



Alexandria Carbon Black CDM project

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Alexandria Carbon Black Co.

Investments opportunities for CDM

Symposium – 1st April 2009

About Alexandria Carbon Black



FIRST EGYPTIAN- INDO COMPANY IN EGYPT

BY ADITYA BIRLA GROUP FROM INDIA and Continental Carbon USA, International Finance Corporation, Arab Petroleum Investments Corporation APICORP , El Nasr Company for Coke and Basic Chemicals.

About Alexandria Carbon Black



Carbon Black Story in Egypt

Egyptian Government calls for International Tender

Before establishing Alexandria Carbon Black in Egypt.. Egypt used to import it's local needs of carbon black from abroad.

At the Early 90's.. The Egyptian government raised an international tender for constructing a Carbon Black Plant in Egypt for saving foreign exchange.

Among all multinational manufacturers organizations and competitors , ACB was awarded the tender.

About Alexandria Carbon Black

ALEXANDRIA CARBON BLACK



STARTUP

JULY, 1994

TECHNOLOGY

STATE OF THE ART TECHNOLOGY

From Continental Carbon Company, USA

CAPACITY

**The initial capacity was 20 000 MT in 1994 and
285 000 TPA in 2008**

PRODUCTS

CARBON BLACK plus

ENERGY: Steam, Electricity

SALES

NO 1 CHEMICAL EXPORTER IN EGYPT

Export 95% after meeting 100% local requirement

EMPLOYEEMENT

3000 (Direct and Indirect)

About Alexandria Carbon Black

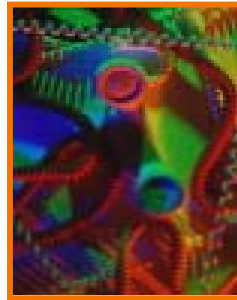
ALEXANDRIA CARBON BLACK



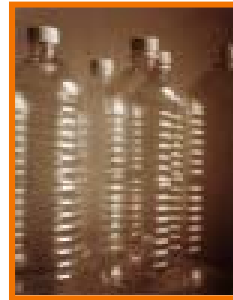
Primary CARBON BLACK Usage



PAINTS



CABLES



PLASITC



PAPER



INSULATION
MATERIALS



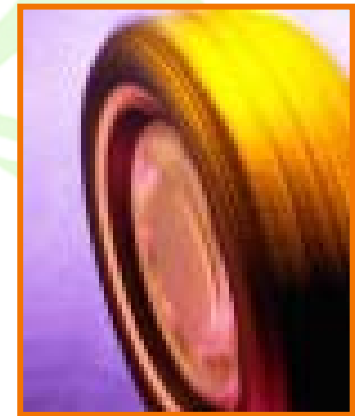
CONVEYOR
BELTS



INK



RUBBER



TIRES

ADITYA BIRLA GROUP

ALEXANDRIA CARBON BLACK



REVENUES ARE US\$ 24 BILLION

FIELDS OF OPERATION

TEXTILES / GARMENTS
POWER GENERATION
VISCOSE STAPLE FIBER
ALUMINUM
COPPER
ACRYLIC FIBER
FERTILIZERS
REFINING
CARBON BLACK
INFORMATION TECHNOLOGY
CHEMICALS
CEMENT
COMMUNICATIONS
SPONGE IRON
TRADING
INSURANCE
E-COMMERCE
FINANCIAL SERVICES

MANUFACTURING BASES

INDIA
THAILAND
INDONESIA
PHILIPINES
CANADA
EGYPT
UK
USA
CHINA

LARGEST VISCOSE STAPLE FIBER PRODUCER IN THE WORLD

LARGEST ALUMINUM PRODUCER IN THE WORLD

ADITYA BIRLA GROUP

ALEXANDRIA CARBON BLACK



Birla Carbon Black Plants

Alexandria Carbon Black Egypt



Hi Tech Carbon – India (Two Plants)



Liaoning Birla Carbon Co Ltd – China



Thai Carbon Black Public Co Ltd - Thailand



ACB & Environment

ALEXANDRIA CARBON BLACK



35% of ACB land is a green area

Achievements

ISO - 14001 CERTIFICATION

For Environmental Management System



ALEXANDRIA CARBON BLACK (ACB)

FIRST CARBON BLACK COMPANY

IN THE WORLD TO ACHIEVE

ISO-14001 CERTIFICATION



Certified by **DNV** (Norske Veritas – Netherland)

Achievements

OHSAS-18001

*Occupational Health &
Safety Assessment Standard*



Alexandria Carbon Black Company (ACB)

1st Carbon Black Company

In the world to achieve

OHSAS - 18001



Certified by **DNV** (Norske Veritas – Netherland)

Achievements

ISO-TS-16949 Accreditation



For Quality Management System



Alexandria Carbon Black Company (ACB)

1st Carbon Black Company

in the world to achieve

ISO-TS-16949 Accreditation



Certified by DNV (Norske Veritas – Netherland)

Achievements

SA-8000 Accreditation

*Social Accountability For society,
Employees & Stakeholders*



Alexandria Carbon Black Company (ACB)

1st Carbon Black Company

in the world to achieve

SA – 8000 Accreditation



Certified by **DNV** (Norske Veritas – Netherland)

Achievements

TPM - SPECIAL AWARD

*Of outstanding achievements
in the modernization of techniques,
approaches of plant maintenance*



Alexandria Carbon Black Company (ACB)

1st Carbon Black Company

in the world to achieve

TPM – SPECIAL AWARD

Certified by  – Japan

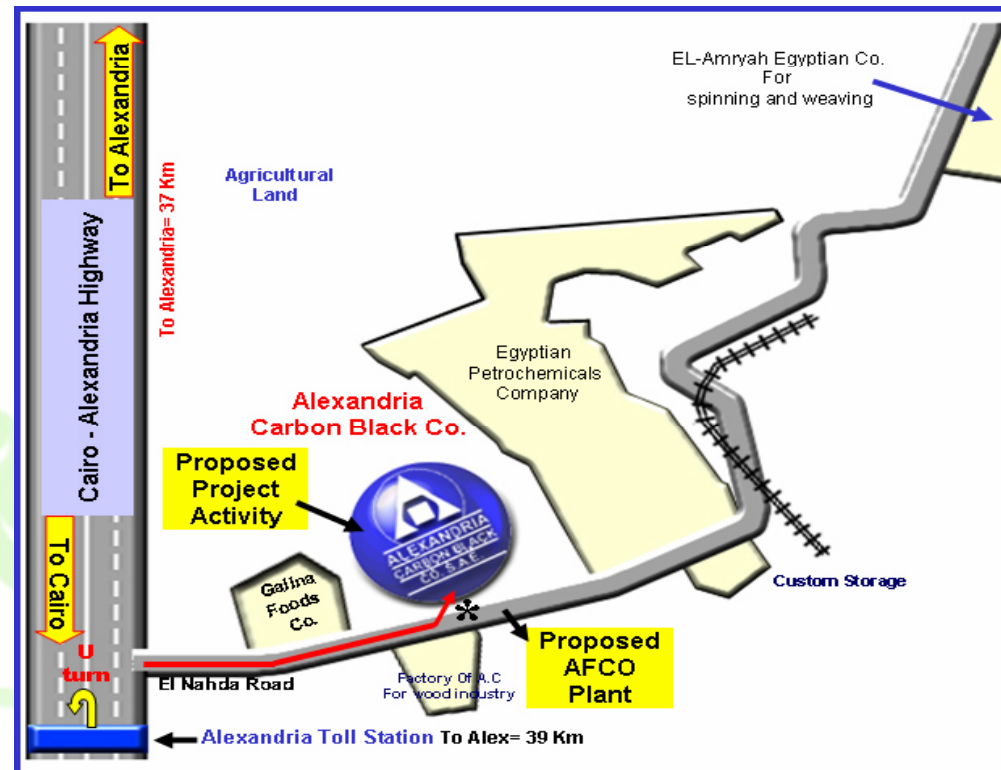
*“Waste Gas-based Cogeneration Project at
Alexandria Carbon Black Co.,
Egypt”*

- **Description of Project Activity**
- **Baseline Methodology**
- **Duration of Project Activity / Crediting Period**
- **Estimated Emission Reductions**
- **Environmental Impacts**
- **Contribution to Sustainable Development**

Description of Project Activity



- **Location**
 - **El Amreya- El-Nahda Industrial Zone**



* From Road Entrance to Alexandria Carbon Black= 3.75 Km

Description of Project Activity

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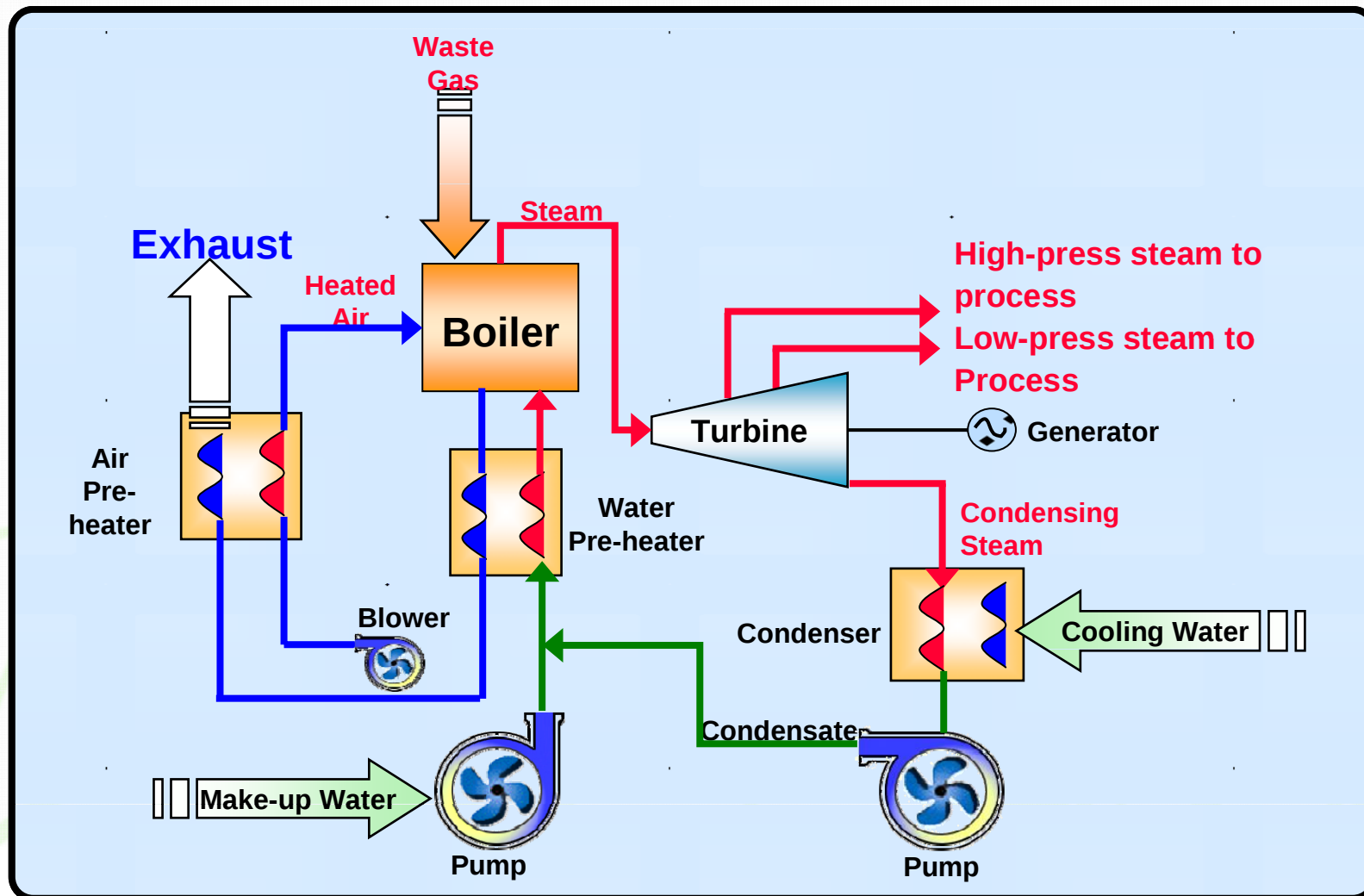
- *Waste Gas incinerated at ACB*
- *Instead of incineration, waste gas will be directly combusted in a boiler to generate steam*
- *Steam is then expanded through a turbine-generator to produce electricity*
- *Such combined heat (steam) and power (CHP), i.e. cogeneration system provides higher efficiency than systems that generate electric power and heat separately*

Description of Project Activity

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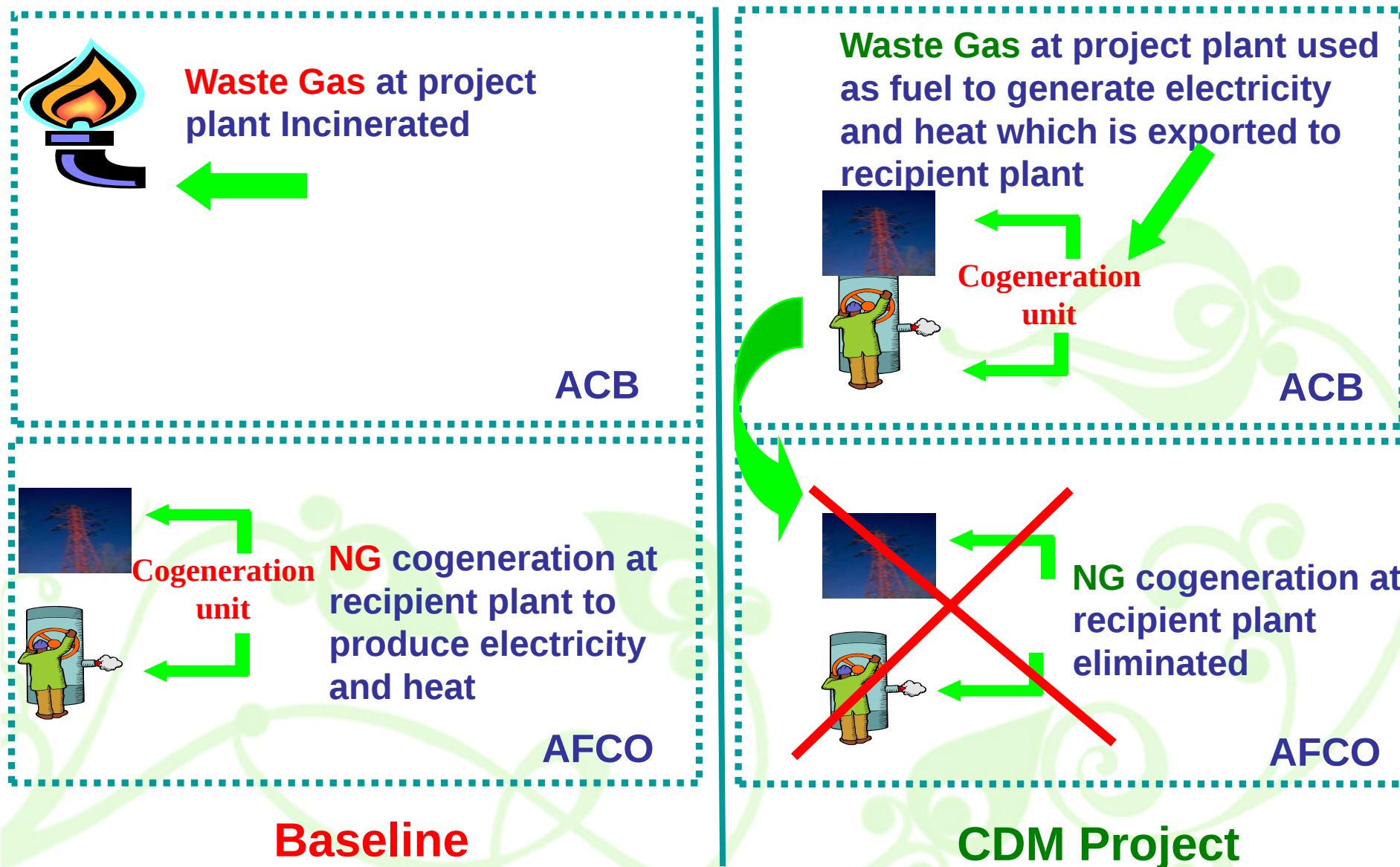


Technology to be employed by the project activity



Description of Project Activity

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Baseline Methodology

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- ***AM0032 “Methodology for waste gas or waste heat based cogeneration system ”***
- ***Developed In-house by Alexandria Carbon Black Technical Team***

CDM Project – Public Hearing

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Dr. Said Mansour ,NDA president explaining the concept of CDM projects during the public hearing about ACB's CDM Project

CDM Project – Public Hearing

ALEXANDRIA CARBON BLACK



ACB representative explaining ACB CDM project during the public hearing about ACB's CDM Project

Additionality

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- ***Simple Pay Back of Project without revenue from CDM is 16.8 years (Company benchmark is 5 to 6 years)***
- ***ROI is 6% (Company benchmark not less than 7.5% - average commercial interest rate for the last 4 years)***
- ***Project is not financially feasible without CDM***
- ***Including revenue from CDM changes Simple pay back to 5.4 years and ROI to 18.5% → Passes hurdle rate***

Duration of Project Activity

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- *Final approval by ministry of environment was on 27th November 2007*
- *Alexandria Carbon Black Company CDM project is registered by UNFCCC on 26 / 7 / 2008*
- *Expected lifetime 25 years*
- *Crediting period 7 years to be renewed*

Estimated Emission Reductions

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Crediting period for seven years, with the option of two renewal crediting periods

Year	Annual Emission Reductions in tonnes of (CO ₂ e)
2008	37120
2009	94578
2010	119044
2011	119044
2012	119044
2013	119044
2014	119044
2015	39681
Annual; average during 1 st crediting period	109514
Total Emission Reductions in 1 st crediting period tonnes of (CO ₂ e)	766599

Environmental impacts

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The project activity will avoid the emission of CO₂, NO_x, SO_x and SPM that would have occurred in the absence of the project activity since fossil fuel would have been burnt by the recipient plant to generate steam and the power. The emissions from the project activity would be the same as would have occurred if the waste gas was incinerated in the absence of the project activity. Therefore there is no additional environmental impact due to the project activity.

Contribution to Sustainable Development

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- *Avoiding green house gas emissions*
- *Enabling the country to export the natural gas which would have been combusted for power & steam generation at the recipient plant*
- *Supporting the national policy for energy conservation which opens doors for the foreign exchange*
- *Supports the National policy for sustainable development*
- *Positive impact on employment in the local area (small effect)*

Thank You