



# AT A GLANCE

DELIVERING SIMPLIFIED BUSINESS INTELLIGENCE

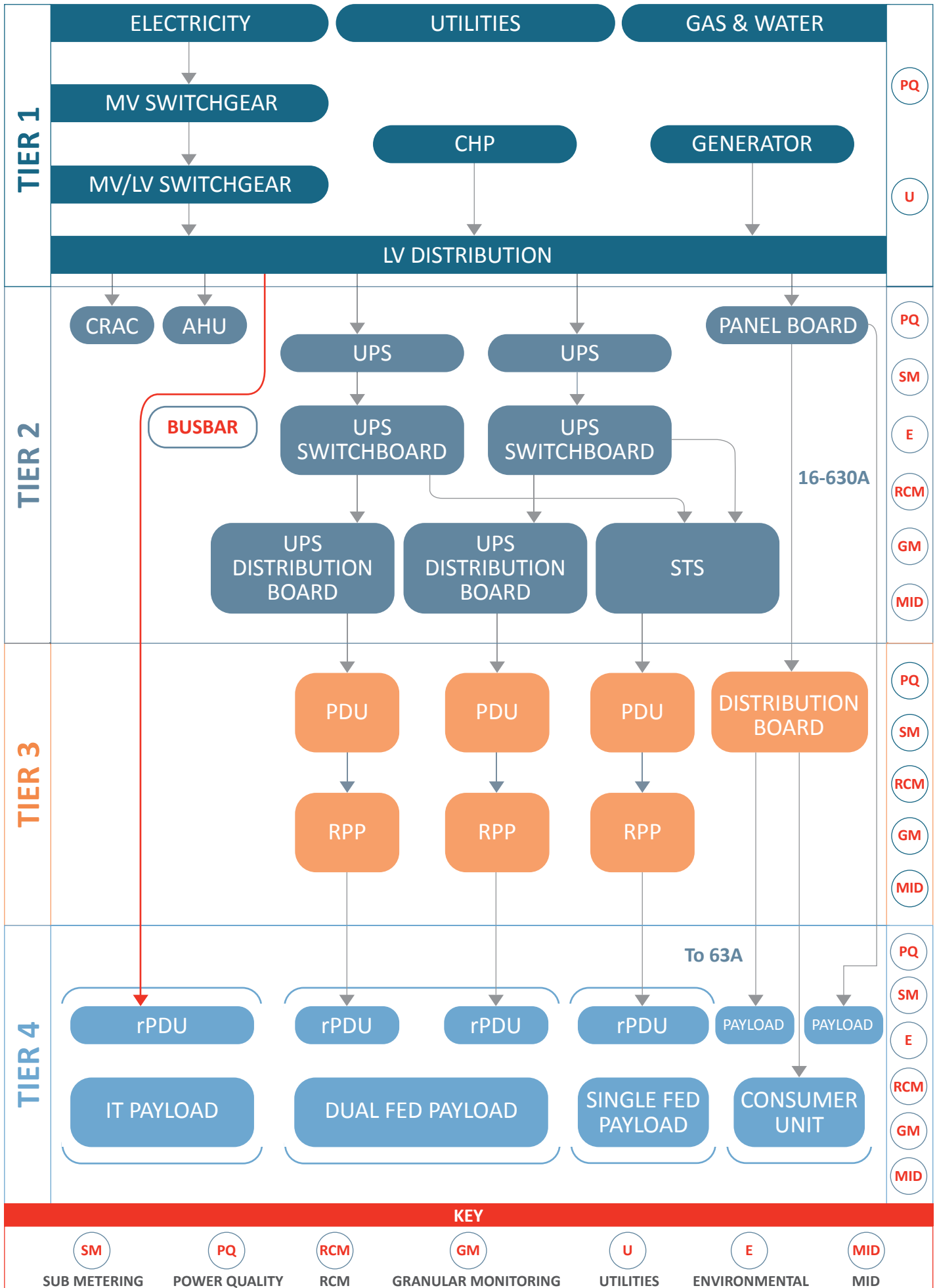
# MPL SUSTAINABILITY AND DECARBONISATION PROGRAMME

MPL Technology Group has been at the forefront in the provision of power, energy and environmental monitoring solutions for critical environments across a wide and diverse range of industries. MPL's widely deployed technology has the capacity to monitor and manage in excess of 18 billion kWh of energy per annum.



ESTATE WIDE SOLUTIONS  
MONITOR | UNDERSTAND | MANAGE

# MPL 4-TIER APPROACH TO EPMS





# OPERATIONAL EFFICIENCIES

Through the delivery of a wide portfolio of measuring devices, each one offering industry leading accuracy, coupled with the ability to centralise and visualise data collection, MPL provide a truly holistic view across the entire estate from building point of entry through to an individual payload. This empowers the client to make informed decisions to drive operational efficiency, whilst reducing associated costs and enhancing business resilience. MPL identifies when and where energy is consumed across the entire Electrical Power Management System.



# EPMS

The MPL Electrical Power Management System (EPMS) will monitor, manage and report on the end to end electrical power distribution network. The EPMS will provide a complete insight into real time energy consumption and trended data. Furthermore, by providing detailed analysis and reporting on power quality and other important metrics, clients are able to optimise energy use and identify opportunities to reduce electrical power consumption and protect/prolong the life of the infrastructure.



# POWER QUALITY

Circa 30-40% of business downtime is being caused by power quality disturbances, accounting for 4% of the annual turnover in the industrial sector. It is therefore imperative that power quality parameters such as Power Factor and Harmonics, are regarded as an integral part of any Energy Management solution. Healthy power quality will drive the reduction in the power requirement from the utility provider, increase site wide efficiency whilst reducing losses, extend the life of equipment and save money. Achieving unity in power factor will reduce kVA demand and associated standing charges. A power factor of 0.8 equates to 20% wasted electricity. MPL advocate that as a minimum, organisations should implement a power quality metering and monitoring strategy of the incoming power feeds.

## RCM

Detects current leaking outside its normal circuit path (ie phase and neutral wires). Current flowing in the earth cable (or other path to earth) presents a significant safety hazard (electrocution and fire). The RCM solution from MPL monitors residual/fault current in 'real time' and alerts when thresholds are exceeded. Continuous system residual current monitoring is an acceptable alternative to the costly periodic inspection shutdowns and testing. The MPL RCM solution will deliver optimised maintenance, increased fire protection, improved economic efficiency and higher operational and system safety.

## ENVIRONMENTAL MONITORING

As part of its estate wide monitoring of environmental parameters, MPL can integrate a highly accurate and calibrated range of monitoring devices to provide the highest levels of environmental and air quality monitoring. They are designed to continuously monitor for temperature, humidity, airflow, smoke, leak detection and essential air quality parameters including a range of harmful gases, VOCs and particulate matter. Each device continuously measures factors critical to knowing if the indoor air is healthy for occupants and will assist facility management meet voluntary performance standards (such as LEED and BREEAM).

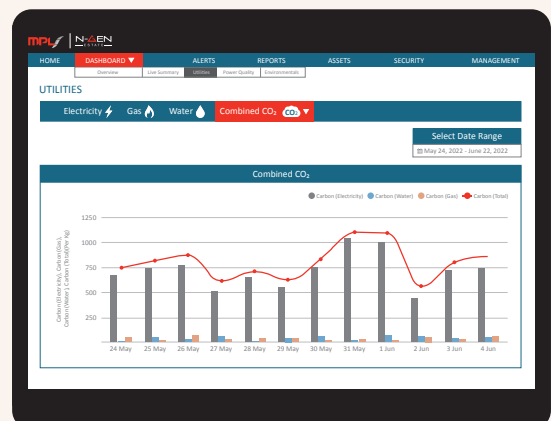
## CENTRALISED REPORTING OF UTILITIES

MPL, via its N-GEN Estate platform, centralises the data collection and reporting of all utilities including electricity, gas, water, heat, steam and fuel oils. The client has full visualisation of where and when energy is consumed, total consumptions and the granular monitoring of plant equipment, sub distribution and individual payloads. Real time, exploratory/forecast and historical reporting coupled with real time alerting/alarming and exception reporting, provides the necessary business intelligence to allow clients to make informed decisions across the entire estate.



## CARBON REPORTING

Carbon dioxide is expected to be responsible for about two thirds of the anticipated future global warming. Many countries are now making carbon reporting mandatory, impacting all businesses large or small. This increase in legislation is driving organisations to report their global energy use and greenhouse gas emissions. MPL, through its Estate Management Programme, can centralise the collection of data across multiple client locations to seamlessly report on consumptions, efficiencies, trends and exception reporting. N-GEN Estate provides date range driven graphical and tabular reporting to support a more sustainable, efficient, and productive way of doing business.



# ESTATE MANAGEMENT BY MPL TECHNOLOGY GROUP

We define an Estate as the collective name for all client's facilities which contribute to their overall power and energy consumption.

Our Estate Technology Energy Programme provides a fully integrated power, energy and environmental management solution, delivering a holistic view of the estate from the building point of entry through to individual payloads.

The key elements of our solution support Sustainability, Decarbonisation and Energy Efficiency programmes across single or multiple site locations.

---

## VISUALISATION AND REPORTING VIA N-GEN ESTATE

Our N-GEN Estate platform provides the visualisation of highly accurate real time and historical reporting information combined with instantaneous alerting across the entire estate.

N-GEN Estate centralises information across the EPMS infrastructure offering site wide views of utilities, total consumptions and the granular monitoring of plant equipment, sub distribution and individual payloads. Power Quality reporting is an integral part of the reporting capabilities of N-GEN Estate.

N-GEN Estate adopts a multi-tiered approach to visualisation and reporting of an estate to facilitate and meet the needs of multiple roles within an organisation from Board Level reporting requirements through to more granular operational day-to-day management information.

N-GEN Estate provides the single pane view for clients which can be deployed as an on-premise or Cloud based solution.



Delivering Simplified Business Intelligence

