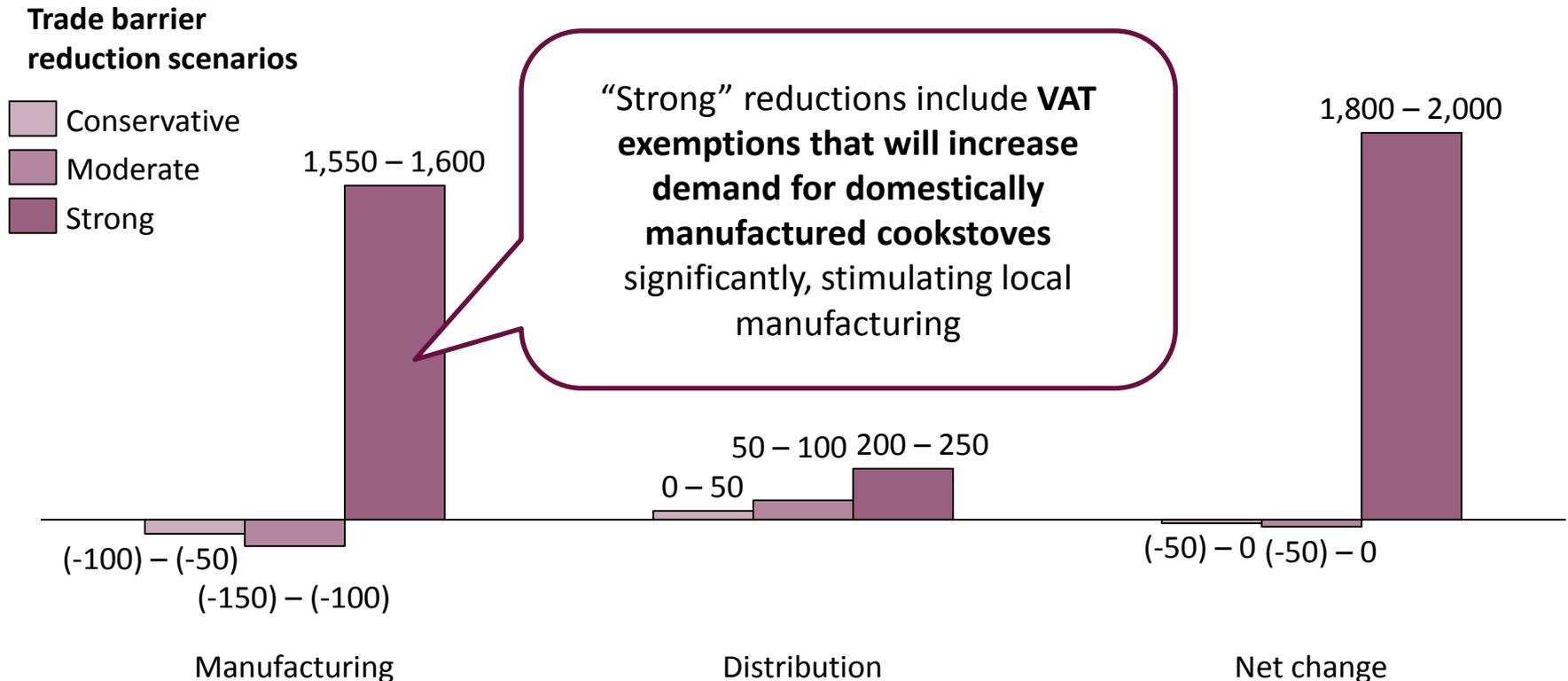
Even though the revenues on each cookstove goes down if tariffs are reduced, so many more get sold that total revenues from cookstoves will only minimally decrease

Note: Changes in government revenue calculated using an import substitution model for each country, based on publically available stove import and usage data, triangulated with data from interviews.

Source: Cookstove manufacturer data; TRIST model and Dalberg analysis

Jobs will be created through increased distribution networks – largely counteracting any potential negative effects on local manufacturing

Projected employment gains (losses) from lowering cookstove trade barriers for a mid-sized SSA nation



By analogy, countries that reduced tariffs on solar lanterns have seen vibrant growth in local markets, industry, and employment

Case Study: Solar

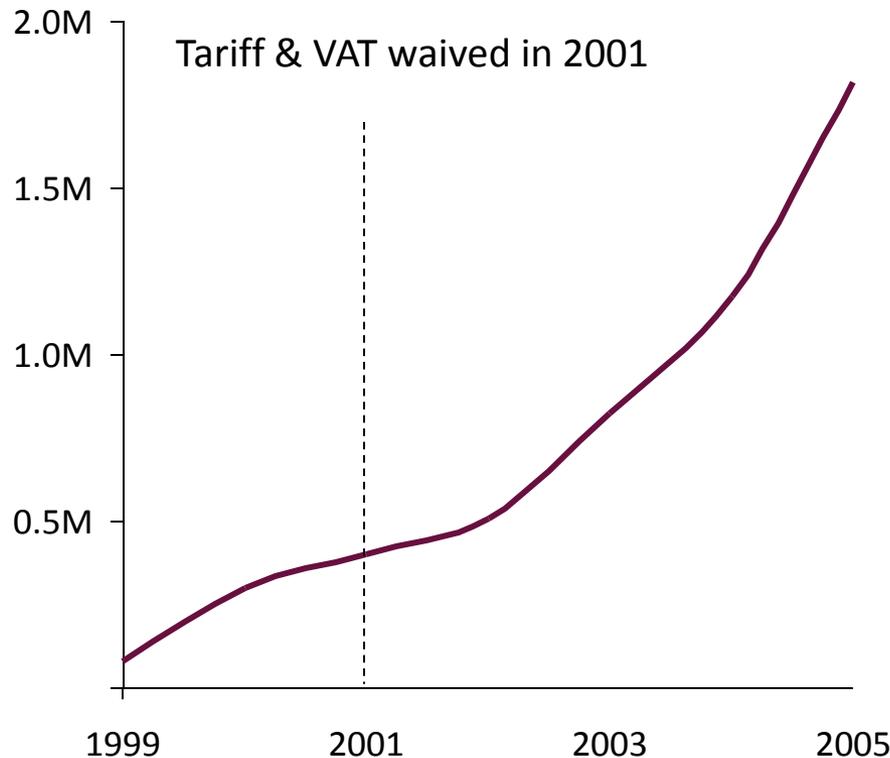
Country	Tariff & tax changes	Impact
 <p>Kenya</p>	<p>Tariff → 0% (2014)</p> <p>VAT → 0% (2009)</p>	<ul style="list-style-type: none"> Kenya's market moved from donor-funded to a thriving private marketplace, with 700K solar lanterns sold in the last 3 years Demand is outpacing supply for local employees in solar distribution and service
 <p>Uganda</p>	<p>Tariff → 0% (2011)</p> <p>VAT → 0% (2011)</p>	<ul style="list-style-type: none"> As of 2015, the Ugandan solar market is vibrant and growing, with over 30K solar installations per year. SolarNow, a Ugandan company, leads the market with 30% share of sales and distribution.
 <p>Tanzania</p>	<p>Tariff → 5% (2005)</p> <p>VAT → 0% (2005)</p>	<ul style="list-style-type: none"> Installed solar capacity in Tanzania tripled from 2003 to 2009 Tanzania now has a robust solar distribution sector; Helvetic Solar Contractors alone boasts sales of >US\$10M/year
 <p>Rwanda</p>	<p>Tariff → 0% (2006)</p> <p>VAT → 0% (2006)</p>	<ul style="list-style-type: none"> Gigawatt Global recently launched a US\$23.7M solar energy plant in Rwanda Two home-grown solar companies compete in the Rwandan market

The case of insecticide-treated bed nets likewise highlights how tariff reductions can “prime the pump” for local market growth

Case Study: Mosquito Nets

Local production of mosquito nets

Uganda, 1999-2005



“Several years ago, when we removed taxes and tariffs on all antimalarial commodities, the cost of mosquito nets sold in local markets declined, local demand for nets increased, and **more small businesses entered the market to produce and supply these essential commodities. Since then, our countries have become significant manufacturers of insecticide-treated nets that are exported to other African countries.**”

-Ugandan President Museveni & Tanzanian President Kikwete in joint Wall Street Journal op-ed

ANNEX

Lowering cookstove trade barriers in this manner will not cause damage to the local economy or government revenues...

Will lowering trade barriers...	Answer
<p>Hurt local manufacturers?</p>	<ul style="list-style-type: none"> • Not in the long run. Evidence from industries for similar social goods suggests that lowering trade barriers will “prime the pump” of the market, encourage technology transfer, and incentivize foreign manufacturers to build local operations. • If tariffs are reduced without complementary VAT exemptions there will be small short-term declines in local cookstove manufacturing jobs, but this is likely to be a prelude to a more rapid pace of growth for the local market.
<p>Increase un-employment?</p>	<ul style="list-style-type: none"> • No. Under all projected scenarios employment effects are neutral (worst-case) to positive. • Reductions in trade barriers drive significant increases in stove purchases because of significant pent-up demand for clean and improved cookstoves. This will necessitate a growth in distribution networks, creating jobs that replace those lost in manufacturing.
<p>Reduce government revenues?</p>	<ul style="list-style-type: none"> • Only slightly, and only for the short term. Revenue changes from tariff reductions will be close to neutral due to increased import volumes. Revenue losses from full VAT exemptions will be moderate (US\$3-3.5M for small countries). • Tariff and tax exemptions will cause a step change in the growth of the industry, creating employment gains and small business growth that will ultimately make up for short-term revenue losses. A US\$12-\$15M increase in the tax base will compensate for these losses.

...nor will it harm consumers or create significant political liabilities for the ministers that champion the idea

Will lowering trade barriers...	Answer
<p>Limit consumer access to after-market service?</p>	<ul style="list-style-type: none"> • No. Evidence from other industries with goods of arguably equal or greater technical complexity (e.g., portable solar lanterns) indicates that robust local after-market service industries develop after trade barrier reduction. There is no evidence to suggest that cookstoves will be different. Consumers will not need their cookstove manufacturer to be located within the country in order to have their stove serviced appropriately.
<p>Expose consumers to shoddy foreign goods?</p>	<ul style="list-style-type: none"> • Only if consumers choose. Lowering trade barriers will expand consumer freedom to choose between more cookstoves at more price points: traditional; improved; advanced; local; imported; high quality; low quality. Consumers with preferences for locally-made stoves will still have that option. Moreover, there is no evidence to suggest that foreign-made cookstoves are of lesser quality than those made domestically.
<p>Threaten me politically?</p>	<ul style="list-style-type: none"> • In most cases, no. Every minister and policymaker faces their own unique political context and set of stakeholders to manage. However, the track record of ministers who have lowered trade barriers to social goods has generally been quite positive. They receive acclaim from international press and the global development community. At home, they tend to receive positive press, with some mixed feedback from local manufacturers.