



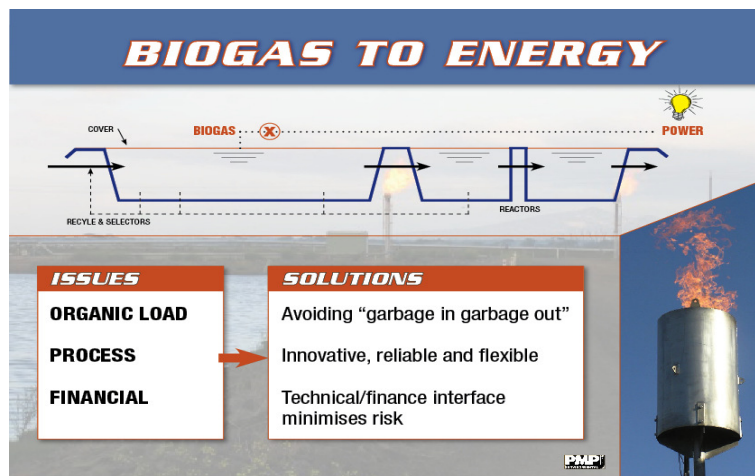
### Case Details

PMP Environmental have built a methane recovery plant at the Tapioca Starch Plant in Sumatra, Indonesia. The impact of Greenhouse gas emissions and rising energy costs were the impetus for the Tapioca Starch Plant to look for a solution to these environmental issues.

PMP Environmental Australia has long been involved with biogas generation and the requirements to make this a viable proposition for a range of projects. Their solution was to build a methane recovery plant.

### Key Requirements

- Easy data retrieval
- High accuracy
- Calculations performed in real-time
- Reliable data storage



**Bio Energy:** A graphical overview of the biogas generation process.

### dataTaker DT80

- 1 A cost effective data logger expandable to 100 channels, 200 isolated or 300 single-ended analog inputs
- 2 Built-in web and FTP server allows for remote access to logged data, configuration and diagnostics
- 3 Modbus slave and master functionality allows connection to Modbus sensors and devices and to SCADA systems
- 4 Smart serial sensor channels capable of interfacing to RS232, RS485, RS422 and SDI-12 sensors
- 5 Rugged design and construction provides reliable operation under extreme conditions
- 6 Includes USB memory stick support for easy data and program transfer



### dataTaker Solution

#### Equipment

dataTaker DT80 data logger  
USB Memory Stick

#### Sensors

Gas flow sensors

#### Implementation Notes

The wastewater from the starch plant is being pumped into aerobic ponds where the methane gas is harvested and used to drive generators that provide the electricity to power the plant. The dataTaker DT80 data logger was chosen for its flexibility, ease of data retrieval and intelligent calculation capability. The DT80 data logger monitors the gas collected from the ponds, the amount used to power the generator and the amount burnt by the flare. These values are required by the governing body as evidence of the gas saved and used to determine the number of carbon credits to be allocated. The DT80 also monitors the run time of the gas blowers and runs calculations based on this data for maintenance, efficiency and power consumption.

As a result of PMP Environmental's efforts, 250,000 tonnes of greenhouse gas per year is being saved and the carbon credits can then be sold on the open market, currently for about US\$25 per tonne.