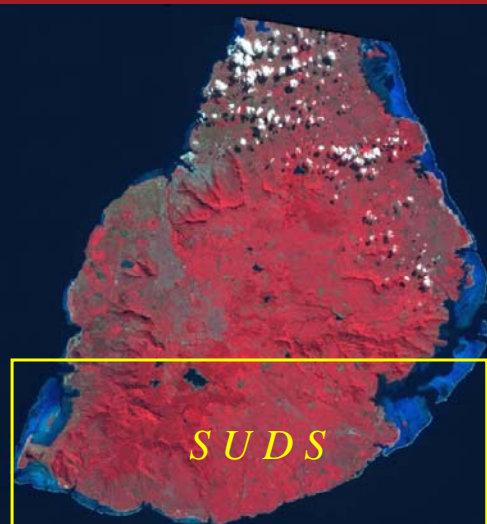




## SOCIETE USINIERE DU SUD

CANE SUGAR PRODUCTION  
&  
ELECTRICITY EXPORT TO THE  
NATIONAL GRID

## LOCATION

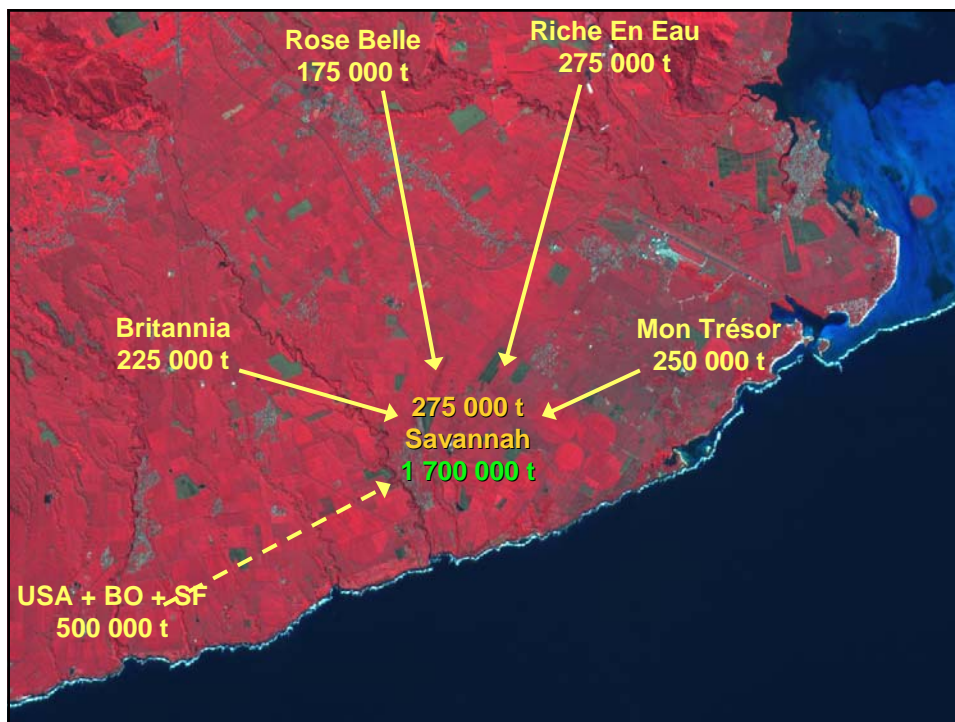


SUDS : Savannah Factory Expansion & CTSAV Power Plant Project



## Historic of SUDS

- SUDS was formed in 2002 by bringing together the assets of the major millers operating in the south of the island, namely Britannia, Mon Trésor, Riche En Eau, Savannah & Union St Aubin
- Following the anticipated drop in sugar price SUDS had no alternative but to rapidly cut down its production costs through centralisation of all its milling activities on a single upgraded mill at Savannah, working in cogeneration with an adjacent bagasse/coal power plant
- A Power Purchase Agreement was thus signed with the Utility in February 2005 for 2 lines each of 42 MW capacity to be operational in June 2007 i.e. for the start of the 2007 crushing season
- Prior to the centralisation of its milling and power production activities, all 4 SUDS mills have been engaged (over the past 10 years), in power export activities to the national grid (through cogeneration from bagasse) thanks to « continuous » power contracts signed with the Utility



### FINAL PRODUCTION PARAMETERS OF SAVANNAH

- **WT CANE CRUSHED PER YEAR** : 1,7 million tonnes
- **RAW SUGAR PRODUCTION** : 180 000 tonnes @ 98,5 POL
- **MOLASSES PRODUCTION** : 50 000 tonnes
- **SPECIAL SUGAR PRODUCTION (DEMARARA)** : 11 000 tonnes

## **PRODUCTION PARAMETERS OF FINAL SAVANNAH/CTSAV CONFIGURATION**

### **➤ CROP DURATION**

- Early June to mid-December

### **➤ ENERGY EXPORT TO GRID**

- 160 GWh from bagasse
- 420 GWh from coal

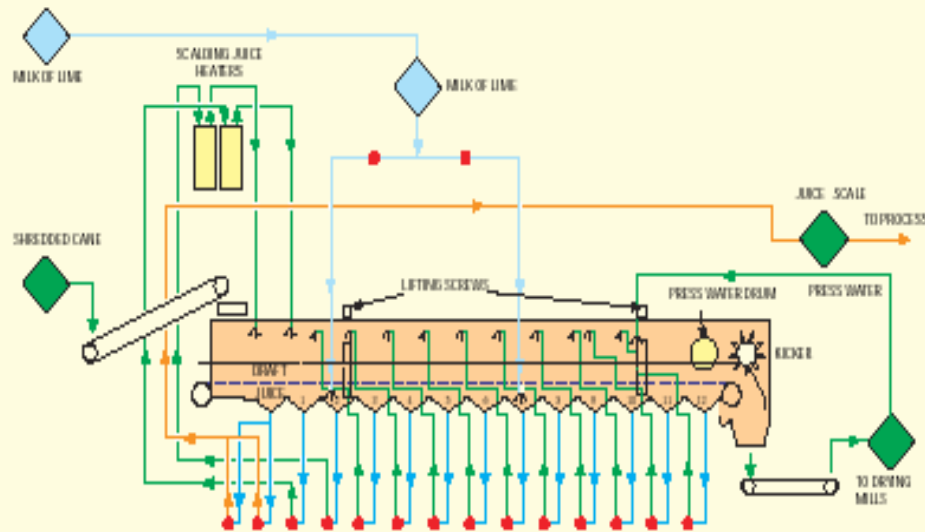
## **NEW DIFFUSER AT SAVANNAH**





## FLOW CHART OF DIFFUSER

### **FS/TONGAAT-HULETT CANE DIFFUSER PROCESS FLOW**



## NEW CONTINUOUS A & C PANS



## NEW CONTINUOUS CENTRIFUGALS



## FLEXI FACTORY FOR ETHANOL AND REFINED SUGAR

- In line with the Multi-Annual Adaptation Strategy – Action Plan 2006-2015, SUDS is also planning the development of Savannah into a « FLEXI-FACTORY » with a white sugar refinery and an ethanol plant, in order to maximize the value-added to all its products and thus be ready to face the 36% drop in sugar price in 2009
- Similarly, closure of the third SUDS mill (Union Saint Aubin) will be inevitable by 2008 and all its canes shall then be processed at the Savannah mill (further upgraded to 425 TCH)
- A third 25 MW Power Plant is required to satisfy the process and electrical requirements of the proposed Flexi factory, as well as the additional factory expansion to 425 TCH. An extension to the PPA signed for CTSAV 1 & 2 should soon be finalised with the Utility, following Government green light for the third line which is expected very shortly

## **BENEFITS OF FLEXI- FACTORY**

### ➤ **Ethanol Production**

- all year round from locally produced molasses

### ➤ **Sugar refining**

- all year round production of EEC grade 2 white sugar

### ➤ **Rhum distillery**

- up market rum production

### ➤ **Special sugars**

- Demerara and others

## **FLEXI-FACTORY POTENTIAL**

- REFINED WHITE SUGAR ( 35 ICUMSA, EEC gr. 2)

**170 000 to 150 000 tonnes**

- POWER ETHANOL

**between 12,5 and 30,0 millions litres**

- SPECIAL SUGARS

**according to requirements**

## CTSAV POWER PLANT

### ► ENERGY COGENERATION

Factory supplies bagasse to Power Plant  
in return, factory receives electricity and  
process steam requirements

### ► POWER EXPORT

Excess electricity exported to the  
national grid

~ 78 MW during the crop season (bagasse)

~ 90 MW during the intercrop season (coal)





## **BAGASSE CONVEYOR TO CTSAV**



## **PRODUCTION FIGURES OF THE CTSAV BAGASSE/COAL POWER PLANT**

- All lines operational 8 000 hours per year
- First 2 lines operational in June 2007
- Third line operational in 2008
- Estimated yearly electrical energy export :  
600 GWh
- of which 31% (182 GWh) is from bagasse
- Annual Fuel requirements of the Power Plant :
  - 510 000 tonnes of bagasse
  - 250 000 tonnes of coal

## SUDS FINANCIAL IMPLICATIONS

The estimated SUDS centralisation and rationalisation costs are the following:

|  | € Million  |
|--|------------|
| Savannah mill upgrade                          | 25         |
| MT, REE, USA and St Felix social closure costs | 20         |
| CTSAV 1,2 & 3 power plants                     | 140        |
| White sugar refinery                           | 11         |
| Ethanol distillery                             | 10         |
| <b>TOTAL</b>                                   | <b>206</b> |



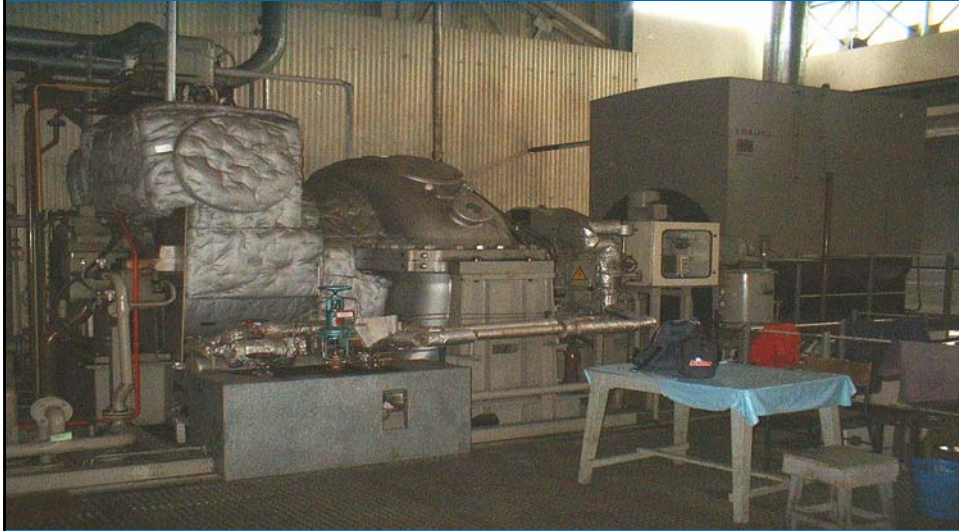
**Société Usinière du Sud**

**THANK YOU**



**Maîtriser L'Avenir**

RICHE EN EAU 6 MW FULLY CONDENSING SIEMENS TA

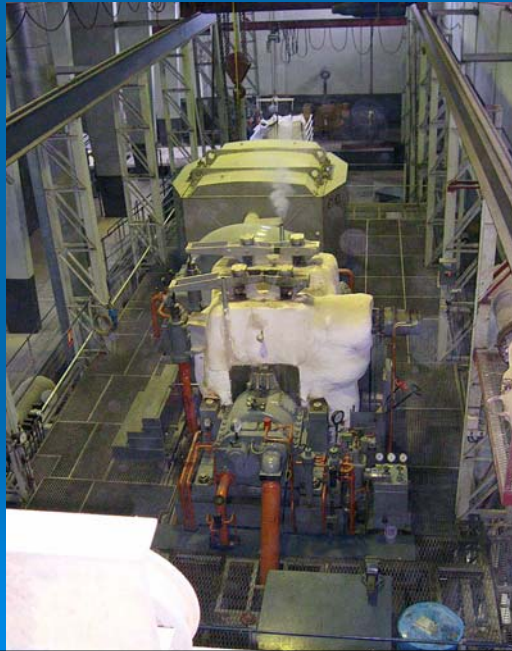


REE BACK PRESSURE 4 & 1.5 MW TA'S

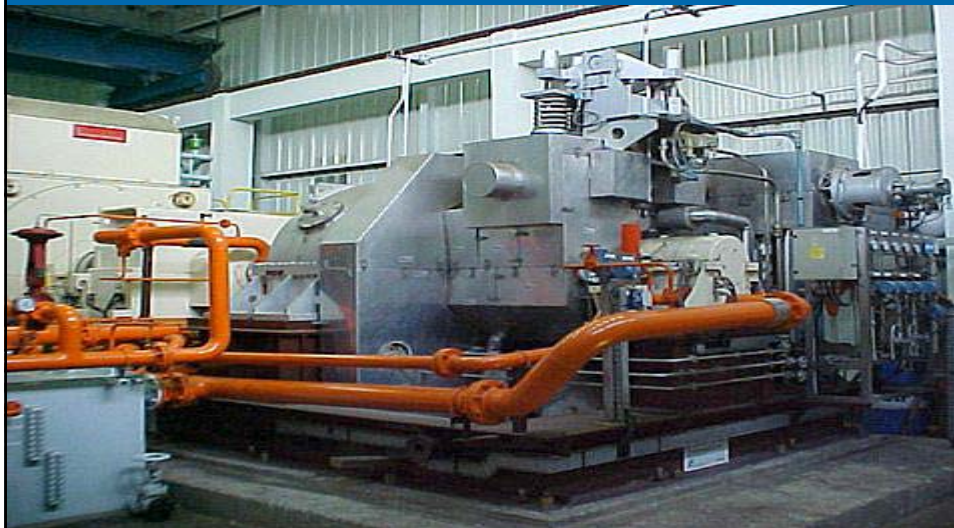




MTMD 11.5 MW CONDENSING PASS OUT SIEMENS TA



SAVANNAH 15 MW CONDENSING/PASS OUT THERMODYNE TA



USA 12.2 MW BACK PRESSURE PETERBROTHERHOOD TA



BAGASSE STORE AT USA





**CTDS 30 MW FULLY CONDENSING COAL FIRED POWER PLANT**



**NEW VERTICAL CRYSTALLISERS**

