



A Regional Fuel Market for ECOWAS

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Clean Energy Solutions Center

CleanEnergySolutions.org

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The Clean Energy Ministerial launched the Clean Energy Solutions Center as a major initiative in 2011.

The Solutions Center:

- Helps developing governments design and adopt policies and programs and identify finance measures that support the deployment of clean energy technologies.
- Partners with 35+ international energy and finance organizations to provide a range of resources, from web-based information to webinars and trainings.
- Offers the Ask an Expert service, which connects governments with a global network of 50+ energy and finance experts for direct technical assistance to develop solutions to policy and finance barriers to clean energy.



Energy EfficiencyEnergy AccessFinance MechanismsRenewable EnergySmart GridTransportationUtilities



Ask an Expert: Our Experts in Action

CleanEnergySolutions.org



Benefits of the Ask an Expert Service

- Quick and Easy access to assistance.
- **No cost** for assistance and no commitment.
- **Objective** assistance from experts is **personalized** to help governments meet local clean energy goals.
- High-quality assistance includes:
 - Access to a collaborative network of over 50 vetted, international experts with authority on clean energy policies and financing.

Delivered no-cost assistance for more than 250 requests from over 100 countries/regions.

Independent review of assistance to ensure quality.

To request assistance, go to cleanenergysolutions.org/expert

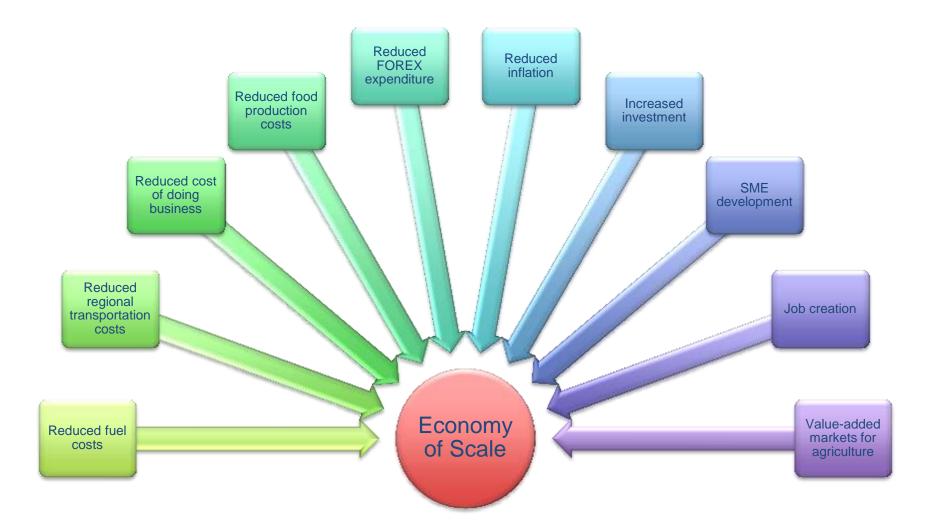
Expert support available to developing countries

- Request can come from staff or officials at all levels of government – national, regional, local.
- Service also supports organizations working with governments.

What is a regional fuel market for ECOWAS?

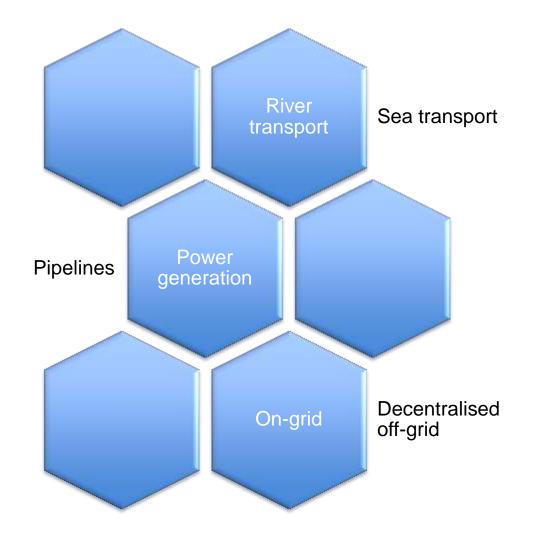
- A single market for fossil fuel and biofuel
 - Creates significantly larger fuel demand, reducing fuel costs
 - Upstream, where it's produced
 - Downstream, where it's consumed
 - Facilitates cross-border trade
 - A truck of E10 blended fuel in Mali could be sold in Niger or Togo
 - Improved fuel availability
 - Achieved through common fuel standards
 - Fuel Quality Standards
 - Fuel Operability Standards
 - Sustainability Standards

Why a regional fuel market for ECOWAS?





Beyond road transport





The fuel situation in ECOWAS

- ECOWAS countries are price takers
 - IEA 2014 data shows:
 - Nigeria exports crude and imports petrol
 - Cote d'Ivoire imports crude and exports petrol and diesel
 - Niger exports crude surplus but imports petrol and diesel
 - Benin and Togo import petrol and diesel
 - Ghana and Senegal import petrol and diesel as well as crude for refining



ODA for SSA reached **\$15.6 billion**...

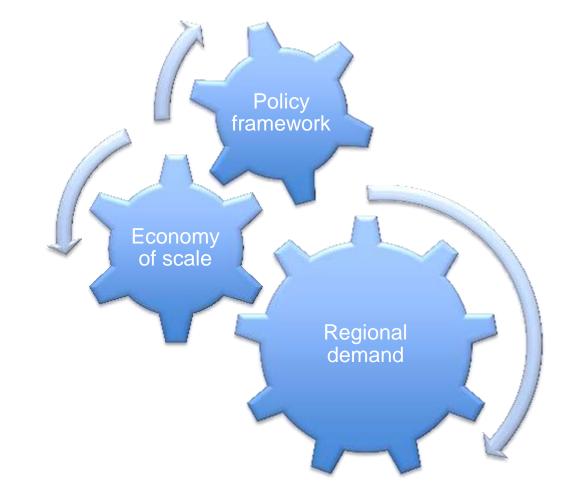
...while fossil fuel imports for EAC, COMESA and SADC reached <u>\$16.7 billion</u>



Increasing energy independence

- Mandatory 10% ethanol and biodiesel blending
 - Reduce Forex expenditure
 - Reduce exposure to fossil fuel prices
 - Stabilise local fuel markets and prices
 - Create demand for investment in biofuel production
 - Create demand for investment in fuel infrastructure
 - Create value-added markets for agriculture
 - Create jobs
 - SME development

But biofuels don't work! Unless...





CREATING A REGIONAL FUEL MARKET

A how-to guide



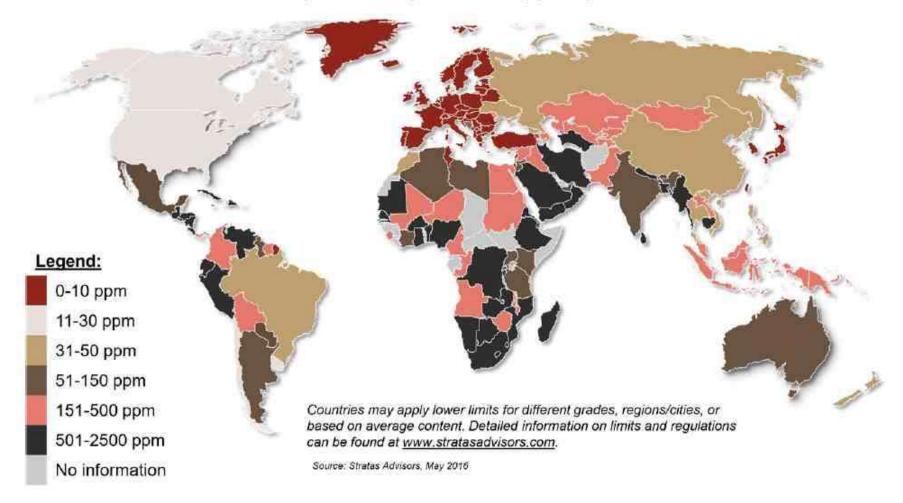
Standards are key to regional integration





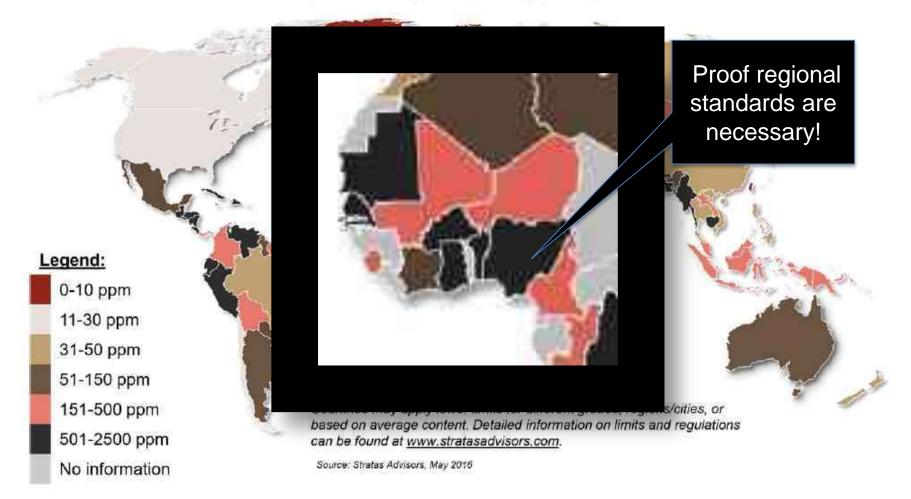
Max Sulfur Limits in Gasoline, 2016

Ecuador and Russia required to implement 10 ppm by second half of 2016



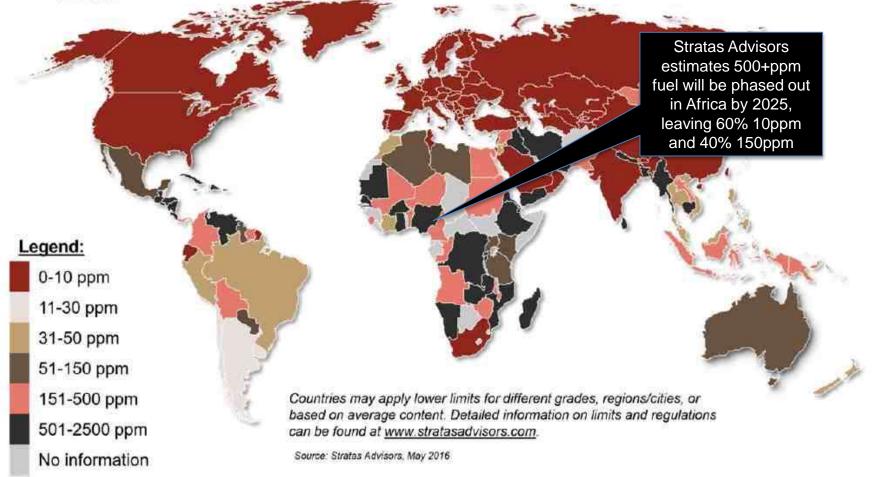
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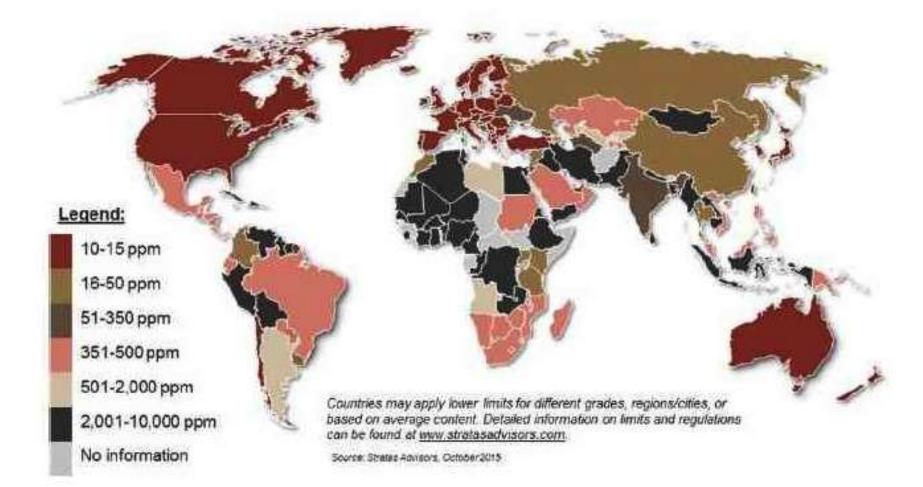
Max Sulfur Limits in Gasoline, 2020

Canada, China, Ecuador, India, Saudi Arabia, South Africa, Ukraine and the U.S. to implement 10 ppm by this time



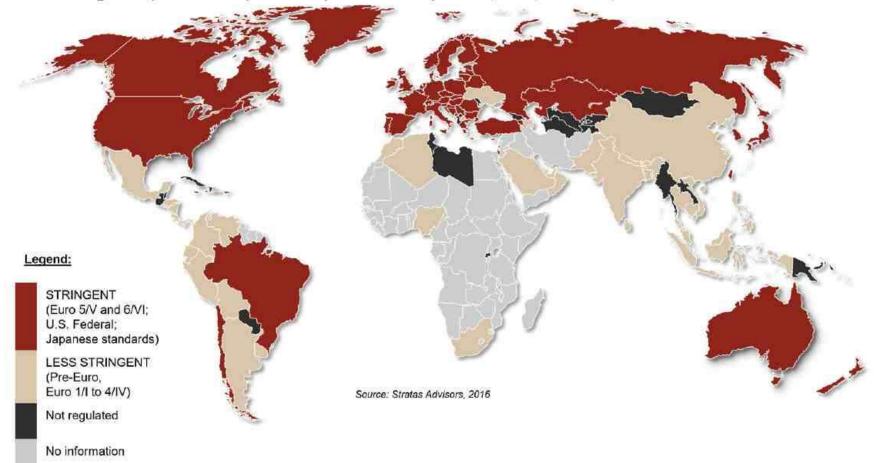
Max Sulfur Limits in On-Road Diesel, 2015

Belarus required 10 ppm by this time; China, EAC and Russia 50 ppm



Current Emission Requirements for New Vehicles

Stringent requirements in place for top markets except China, India, Indonesia, Mexico and Saudi Arabia





Current Fuel Efficiency Requirements for Gasoline and Diesel Vehicles

Policies in place for top markets except Indonesia, Russia and Saudi





Standards to be developed

Fuel Quality Standards

Petroleum

- Produce petroleum standards to ensure compliance with:
- Unleaded petrol (ie lower octane sub 95 RON)
- Premium petrol (ie higher octane 95 RON and above)
- · Bioethanol E10 blended petrol
- · Bioethanol E85 blended petrol
- Diesel
- Produce petroleum standards to ensure compliance with:
- Mineral diesel
- Premium diesel
- Biodiesel B5 blended diesel
- Biodiesel B20 blended diesel
- Renewable diesel
- •Gas
- Produce gas standards to ensure compliance with:
- Liquified Natural Gas (LNG)
- Liquified Petroleum Gas (LPG)
- Biogas

Operability standards

- Vehicle emission standards for cars and trucks (in time, possibly rail and marine):
- •To reduce noxious emissions, particulates and other air pollutants
- To introduce better technology solutions such as Euro 2 or 3 as a minimum
- Fuel efficiency standards for cars and trucks:
- •To reduce carbon dioxide emissions and other greenhouse gases
- To introduce better technology solutions into the region

Sustainability standards

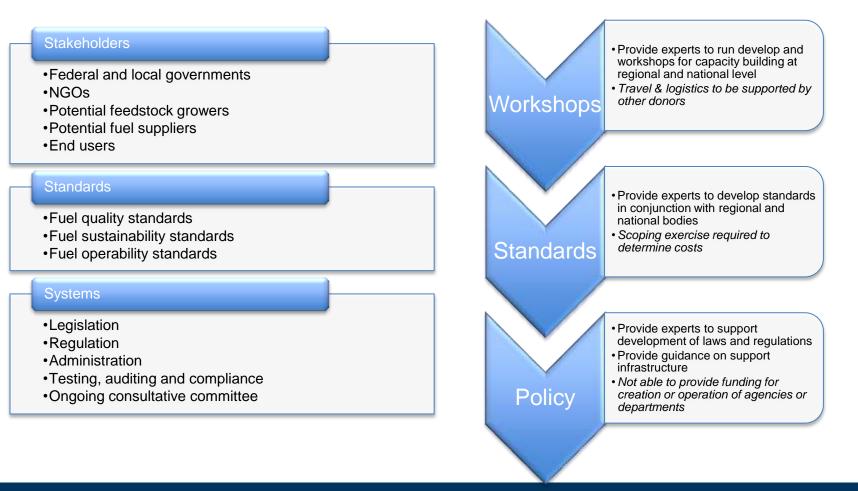
• To ensure the economic, environmental and social impacts of fuels are not adversely affecting the region or the communities in which ECOWAS operates



Next steps

What's next:

We can help!



MEDA ASE!

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