Multi-Utility Metering Solutions
Preparing a site for a remote meter reading system

Integrating an automated remote meter reading solution into a site enables developers, building owners, facility managers, billing service providers and body corporate’s to easily access energy and utility data for management billing and compliance reporting.

Multi-Utility metering involves installing remotely read metering at strategic points in your utility and energy supply lines to measure usage of electricity, gas and water.

In most cases Metering Dynamics can connect to an existing main, incoming water or gas meter to obtain usage data for an entire site. Metering Dynamics multi-utility metering solutions create an automated process from which the customer receives timely, accurate and reliable data. Data can be provided in 15 and 30 minute intervals or by cyclic consumption (3 monthly for example). Metering Dynamics collects the data from these meters and processes it through our data validation and warehousing system resulting in accurate and validated data.

**Sub-metering comprises three core elements:**

1. A pulse capable utility meter – turns meter flow into pulses.
2. A data logger to collect the pulses generated by the meter.
3. A communications link to enable the data logger to be remotely read.
To get the best from a remote meter reading system consideration should be given to the following at the earliest possible stage of development or refurbishment:

- **Location - What do you want to report on?** - Answering this question will help you to determine where you want to locate the sub-meters that will provide you with the information you seek.
  - Meter reading solutions are available for meters located within a building as well as meters that may be located external to the building – in car parks, on boundary lines etc.

*Giving you the ability to measure energy and utility consumption across your site*
- **Capable - Ensure all meters are pulse capable** – A pulse capable meter will provide you with the options you need to translate the flow of gas or water into information.
  - As standard most Utilities install basic, non-pulse capable meters as the main incoming meter, you will need to specify to them that you require a pulse capable meter.
  - This is also a requirement when installing sub-meters throughout the building; however it will most likely be the plumber or developer that will need to ensure meters are pulse capable.

An example of a gas meter with pulse outputs

- **Access** – Where feasible it is recommended to install pulse capable sub-meters in locations that are easy to access, but are also secure.
  - Try to avoid installing meters within individual tenancies, as this may hinder future access to the meters for face reads, maintenance work and asset management. If possible group your meters together, as this could help to reduce the cost of a reading system.
  - Meters should be located in secure areas to prevent tamper and vandalism – meters with pulse cables protruding are susceptible to attack.

- **Power** – Most remote meter reading systems will require a local power source, so wherever you install a main meter, sub-meter or group of sub-meters, consider installing a 240v power point nearby to power the logging system.
This is particularly relevant to meters located externally. If not feasible meter reading solutions using battery or solar power will need to be used.

Gas Specifics -

- Installation of gas meters is heavily regulated for safety and meters will need to be installed according to State and Federal regulations and standards, such as AS2381 and AS61241 for metering installed in hazardous areas.

- Remote meter reading systems will need to be connected to gas meters through Intrinsic Isolation Barriers. These devices are supplied at the time the remote meter reading system is installed and can be supplied with the system, or by the gas utility.

Metering Dynamics offers a number of remote meter reading solutions for reading gas and water sub-meters. For more information please visit: www.meteringdynamics.com.au