

Rural electrification

> Develop the rural electrification service offer



LOCATION

- Throughout the country



ESTIMATED COST

- 385 million US\$



STUDIES

- Feasibility and technical: to be carried out for some project components



ACTORS

- Ministry of Energy
- Senegalese Rural Electrification Agency (ASER)



CHARACTERISTICS



- Installation of 2 454 km medium-voltage line in the rural areas, installation of a low voltage mini-network and decentralized photovoltaic systems, for close to 2 240 villages to provide electricity to about 101 000 subscribers in connection with the emergency rural electrification program
- Extension of the medium-voltage network in partially covered concessions (the concerned area encompasses 230 villages corresponding to 16 000 new households and 7 000 others supplied through a discontinuous electricity supply service in the 9 secondary plants powered by diesel generators)
- Implementation of 4 new rural electrification concessions (connection of 85 000 new subscribers and 1 100 villages)



SPECIFIC OBJECTIVES

- Achieve the objective of 60% rural electrification rate in 2016
- Create viable development centres to substantially contribute to poverty reduction
- Improve the access of households to electricity services
- Improve the quality and continuity of electricity services in areas with discontinuous power supply service or with a poor voltage plan
- Improve the access and quality of basic social services through electrification



OVERVIEW OF THE SECTOR

- In Senegal, the populations' access to electricity is still limited and shows a significant gap between the urban and rural populations, judging by the electrification rate (ratio between the number of electrified households and the total number of households) which stood as follows in 2012: 54 % at national level; 90 % in the urban zone and 24 % in the rural zone
- Moreover, Senegal has, since March 2012, joined the SE4All initiative launched by the UN Secretary General and thus intends to contribute, through this project, to achieving the objective of universal access to electricity services

Renewable energy

> Set up alternative electricity supply systems for public and private buildings as well as public lighting



LOCATION

- Throughout the country



ESTIMATED COST

- 100 million US\$



STUDIES

- Prefeasibility: to be carried out (except for public lighting using solar power)



ACTORS

- Ministry of Energy
- Senegalese Rural Electrification Agency (ASER)



CHARACTERISTICS



- Ensuring the autonomy of public buildings by installing solar generators with a capacity of 1500 mc per unit and solar water heaters in health structures and providing photovoltaic solar kits in 1000 villages and near-urban communities
- Pilot project for the production of oil from sub-basin micro-algae
- Public lighting using solar power by installing 35 000 solar street lights



SPECIFIC OBJECTIVES

- Provide health structures and schools in the rural areas with the possibility to access solar photovoltaic electricity in order to achieve the MDG related to schooling, health care and the reduction of infant and maternal mortality
- Explain to local actors about the advantages of using marginal land to start income-generating activities and local development
- Contribute to reducing the country's oil bill
- Reduce the financial costs deriving from the electricity consumption of Local Communities



OVERVIEW OF THE SECTOR

- The electricity sector is characterized by an extremely high dependence on the importation of oil products. Thus, close to 77% of villages still have no access to electricity due to their low economic profitability and little interest for the private sector
- The diversification of electricity and fuel production sources likely to make up for the demand for transport fuels and the reduction in the local communities public lighting bill constitute major challenges

Energy transmission and distribution network

> Extend and strengthen the transmission and distribution system to ensure the networking of the transport system and the electrification of the zones



LOCATION

- Throughout the country



ESTIMATED COST

- 634 million US\$



STUDIES

- Feasibility: carried out for some components of the project
- Technical: to be carried out for some project components

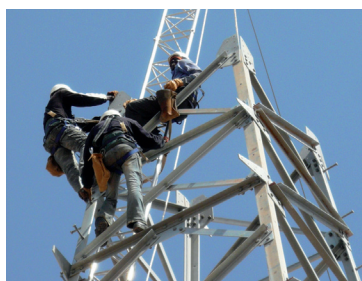


ACTORS

- Ministry of Energy
- SENELEC



CHARACTERISTICS



- Construction of an interconnection line with Mauritania
- Construction of new 225 kV lines Kounoune-Patte d'Oie, Mbour-Kaolack, Kaolack-Tambacounda-Bakel, Tambacounda-Kédougou, Tambacounda-Kolda-Ziguinchor
- Consolidation of the 90 kV lines
- Creation of new 90/30 kV and 225/30 kV stations
- Consolidation of distribution networks in regions



SPECIFIC OBJECTIVES

- Create the conditions necessary for the development of rural electrification, of mining zones of the East of Senegal and interconnections with the sub-region
- Guarantee the evacuation of the capacity of new plants
- Guarantee the operating safety of the electricity system and improve the quality of service
- Reduce technical losses and increase the capacity to service distribution networks



OVERVIEW OF THE SECTOR

- Electricity transmission and distribution are characterized by the dilapidated and congested networks, with limited possibilities for relief in case of accident
- The regions of Tambacounda, Kolda and Ziguinchor are currently supplied by the isolated regional power plants of the interconnected network with a non-secure electricity supply, high operating charges and production costs per kWh, and a low rate of penetration of the transmission network into these zones

Dakar - AIBD rail service

> Build a new standard gauge railway line between Dakar and the Blaise Diagne International Airport (AIBD) Diass (50 km)



LOCATION

• Dakar - Diass axis



ESTIMATED COST

• 200 million US\$



STUDIES

• Pre-feasibility: carried out
• Technical: to be carried out



ACTORS

• Ministry for Infrastructures, Land Transport and Road development



CHARACTERISTICS



- Shifting of channels 1 & 2, track renewal and security
- Construction of a railway station and a workshop on the site of the AIBD
- Construction of 4 new stations and reconstruction of railway structures (5 bridges and 45 culverts)
- Establishment of a telecommunications system and train control



SPECIFIC OBJECTIVES

- Improve urbane mobility: 25 000 passengers per day (highway traffic + rail)
- Improve travel conditions and shuttels between Dakar and AIBD
- Freight (regional and international)
- Economic Zone ZESI (1000 new foreign companies, additional export value of around 200 billion CFA francs)



OVERVIEW OF THE SECTOR

- Length of rail: 906 km of existing railways, ≈1360 km of new railways and ≈890 km to rehabilitate by 2023
- Annual rail trafic: 393 million tonne-kilometres of goods and 91 million of passenger-kilometres

Dakar - Tambacounda - Kedougou - Bamako railway line

Component 1 of the integrated Falémé iron project

> Provision of a new railway line with standard gauge on the Dakar - Tambacounda - Kédougou - Falémé section



LOCATION

- Dakar - Tambacounda - Kédougou - Falémé axis



STUDIES

- Pre-feasibility: carried out
- Technical: to be carried out



ESTIMATED COST

- 1.5 billion US\$



ACTORS

- Ministry for Infrastructures, Land Transport and Road development



CHARACTERISTICS



In Senegal:

- Provisions of 750 km of railways as follows: 439 km between de Port of Bargny-Sendou and Tambacounda, 311 km between the iron mine of Koudékourou (Kédougou region in the South-East) and Tambacounda

In Mali:

- Provision of 300 km of railways between Koudékourou in Senegal, Faléa - Kita and Bamako in Mali



SPECIFIC OBJECTIVES

- Encourage the substantial resources of iron ore in eastern Senegal
- Provide infrastructure to support mining development in neighboring countries
- Facilitate the movement of goods and services on the Dakar-Bamako corridor and in the sub-region
- Create synergy between States and the mining operators to operate and transport of minerals



OVERVIEW OF THE SECTOR

- Length of rail: 906 km of existing railways, ~1360 km of new railways and ~890 km to rehabilitate by 2023
- Annual rail traffic: 393 million tonne-kilometres of goods and 91 million of passenger-kilometres

Thiès - Diourbel - Touba highway

> Build a highway on the Thiès - Diourbel - Touba road (120 km)



LOCATION

- Thiès - Diourbel - Touba road



ESTIMATED COST

- 800 million US\$



STUDIES

- Detailed pre-project study: in start up phase



ACTORS

- Ministry for Infrastructures, Land Transport and Road development
- AGEROUTE



CHARACTERISTICS



Building:

- 125 km of 3.5 m wide two-lane roadways (2 x 2 lanes)
- 5 interchanges (1 diamond in Thiès on the D701, 3 single trumpets in Thiès on the RN3, Bambey et Diourbel, 1 cloverleaf on the Ngabou-Touba bifurcation)
- 4 flyovers on the national road and secondary roads
- 12 flyovers on rural roads
- 20 footbridges (pedestrians and non-motorised vehicles)
- 5 toll booths (2 mainline and 3 on slip roads)
- Services areas



SPECIFIC OBJECTIVES

- Increase the capacity of traffic flow
- Improve traffic conditions and safety in the areas crossed
- Improve access to services and social facilities
- Improve the living environments of people



OVERVIEW OF THE SECTOR

- The transport sector is one of the most dynamic in the economy of Senegal
- The highway will connect major cities in Central and Eastern Senegal (Touba, Matam, Linguère, etc.) and will significantly improve the mobility of pilgrims at various religious events in the Diourbel region, notably the Magal of Touba (2 million pilgrims)

Mbour - Fatick - Kaolack highway

> Build a highway on the Mbour - Fatick - Kaolack road (125 km)



LOCATION

- Mbour - Fatick - Kaolack road



ESTIMATED COST

- 760 million US\$



STUDIES

- Feasibility: in progress



ACTORS

- Ministry for Infrastructures, Land Transport and Road development
- AGEROUTE



CHARACTERISTICS



Construction:

- 125 km of 3.5 m wide two-lane roadways (2 x 2 lanes)
- Interchanges

Related developments:

- Local side roads to access peripheral district roads located on the right-of-way of the highway corridor
- Underground passages at about every kilometre in the urban area



SPECIFIC OBJECTIVES

At national level:

- Upgrade the level of service of the Mbour-Kaolack road (doubling the capacity)
- Have rapid access road to regional development centres
- Improve the traffic and safety conditions
- Improve access to social services and facilities and ensure territorial balancing

At regional level:

- Improve the connection between Senegal and countries of the sub-region (Mali, Guinea, Gambia, etc.)
- Become an important link between the 2 major African corridors: the trans-coastal (Algiers-Tangiers-Nouakchott-Dakar-Conakry-Abidjan-Lagos) and the trans-Sahelian (Dakar-Bamako-Djibouti)



OVERVIEW OF THE SECTOR

- The transport sector is one of the most dynamic of the Senegalese economy
- This road will link major cities of Central and South Senegal (Kaolack, Ziguinchor, Kédougou, Tambacounda) and reach the sub-region towards the South (Gambia, Guinea, Guinea Bissau, Mali)

Thiès - Saint-Louis highway

> Build a highway on the Thiès - Saint-Louis road (190 km)



LOCATION

- Thiès - Saint-Louis road



ESTIMATED COST

- 1.2 billion US\$



STUDIES

- Feasibility: to be carried out



ACTORS

- Ministry of Infrastructure, Road Transport and Improved Access
- AGEROUTE



CHARACTERISTICS



Construction:

- 190 km of 3.5 m wide two-lane roadways (2 x 2 lanes)
- Interchanges

Related developments



SPECIFIC OBJECTIVES

At national level:

- Improve the mobility of persons and goods and step up the performance of the road sub-sector by reducing the transport costs and duration
- Promote the economic and social development of a zone with high agricultural (River Senegal Valley) and tourism potential
- Foster the economic and social development of zones crossed by the road by providing basic social facilities and services

At regional level:

- Become an important link in the progressive construction of major transcontinental corridors, namely the Eurafrican (Madrid-Tangiers-Nouakchott-Dakar), the trans-coastal (Algiers-Tangiers-Nouakchott-Dakar-Conakry-Abidjan-Lagos) and the trans-Sahelian (Dakar-Bamako-Djibouti)



OVERVIEW OF THE SECTOR

- The transport sector is one of the most dynamic of the Senegalese economy