



ECOWAS COMMISSION
COMMISSION DE LA CEDEAO
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**High-Level African Petroleum Ministers Meeting on Cleaner Fuels in Africa
29-30 November 2022, UNEP Headquarters, Nairobi, Kenya**

**Presentation on the Status of implementation of
ECOWAS Directive on Harmonized Specifications for
Automotive Fuels (Gasoline & Diesel)**

ECOWAS Commission



CONTENT

- 1) Generality
- 2) Process of preparation of the harmonized specifications
- 3) Main study conclusions
- 4) Motivation for the harmonization
- 5) Presentation of the Directive
- 6) Sensitization in Member states
- 7) Current implementation status



1. Generality

□ ECOWAS revised Treaty of 1993 are as follows :

✓ **Article 28: To ensure the coordination and harmonization of policies and programs of Member States in the field of energy, particularly for the Hydrocarbon sub-sector :**

- Ensure the efficient development of the Region's energy resources (oil, gas, hydro, solar, etc.);
- Establish appropriate cooperation mechanisms to ensure a regular supply of hydrocarbons.

- Ensure a regular supply of hydrocarbons in the region and energy security
- Develop an integrated hydrocarbon market through the harmonization of policies and regulations as well infrastructure development
- Ensure the development of the hydrocarbon sector in the perspective of the energy transition (reduction of atmospheric pollution, cleaner fuels, etc.)

The actions to be implemented must contribute to :



2. Process of preparation of the Harmonized Specifications

Recommandation C/REC.03/06/17 of ECOWAS Council of Ministers

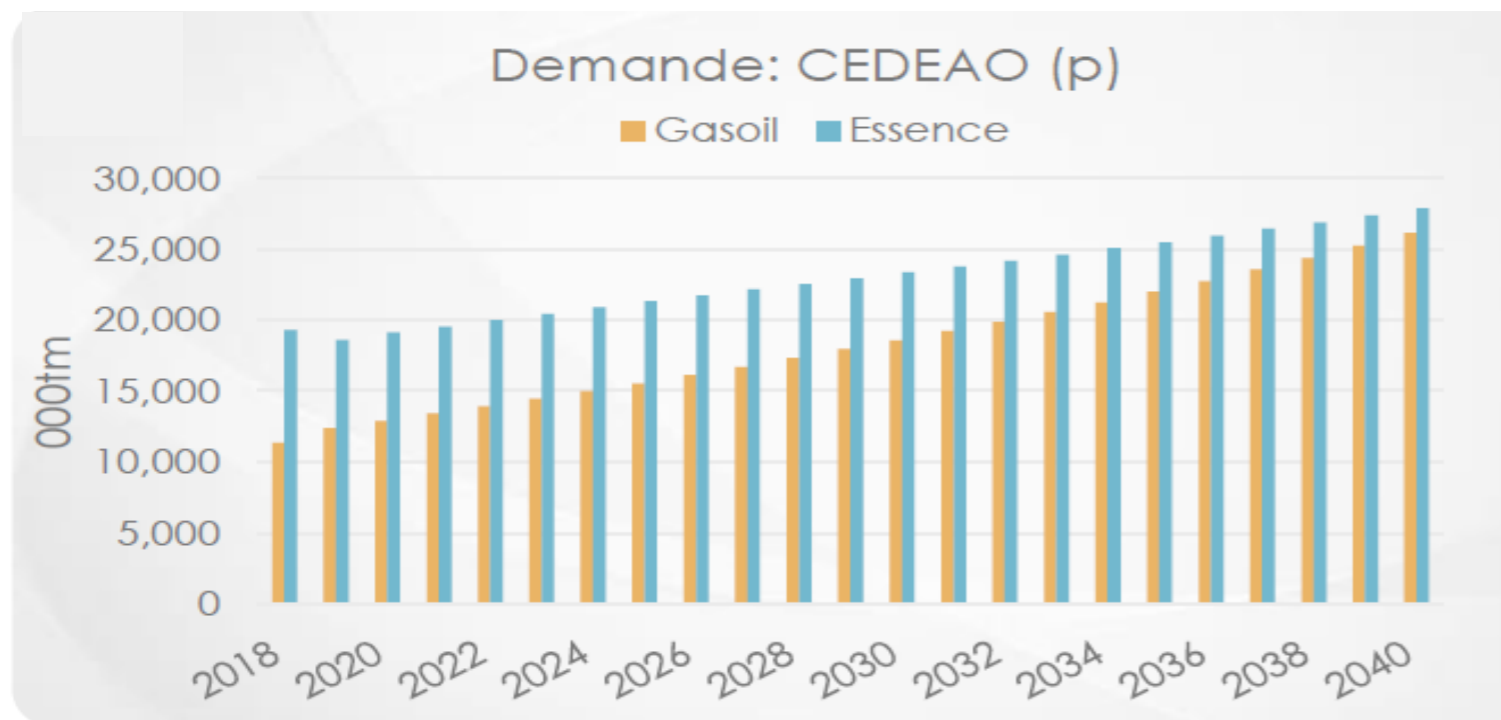
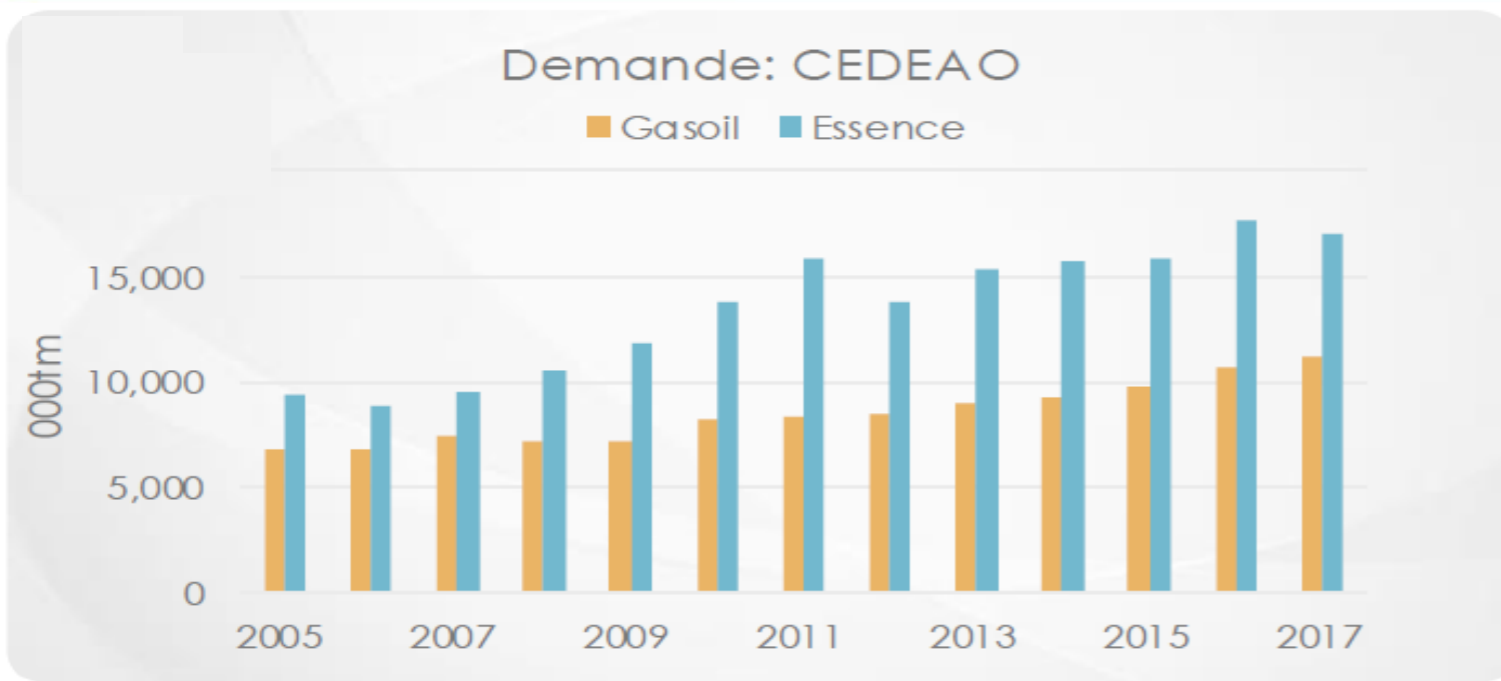
On the proposal of the Ministers in charge of energy/hydrocarbons

(Study for the harmonization of automotive fuel specifications)





3. Main Study conclusions : Demand/Production automotive fuels

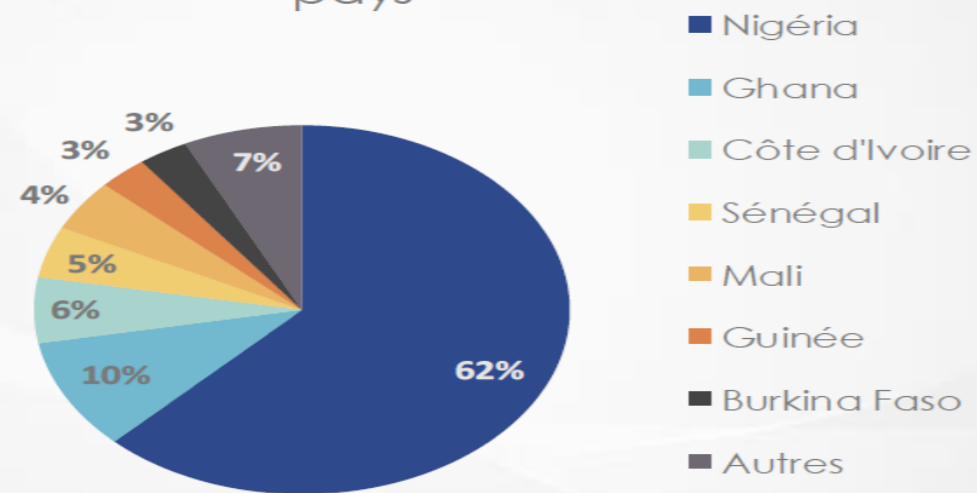


- ❑ 34 million tons of refined products consumed in 2017
- ❑ Of which 17.1 million tons of gasoline and 11.1 million tons of diesel (i.e. 28.2 million tons i.e. 82% of global refined products consumption)
- ❑ Between 2018 and 2040, the demand for gasoline and diesel should increase by 1.7% and 3.85% to reach 27.9 million tons and 26.1 million tons respectively (54 million tons in 2040)

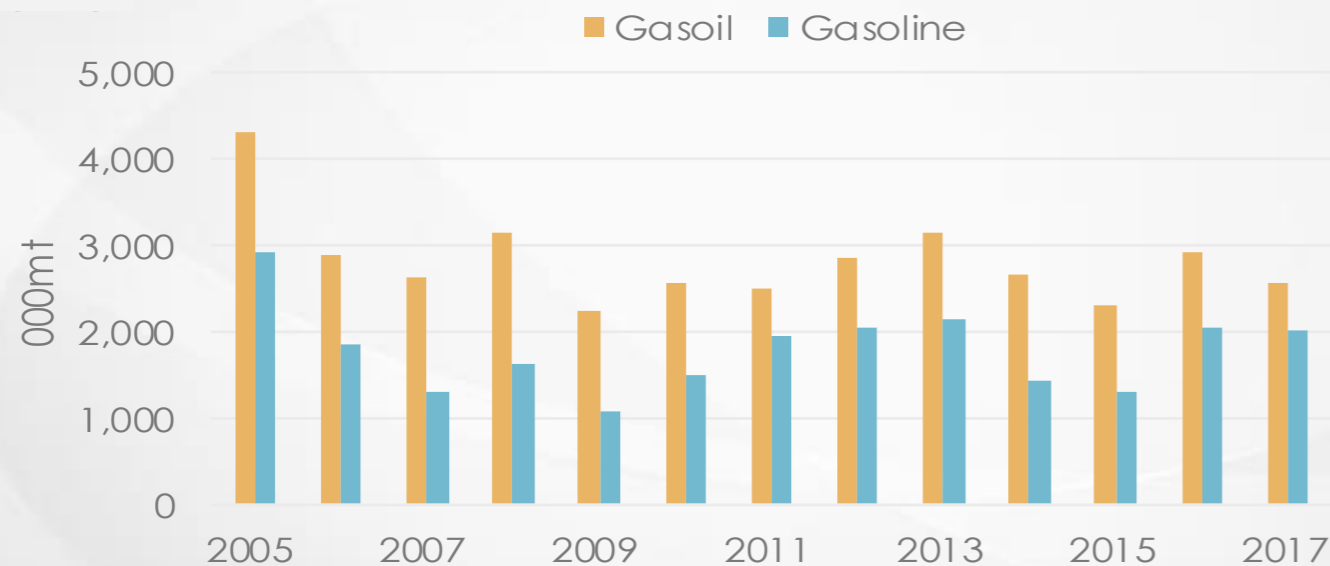


3. Main Study conclusions : Demand / Production of automotive fuels

Demande essence & gasoil: CEDEAO par pays



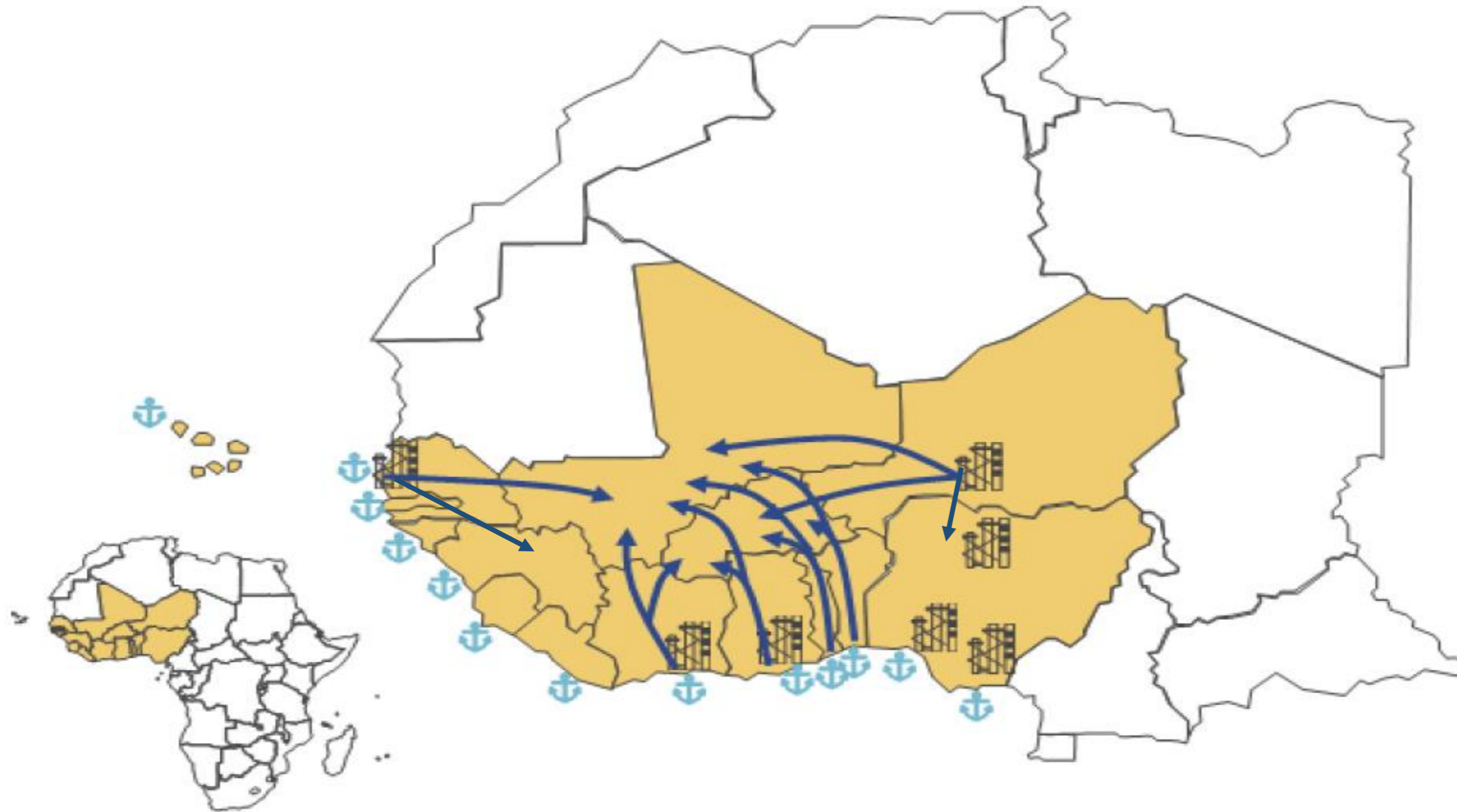
ECOWAS Historical Ref. Output



- Nigeria accounts for 62% of the demand, the largest market in the region
- Nigeria, Ghana, Côte d'Ivoire, Senegal and Mali account for 87% of the regional demand for gasoline and diesel
- 8 refineries with a total installed capacity of 30.5 million tons per year (Nigeria accounts for 72% of this capacity)
- However, a low refinery utilization rate below 25% since 2014.
- In 2017, refineries produced 4.6 million tons of gasoline and diesel. **Thus, 85% of the fuel demand was imported.**

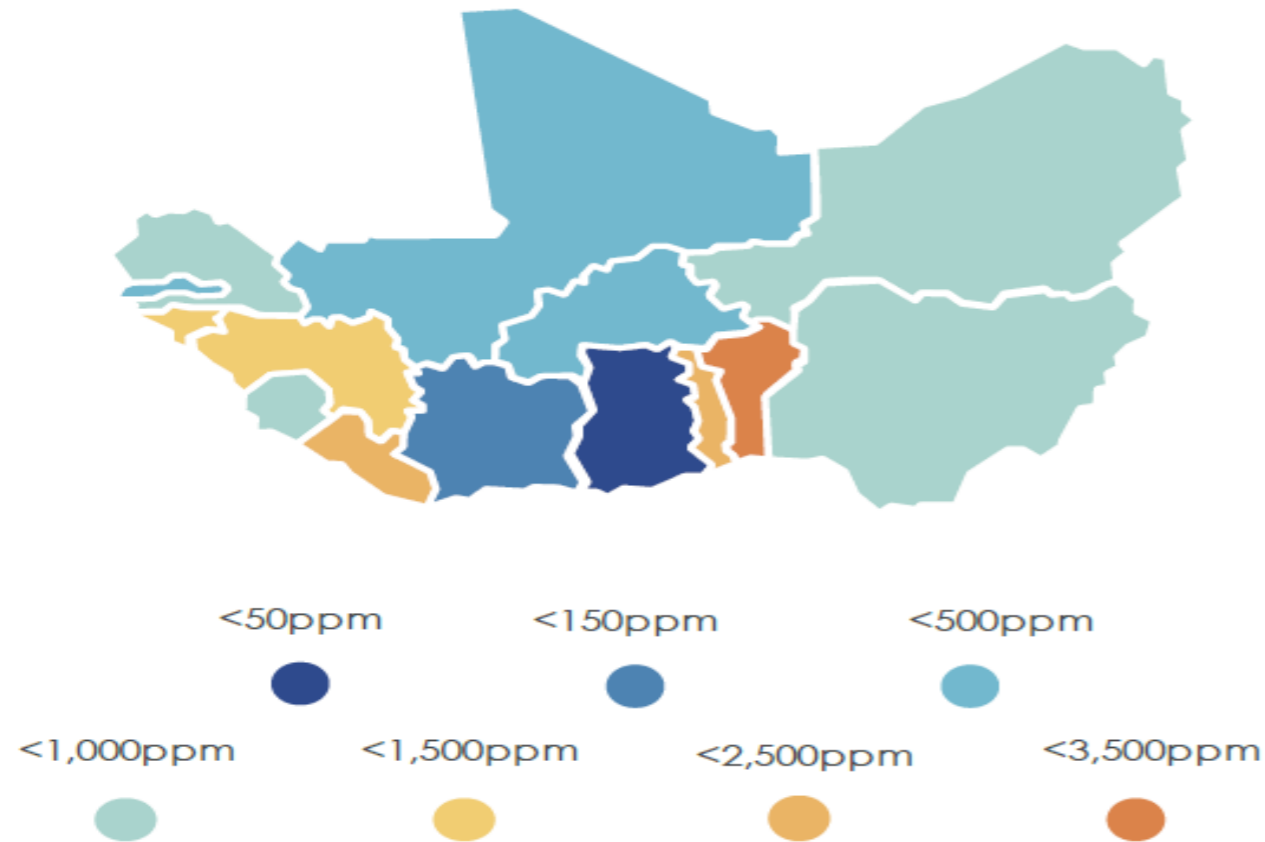


3. Main Study conclusions : Supply route into the region





3. Main Study conclusions : Sulfur level in Gasoline



- Across ECOWAS, there are 12 official specifications for the common grade of gasoline marketed
- There is also a wide range of permissible Sulphur levels within the 15 countries with 7 different limits allowed

50 ppm : Ghana

150 ppm : Côte d'Ivoire

500 ppm : Burkina Faso, Cape verde, The Gambia, Mali

1000 ppm : Niger, Nigeria, Senegal, Sierra Leone

1500 ppm : Guinea, Guinea Bissau

2500 ppm : Liberia, Togo

3500 ppm : Bénin

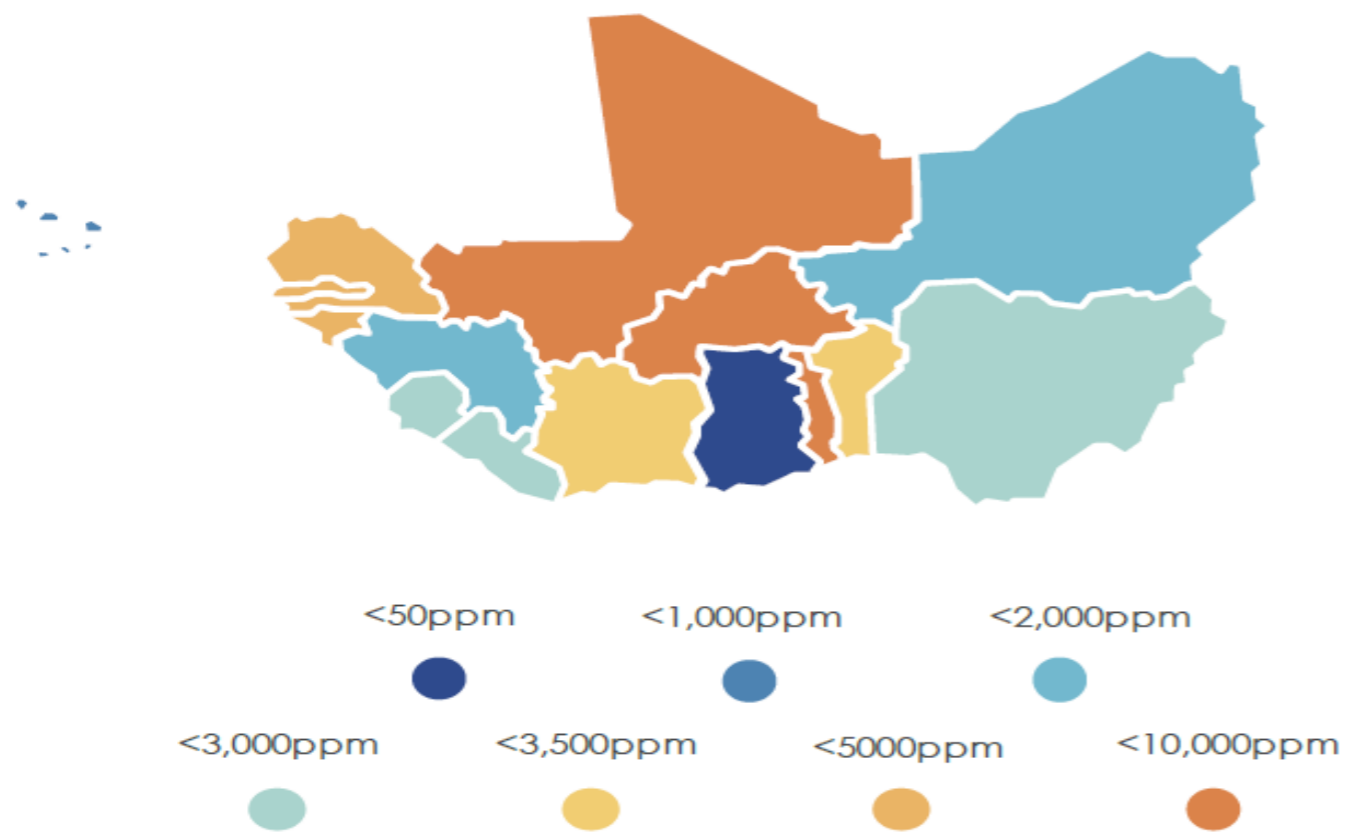
8 countries mention values for Benzene but no harmony on the Maxi value

5% Cape verde, Côte d'Ivoire
2% Nigeria, Senegal
1% Ghana

2018 Figures



3. Specifications Status : Sulfur level in Diesel



- Across ECOWAS, only one category of diesel fuel is proposed
- There is also a wide range of permissible sulphur levels within the 15 countries with 7 different limits allowed

2018
Figures

- 50 ppm : Ghana
- 1000 ppm : Cape Verde
- 2000 ppm : Guinea, Niger
- 3000 ppm : Liberia, Nigeria, Sierra Leone
- 3500 ppm : Benin, Côte d'Ivoire
- 5000 ppm : The Gambia, Guinea Bissau, Senegal
- 10000 ppm : Burkina Faso, Mali, Togo



4. Motivation for harmonization of automotive fuels

- Fuel demand will continue to grow in the region over the next 20 years
- Fuels with different specifications from one state to another and far from the best practices accepted in the world
- Refineries with low utilization rates that cannot meet regional demand
- Dependence on the external market (imports) which accounts for 85% of fuel demand
- Vehicle fleet estimated in 2018 at 11,925,083 vehicles (Nigeria 48% share) with a high proportion of vehicles older than 10 years.

Consequence: Polluting emissions linked to the combustion of fuels with a high sulphur content and other compounds / Environmental degradation and impact on the health of populations / Non-integrated hydrocarbon market



5. Presentation of the Directive C/DIR.1/9/2020

The Directive contain 10 Articles with in Annex the detailed content value based on existing and best international practices

- Article 1: Definitions
- Article 2 : Subject
- Article 3: Gasoline
- Article 4 : Diesel
- Article 5 : Free circulation
- Article 6 : Monitoring compliance and reporting
- Article 7 : Review process
- Article 8 : Transposition into national legislation
- Article 9 : Entry into force
- Article 10 : Publication



5. Presentation of the Directive C/DIR.1/9/2020

The application of the harmonized fuel specifications will start from :

- January 1, 2021 for all imports outside ECOWAS
- January 1, 2025 for production from local refineries in the ECOWAS region.

[ECW Directive on fuels harmonization \(Gasoline & Diesel\) Sept2020 ENG.pdf](#)

For Gasoline:

- ✓ 50 ppm Sulfur,
- ✓ Benzene 1% de volume maxi,
- ✓ Manganese 6 mg/l max,
- ✓ Zero oxygene
- ✓ Reseach Octane Number (RON) : 91.

For Diesel:

- ✓ 50 ppm sulfur,
- ✓ Lubrification 460 microns max,
- ✓ Cetane Index mini 46;
- ✓ Cetane number mini 49
- ✓ Flash point : 55°C
- ✓ Cloud point : 7°C

Any improvement of the specifications without alignment with the vehicle emission limits will not have the desired effect. Therefore, this Directive is strongly aligned with the Directive C/DIR.2/09/20 also enacted and relating to the harmonization on the limit of gas and exhaust particle emission limits



6. Sensitization Mission in Member States

High level sensitization missions conducted in 9 Member States : Niger, Burkina Faso, Mali, Côte d'Ivoire, Senegal, Benin, Togo, The Gambia, Ghana



- National authorities are well aware of the issues and the need to implement Directive C/DIR.2/9/2020 on the harmonization of automotive fuels (gasoline and diesel) in the ECOWAS region;
- Several countries have initiated actions that should lead to the national transposition of the Directive;
- Actions have been taken by countries with refineries (Senegal, Côte d'Ivoire, Niger) to make the required investments to comply with the provisions of the Directive by 2025;
- Several constraints have been pointed out in the implementation of the Directive, particularly
 - (i) the adequacy of logistics and storage infrastructures;
 - (ii) certification and quality control;
 - (iii) price implication impact ;
 - (iv) the financing of the investments required to bring refineries up to standard.



7. Current Implementation Status

Compliance with almost all the parameters particularly Sulfur Content 50 PPM	Ghana	Adopted since 2017
	Benin	Interministerial Act enacts March 2021
	Cape Verde	Aligned May 2021, Official Journal
	The Gambia	National Standard aligned with Directive but not yet gazetted

- Other countries are in preparation of Upgrading their refineries for 2024 deadline (Niger, Côte d'Ivoire, Senegal)
- Other have initiated national consultation : Burkina Faso, Mali, Senegal (also) to find solution for the challenges identified.



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Thank you for your kind attention
