Trade in Environmentally Sound Technologies Opportunities for East African Countries

Policy Brief

Trade in environmentally sound technologies offers triple win opportunities for the environment, economy and people in developing countries

Expanding the use of environmentally sound technologies (ESTs) can serve as a driver for development, resilience and the achievement of several Sustainable Development Goals, These include, among others, goal 7 on affordable and clean energy, goal 8 on sustainable economic growth, goal 12 on sustainable consumption and production, and goal 13 on climate action.

Trade liberalization can further facilitate market creation and expansion for ESTs and generate opportunities for developing countries to participate in regional and global value chains. Increasing trade in ESTs offers triple win opportunities by promoting economic development, job creation and innovation while simultaneously fostering economic and climate resilience and enabling countries to more efficiently access the goods and services needed to improve their environmental performance.

Global trade in ESTs has increased by over 60% from USD 0.9 trillion in 2006 to USD 1.4 trillion in 2016. Developing countries in Africa have, so far, not fully benefited from such opportunities.

What are environmentally sound technologies (ESTs)?

ESTs are technologies that have the potential to significantly improve environmental performance relative to other technologies. They are not just individual technologies but can also refer to total systems that include know-how, procedures, goods and services, equipment, as well as organizational and managerial procedures for promoting environmental sustainability. Examples include technologies related to renewable energy, waste management and pollution management.

The East African Community

- The Eastern African Community (EAC) is the second largest single regional market in Africa, and one of the fastest growing regional economies in Sub-Saharan Africa. The EAC Customs Union and Common Market Protocols have sought to advance the free movement of people, goods and services across the EAC region.
- The EAC is home to 172 million citizens, with a land area of 2.5 million square kilometers and a combined Gross Domestic Product of US$ 172 billion (EAC Statistics for 2017).
- In 2016, only 36% of the entire population in this region had access to electricity, which was below the average electrification rate of 43% for Sub-Saharan Africa as a whole.
- The EAC, through its Vision 2050 development blueprint, has prioritized energy as one of the key economic pillars spurring the region's transition towards an upper-middle income region by 2050. The region seeks to use its energy resources in a manner that meets the needs of the region, while also protecting and conserving the environment.
- This long-term development blueprint set an ambitious target of ensuring 100% access to modern energy services by 2050, with more than 50% of energy being supplied from renewable and clean energy sources such as solar and wind power.

(picture from website of Eastern African Community)

Opportunities for Trade in Environmentally Sound Technologies

- EAC countries import up to 10 times more than they export in the selected ESTs. Imports of PV cells and modules show a generally increasing trend, with Uganda, Tanzania and Kenya as the main importing countries. Similarly, the import of wind turbines and masts has increased recently, with Tanzania, Uganda and Kenya as the main importing countries.
- Under Article 13 of the Customs Union Protocol, the EAC Partner States have agreed to remove all existing non-tariff barriers to trade and not to impose any new ones. Once implemented effectively, this will help unlock trade in ESTs.
- EAC partner states have been strengthening cooperation on environmental protection, with climate change adaptation and mitigation, natural resource management and pollution control and waste management as key areas. Many of these are closely related to ESTs.
- The Partner States have agreed to co-operate in simplifying, standardizing and harmonizing trade information and documentation so as to facilitate trade in goods, including those related to ESTs.
- The African Continental Free Trade Area, once fully adopted, also represents a promising step towards greater development, innovation and trade trade in ESTs as well as for technology-related services within the region including installation, maintenance, repair, recycling.

Challenges

- Intra-regional trade in ESTs remains limited, due to low level of manufacturing and production of these products within the region.
- Non-tariff measures affecting EST trade include technical requirements, quality conditions and proofs, and customs formalities.
- At the enterprise level, access to finance and shortages of skilled labor limit the opportunities to access global and regional markets. The shortage of skilled labour related to the design, testing, installation and maintenance of ESTs presents a key challenge in the African market.
- In many EAC countries, markets for ESTs have largely been driven by donor and government programmes. But ESTs have increasingly become competitive. A vibrant market for ESTs such as individual solar systems has emerged in Kenya and is currently spreading to the region.

Case Study: Trade and Value Chain Development of Solar PV products in Kenya

As a growing economic hub in the East African region, Kenya has become a leading player for EST trade in the region.

The Kenyan solar market is largely liberalized, with these products exempted from import duties and value added tax. Policies were put in place, which provided impetus for EST development, including the Action Agenda on Sustainable Energy for All, National Climate Change Response Strategy, a feed-in-tariff (FIT) scheme for renewable energy. More recently, the Kenya Climate Innovation Center and Kenya Climate Ventures were launched to support private investment in EST sector.

In 2017, a total of 996 solar PV companies had been licensed to conduct trade in solar PVs in the country, majority of which involved in imports.

Key challenges included customs entry procedures, valuation, pre-shipment inspection, business registration formalities, financial constraints, logistical constraints, lack of effective standards and specification system at national level, low consumer awareness and demand. In addition, while solar PVs are exempted from tariffs and VAT, some vital components are not recognized as eligible for tax exemptions.

Next steps for supporting East African countries to better benefit from EST trade

- Promote and encourage trade and investment in EST sectors including through capacity building, training, development cooperation and enhanced financial investments
- Improve regional trade and value chain cooperation on ESTs via regional trade agreements, ensure coherence between environment and trade policies, and stimulate multilateral dialogue on aligning trade rules with energy, clean technology and climate action.
- Introduce comprehensive sustainability assessments for new trade and investment agreements to effectively assess the economic, social and environmental impacts of EST trade
- Improve collection and sharing of trade and environmental data on ESTs, solve methodological issues related the dual-use of certain components, improve data collection and classification on environmental services.
- Foster public private partnerships to diversify funding sources and help Small and Medium Sized companies access funding for exports and production of ESTs.

About this project

Led by the Environment and Trade Hub of UN Environment, and in collaboration with UNEP-DTU Partnership, African Centre for Technology Studies (ACTS), and Oxford University, this project aims to support and enable developing countries in the East African Region to objectively assess and understand the opportunities, benefits and challenges of liberalized trade in environmentally sound technologies and thus contribute to the implementation of climate goals and the Sustainable Development Goals related to trade, energy, technology and climate change.