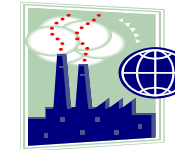




Algae for Biofuel from CO2 Pilot Project



Problem/Reason :

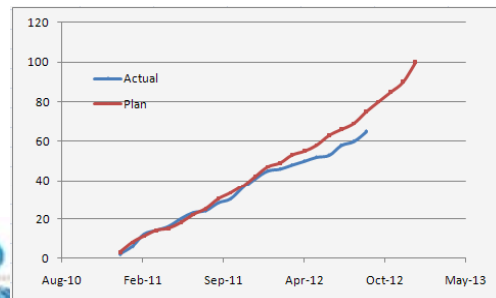
- From GHG reduction target, CO2 utilization is one of the management method.
- Among plants or other biomass, advantages of algae overwhelms this issue by growing algae which consumes 2 times of carbon dioxide from their weight. This could be greenhouse gas mitigation benefits.

Target:

- Commissioning Pilot scale at PTT-GSP from **≥ 240,000 L working volume.**

Progress:

Diff to plan Oct 2012 = 10%.



Green algae species, known as "Botryococcus" from 200,000 m3 pond at PTT GSP is considered to this application because they have potential to produce huge amount of biofuel (yields ~ 40%) per acre per year of production from CO2 consuming.

Screening algae species and investigating optimum conditions for algae growth rate by PTT-RTI.



Construction Pilot scale phase 1

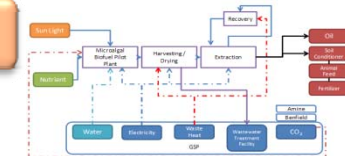
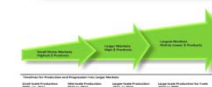


Result



Construction pilot plant (phase1) at GSP. Expected algae mass cultivation ~ 500-1000 kg/yr and oil yield ~ 10,000-20,000 L/yr

Next Plan



Construction completion within 2012. and Factory Acceptance Test (FAT)