



CDM Project at Abu Zaabal Fertilizers & Chemicals Co.



Current Production Capacities

Plant	Name plate Capacity
Sulfuric acid (Unit 5)	83,000 ton/ year
Sulfuric acid (Unit 6)	208,000 ton / year
Cogeneration (Unit 6)	6 MWhr
Single Super Phosphate (SSP)	400,000 ton/ year
Triple Super Phosphate (TSP)	180,000 ton / year
Phosphoric acid	72,000 ton / year
2 Granulation Plant (Units 400 &500)	300,000 ton / year



Conventional Energy Production

Natural Gas or Heavy oil + Oxygen  Heat + CO₂

HEAT  BOILER  STEAM

STEAM  TURBINE  ELECTRICITY



CO-GENERATION PROCESS

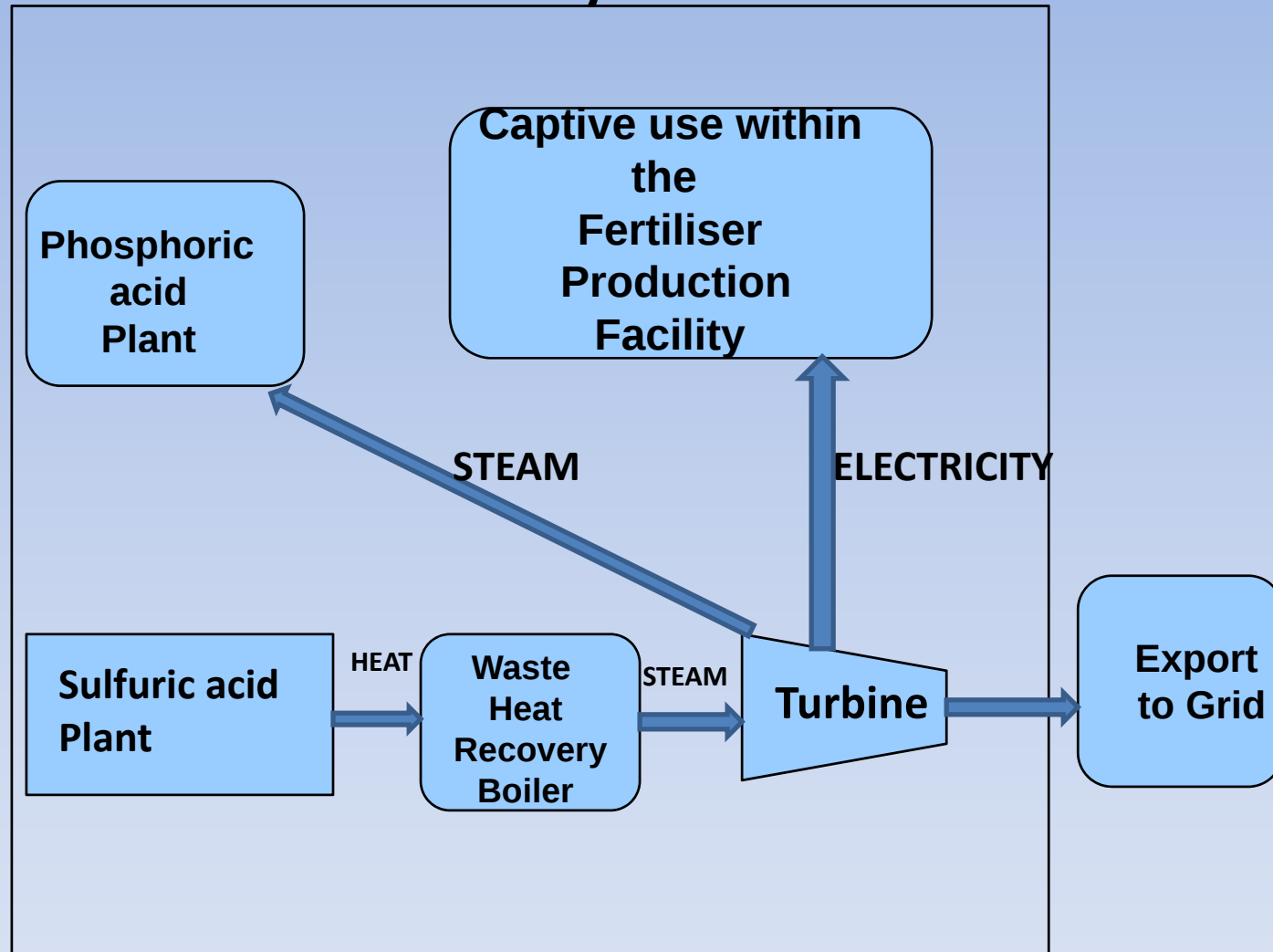
SULFUR + OXYGEN → SULFUR DIOXIDE + HEAT

HEAT → WASTE HEAT BOILER → STEAM

STEAM → TURBINE → ELECTRICITY



Plant Boundary





The project activity will achieve Green house gas emission reduction on two fronts:

Substituting grid power for internal use by utilizing otherwise wasted heat generated from their sulfuric acid production process, thus replacing carbon intensive grid power

By generating steam from waste heat recovery boiler thus replacing natural gas combustion boilers to produce the same amount of steam

The annual estimated emission reduction in tons of CO₂ equivalent is 60,000



Baseline Scenario

Of the total 15 MWhr electricity production. 5.5 MWhr electricity is part of the baseline. However, in absence of the project activity, 9.5 MWhr electricity would have been drawn from the grid. Since grid electricity is available to Abu Zaabal fertilizer complex, this is the most likely baseline scenario since grid electricity is readily available and would not require any additional capital expenditure requirement.



Baseline scenario for steam generation:

The steam demand at the phosphoric acid manufacturing facility within the fertiliser production complex in the baseline is being met by natural gas in the baseline. In absence of the project activity the project could have continued with the existing practice of natural gas combustion in the boiler to meet the steam demand since natural gas is readily available in the region. This would not have required any investment and would have been the most likely baseline scenario.



ROAD TO CER REGISTRATION

- Grant from EEAA to formulate the Project Idea Note (PIN) and Project Design Document (PDD) which was put on Egyptian DNA website and offered project exposure worldwide
- Interested buyers included:
 - Ecosecurities
 - European Carbon Fund (ECF)
 - Mitsubishi
 - MGM
 - EDF Trading
 - CO₂



- Signed CER Purchase agreement with EDF Trading
- PDD is currently in the validation process.
- CER registration from the UN is expected in three months



THANK YOU

