



NATURAL GAS GREEN FUEL EXPERIMENTATION COTE D'IVOIRE



(SOTRA)



NATURAL GAS : GREEN FUEL EXPERIMENTATION COTE D'IVOIRE



PRODUIRE L'ENERGIE
INFORMATION FORTE



SUMMARY

INTRODUCTION

I. PILOT PROJECT GNV PETROCI/SOTRA

II. RESULTS OBTAINED

III. PERSPECTIVES

CONCLUSION



PRODUIRE L'ENERGIE
INFORMATION FORTE



INTRODUCTION

The preservation of the environment occupies a place of choice in the policy of the Ivory Coast government.

Car traffic, the main cause of air pollution and noise nuisance has been the subject of many reflections in the framework of the promotion of sustainable mobility and a new generation of vehicles using clean and economical alternative fuel. The development plan, in its action matrix, has integrated projects into the framework of a sustainable development scheme.

The Ivorian Government, anxious to register in this dynamic, has authorized the companies Petroci and Sotra to implement, an experimental project of natural gas propulsion buses in Ivory Coast.
A first in West Africa



PILOT PROJECT EXPERIMENTATION GNV

TRAINING

The taking of control of this technology required the elaboration and implementation of a comprehensive training plan internally and on the sites in operation in France and in England.

Development Training Plan

For the technical and commercial operation of buses (Maintenance and driving)

Training of the machinists of the Sotra to the gas bus line.

Immersion of Sotra agents in a Natural Gas transport company (Vitalis Poitiers and Véolia Bordeaux.)

Training on the site of the Sotra by the manufacturer.



PRODUIRE L'ENERGIE
NATION FORTE



PILOT PROJECT EXPERIMENTATION GNV

Formation of Sotra Agents in the visual inspection of reservoirs.

Training of Sotra agents on site at Level 2 maintenance of the bus gas circuit.

For the management of the compressor

Theoretical and practical training on the factory compressor (Ipswich/England).

Theoretical training on the compressor in the manufacturer (Comptair France).

Practical and theoretical training in the use and maintenance of the compressor on sites in France.



PILOT PROJECT EXPERIMENTATION GNV

Practical and theoretical training of stakeholders by the on-site builder at Sotra.

Theoretical and practical training by the Gas Research centre of France on its site and the site of the Sotra.

This plan was implemented



COMPRESSION STATION



PRODUIRE L'ENERGIE
INFORMATION FORT



RESULTS OBTAINED

- **Economic**

Economical reduction of operating costs by the reduction of fuel cost

- **Environmental**

Reduction of noise pollution

Suppression of particulate matter and black smokes

- **Social**

Comfort of customers and drivers no increase in ticket prices

- **Emission reductions from gasoline**

25% carbon dioxide CO₂ less

55% NO_x oxides less than

55% carbon monoxide Co less

- **Emission reductions from Diesel in %**

45% carbon dioxide CO₂ of less than

85% NO_x nitrogen oxides less than

98% of soot particulates less than



PRODUIRE L'ENERGIE
INNOVATION FORTE



PERSPECTIVES



Acquisition of 50 bus GNV every year over 4 years

Increase in the number of bus reservoirs from 7 to 9

Optimization of the operating conditions of gas buses (BRT)

Extension of the use of the GVN to the bus boats of SOTRA

Opening of Ivorian market to natural gas vehicles



COMPRESSEUR GAZ NATUREL PETROCI



BUS AU GAZ NATUREL EN CIRCULATION



Thank you

