

# Omnenergy

Technology  
to manage  
Energy



## Corporate Overview



a trusted name  
in energy  
management

**OMNIFLEX** has been designing and manufacturing electronic products and systems for the automation and control industry since 1965.

Through our world wide partner network, we specialise in providing solutions to industry in the fields of Remote Data Acquisition and Control, Alarm and Event Management and Energy Management.

Omniflex has been providing systems for energy management since the 1980's with load shedding for specialised billing tariffs, profiling, plant condition monitoring, peak lopping, remote monitoring and real-time alarming.

Solutions provided have ranged from supermarket monitoring, hotel load control, to load-shedding and maximum demand control for the world's largest gold mine.

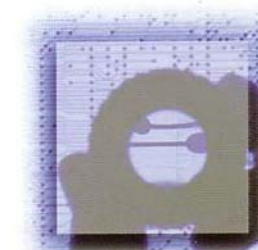
These proven solutions are being relied upon every hour of every day by major corporations around the world.

An investment in solutions that carry such a large responsibility requires confidence in our track record, and the continued expansion of some of the world's giant industries using OMNIFLEX technologies, is sufficient testimony to this support.

Don't ask us – ask our loyal customer base.

[www.omniflex.com](http://www.omniflex.com)

*your link to reliable solutions  
in energy management.*



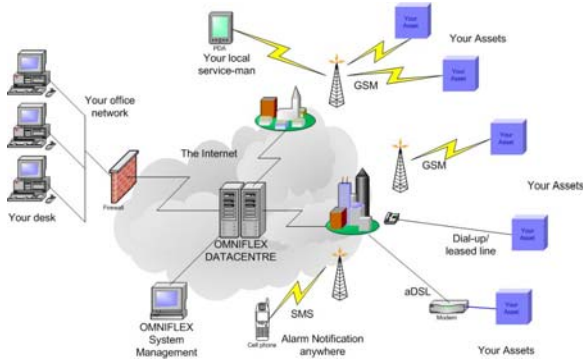
# STRATEGY

*Be environmentally responsible and more profitable*

## Sustainability

The growth in the world's human population and advances in lifestyle have brought with it enormous pressure on the resources of our planet. At current trends, world energy consumption is set to rise by a further 70% in the next 20 years, potentially threatening our very existence.

It is incumbent upon every enterprise to adopt a responsible approach to the conservation of energy and progress toward a more sustainable existence.



## Benefits

Apart from obvious social benefits to society, increases in energy efficiency lead to significant cost reductions that provide an immediate payback.

There is an increasing amount of legislation to manage and reduce energy consumption. Demonstrating compliance and corporate responsibility can be a competitive advantage in marketing your products and services.

**And it makes good business sense.**

## How?

Fundamental to any control is the ability to **measure**. Knowing where your energy is being consumed is the first step.

Once you know where your energy is being utilised you can analyse the information and **manage** this consumption, and eliminate waste.

Managing your consumption to increase efficiency allows you to **save** wasted energy and increase profitability.

**Measure → Manage → Save**

## Who can Help?

Omniflex has developed technology to allow remote metering, aggregation and analysis of water, air, gas, electricity and steam ("WAGES") and integrated these technologies into a package that is easy use called **Omnenergy**.



**Omnenergy** is a web enabled service that integrates through Omniflex remote gateway products with your existing metering infrastructure to create a user friendly management tool for energy management and control.

The result is that consumption patterns and cost information can be delivered across the enterprise allowing the reduction of energy consumption and an increase in profitability and sustainability.

## SOLUTION

# Data to your Desktop...

### Measure

Effective measurement of energy requires real-time profiling of usage over consumption periods to enable analysis.

This requires automated meter reading over the enterprise and aggregation of the data from each utility for presentation and analysis at the point of control.

Remote meter reading over industrial sites, commercial buildings and campuses can be a challenge. In many cases, existing metering infrastructure is in place that requires interfacing.



**Omniflex** have years of experience in industrial networking, remote monitoring and energy management, utilising a variety of the latest communications solutions including mesh radio networking, local area networking and GPRS (mobile phone) communications to acquire utility metering data and communicate readings to the point of control.

### Manage

The geographic spread of metering infrastructure to be managed from potentially multiple locations makes a web based solution ideal.

**Omnenergy**, as a web enabled service, provides an end-to-end solution for energy management, working in conjunction with your existing metering infrastructure, to provide historical data storage, visualisation and control for building owners, operators and tenants alike.

Using any web browser, energy consumption patterns and historical data are accessible to authorised users, providing alarms and reports to optimise consumption and apportion costs.

**Omnenergy**  
Technology to save Energy



## SOLUTION

*...from  
trusted  
partners*

### **Omniflex**

Omniflex is a leading provider of web based solutions for remote monitoring and control over very wide areas.

We combine our extensive in-house industrial measurement, control, communications and energy management expertise and experience with partnerships from the telecommunications and IT sectors to bring you a complete end-to-end solution for energy monitoring and control.

By providing timely information about your consumption and usage patterns, Omniflex assists you to prevent wastage and uncover savings.



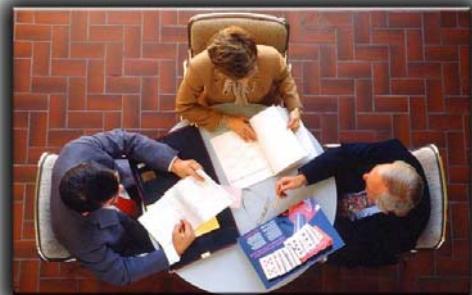
### **Real Cost Savings**

A partnership with OMNIFLEX in the implementation of an **Omnergy** based energy management solution can create lasting benefits for your organisation. Enterprises that are actively managed their utilities consumption, are typically reporting cost savings from 5 to 20%

Ask about the competitive advantage that a **Omnergy** solution from **OMNIFLEX** can provide.

### **Useful Tips to Save**

- Provide timely energy information to users
- View consumption patterns over time
- Compare similar sites
- Define usage profiles and set alarms
- Introduce load-shedding in peak periods
- Aggregate consumption to discover loss.
- Correlate usage with weather patterns



# APPLICATIONS

## Tenant Sub-Metering



### Why Sub-Metering?

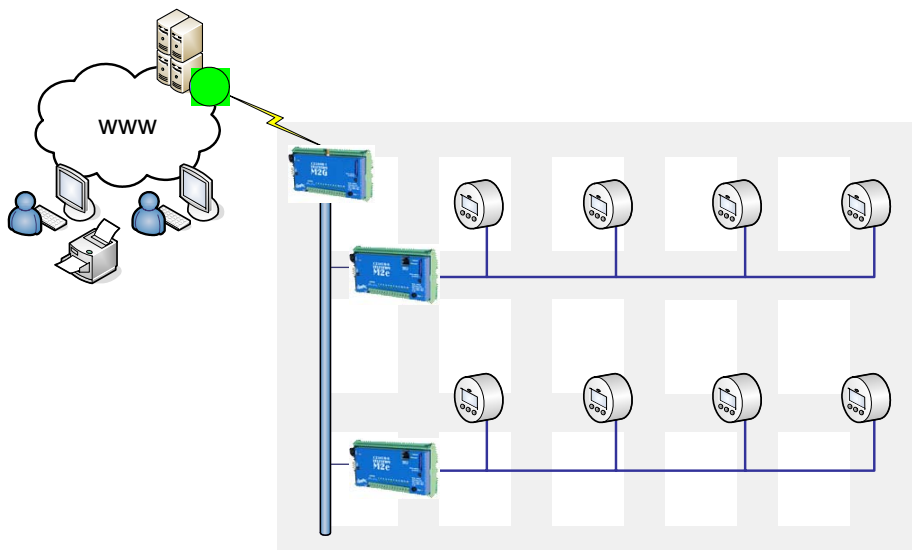
Utility sub-metering is the implementation of a system that allows a multi-tenanted property manager to bill tenants for individual measured utility usage. Individual water, gas, or electricity meters are deployed to measure individual tenant usage.

But this falls short of the optimum operational savings that can be achieved if the individual tenants cannot monitor their own usage in real time.

An **Omnergy** solution can be installed in new or retrofit sites, with new or existing meters, compatible with existing management systems, to provide this real time access to the individual tenants via their own secure web access without interfering with the normal building operation.

Because **Omnergy** is a service, capital costs are reduced to a minimum and energy management costs can be paid for directly out of savings.

- Enables billing by actual usage
- Allows real-time monitoring of usage by each tenant
- Provides SMS alarms if targets are predicted to be exceeded
- Overlays any existing metering infrastructure
- Easy access to energy consumption promotes savings



An Omnergy system for tenant sub-metering

# APPLICATIONS

## Industrial Energy Management



### Be more Energy Efficient

Manufacturers are scrambling for relief from today's rising energy prices and pollution taxes. Often this effort is focused on ensuring the lowest prices rather than looking to manage for optimum use of the energy. Apart from the social responsibility, this increased efficiency translates directly to the bottom line. Real Case studies have shown savings in the range of 10 - 30% when energy is actively managed.

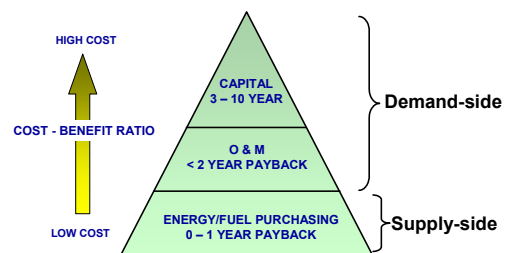
New international standards such as ISO 50001 are in development that will provide a framework to manage energy. Companies will be judged on their ability to meet these energy management standards.

Effective energy management is mostly about HOW energy is managed. Energy must be managed by operational staff like any other valuable input. Timely Information must be available to facilitate this active energy management, to prevent waste before it occurs.

An **Omnergy** solution with Omniflex' considerable expertise in industrial plant communications can facilitate the gathering and distribution of energy consumption data cost effectively.

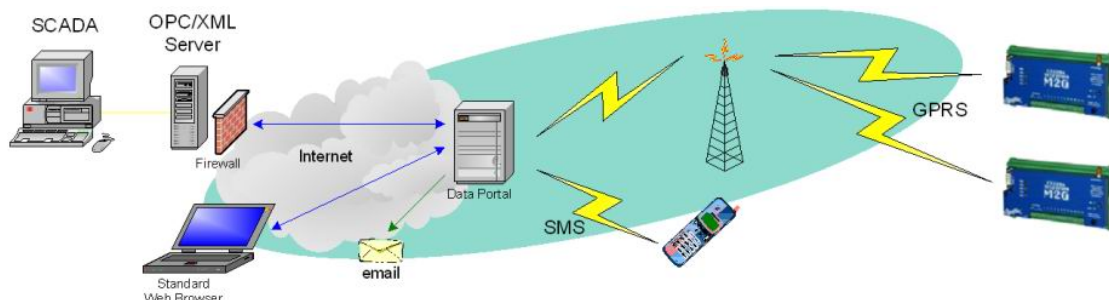
Because **Omnergy** is a service, capital costs are reduced to a minimum and energy management costs can be paid for directly out of savings.

- Enables departmental allocation by actual usage
- Allows real-time monitoring of usage by each cost centre
- Provides SMS alarms if targets are predicted to be exceeded
- Overlays any existing metering infrastructure
- Provides consolidated reports against target to management



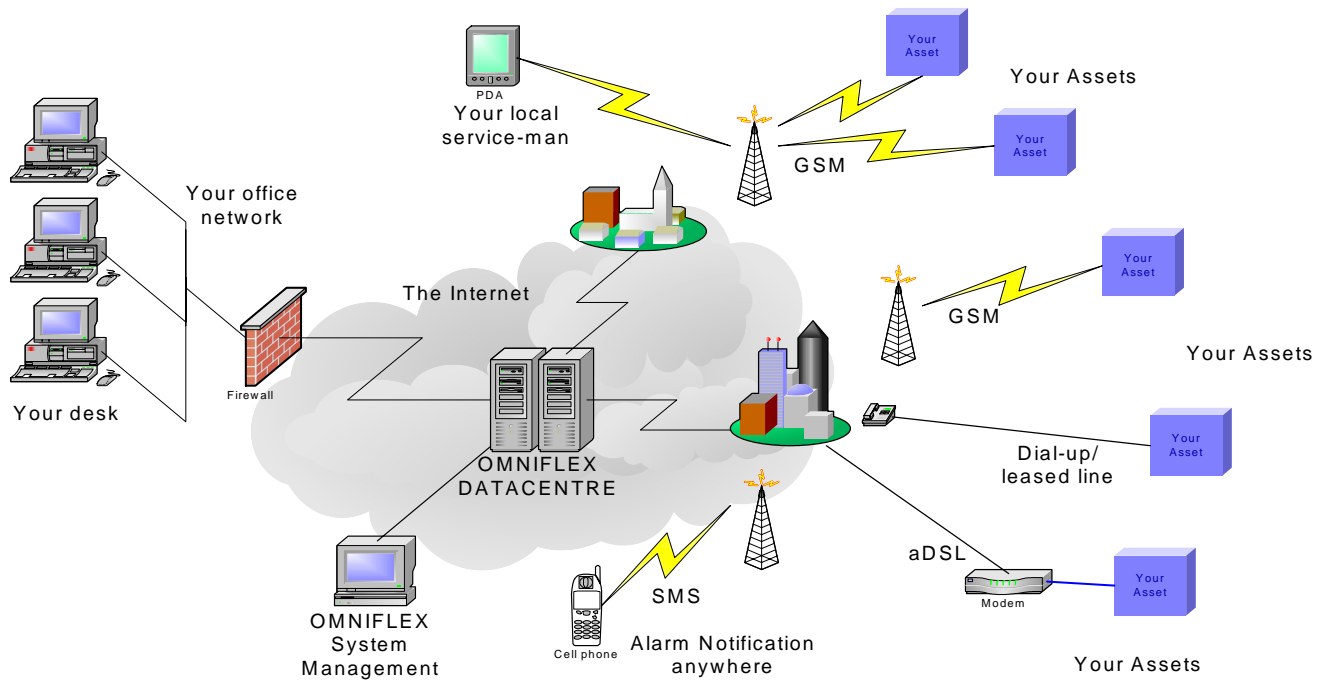
**Move up the opportunity hierarchy**

Courtesy of Bill Meffert, Georgia Institute of Technology



# Geographic

The Technology Framework for enabling effective Energy Management



## Remote Utility Metering with Web-based Management Tools

### Features

- Low infrastructure overhead costs
- Real-time automated updates
- Web based access tailored to each user

### Applications

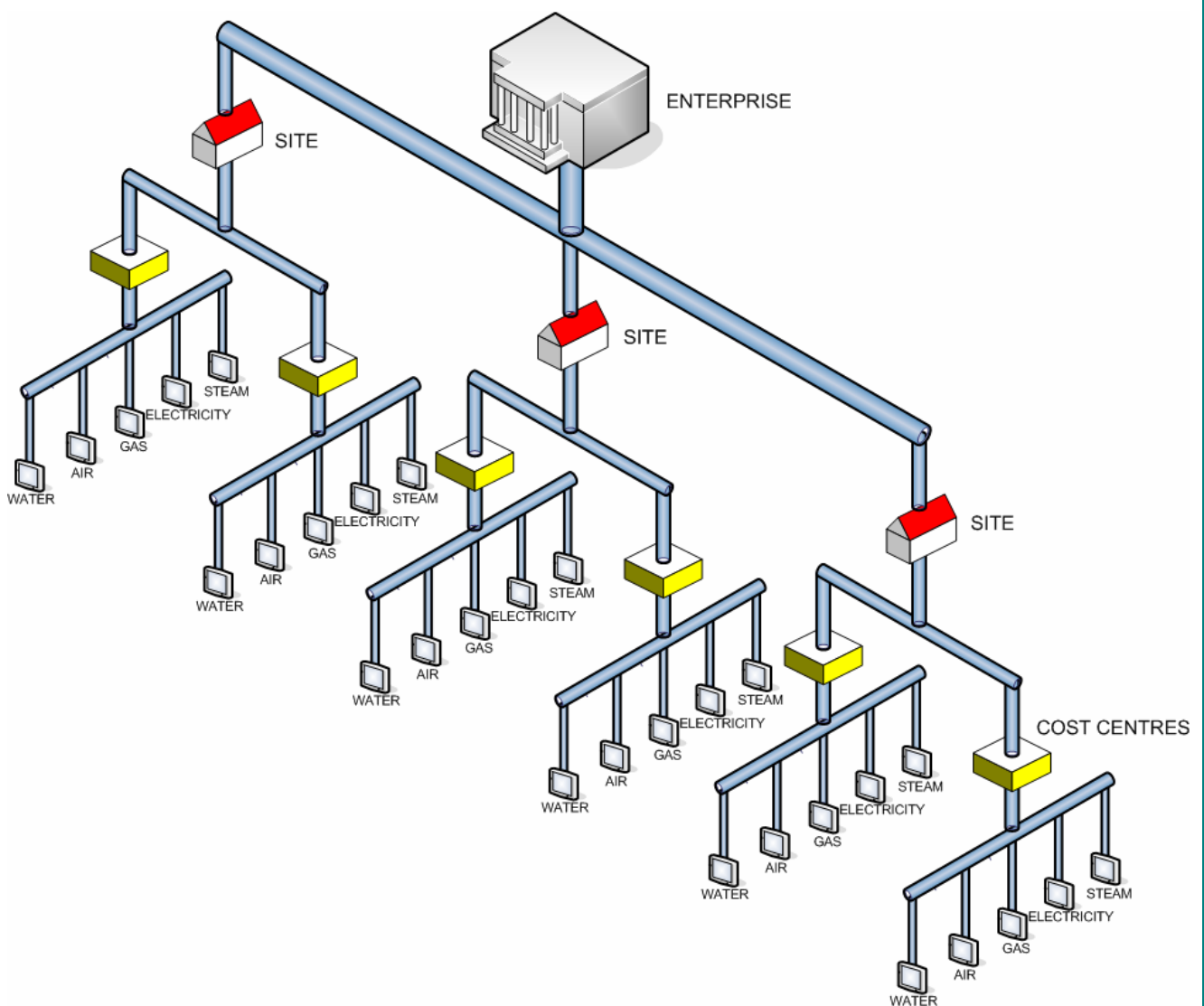
- Energy Management of wide areas
- Sub-metering across enterprises
- Assists enterprise carbon footprint reporting



# ARCHITECTURE

## Organisational

The Organisational Framework for enabling effective Energy Management



[www.omniflex.com/d2d](http://www.omniflex.com/d2d)



*Solutions by Design*