



ENERGY, WE HAVE YOU COVERED.

ENERGY MANAGEMENT SYSTEM.

WHITEPAPERS

FOR THE WORLD OF INDUSTRIAL
/COMMERCIAL ESTABLISHMENTS.

AUTHORS



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AUTOMOBILE



BUILDING



ELECTRIC



TEXTILE



CEMENT



POWER PLANT



WHAT'S INSIDE?

- What is Energy Management?
- Why is This Important?
- What's The Snag?
- A Comprehensive System From the Cloud & in the Cloud
- Elmeasure Approach
- Features that Result in Sustainability
- A Cognitive & An Intuitive Solution - Architecture
- Meet EL-Net EMS - For all Your Energy Related Issues.
- Screenshots
- Energy Billing System
- Conclusion

WHAT IS ENERGY MANAGEMENT?

A process to measure, monitor, save & see the energy consumption & losses in detail. Either general consumption by residential, enterprises or by machines in manufacturings & additional wastage from the mundane assets, see every data on screen & let the system provoke you the action.

WHY IS THIS IMPORTANT?

"Because It is a part of everyday life & will be in future."

Energy is consumed by many living, non-living, tangible & Intangible things on the planet. But, there is no limit or barricade to its consumption until it was mandated. Businesses with more financial support can pay more & consume more but after some point of time, there will be a gap until it was

WHAT'S THE SNAG?

Machines consume a lot of energy & the new living trends are completely incapable without power. In such a scenario, there is a mere requirement for tracking every unit of energy consumed & every unit to be saved wherever possible.

A cognitive system that is connected to the complete system & analyze every flow of the energy eventually recognizing the malfunction, additional consumption, comparisons, etc.

- Monitoring multiple modules is very complicated & consumes a lot of time.
- Machine depreciation lead additional energy consumption than usual & recognizing the bottlenecks is the heck of a problem.
- If the problems were recognized, need the controlling steps to face the issue at the earliest.
- A continuous check & recheck on the consumption patterns for the predictive maintenance would be an advantage.
- Analysis & data reports for the change in savings, Losses & RoI
- All together as a comprehensive system with greater user interface, easy to maintain & at the reliable cost

Energy is central to nearly every major challenge & opportunity that world faces today. It demands a Comprehensive System

OUR > APPROACH.



Monitor



Communicate



Data



Save



Control



Analyze

FEATURES THAT RESULT SUSTAINABILITY.



CLOUD HOSTING

Remote monitoring
& Controlling



ASSET MONITORING

tailor-made user-
friendly dashboard



AUTOMATE

Reduced human
dependency



ENSURE UP-TIME

Get on screen
Email/SMS alerts



ANALYZE BETTER

improved insights

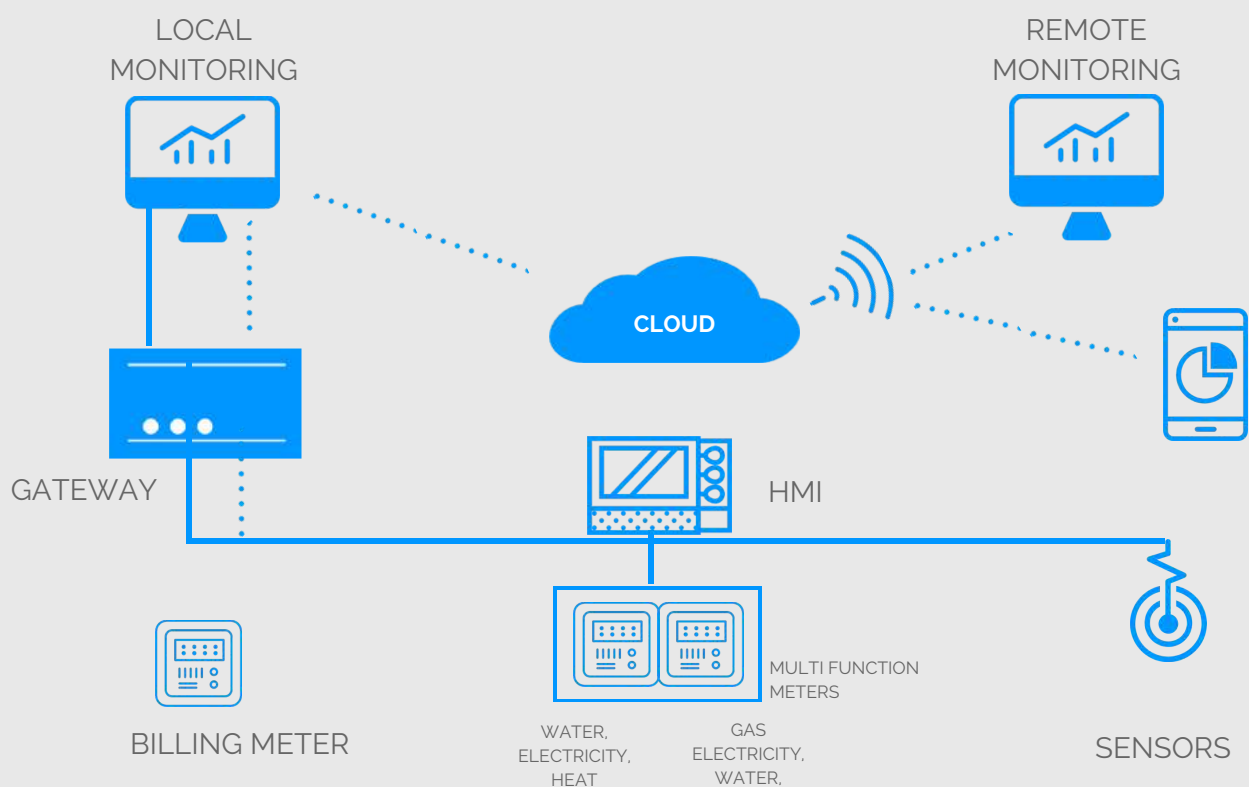


SAVE ENERGY

Consume where
required, save more

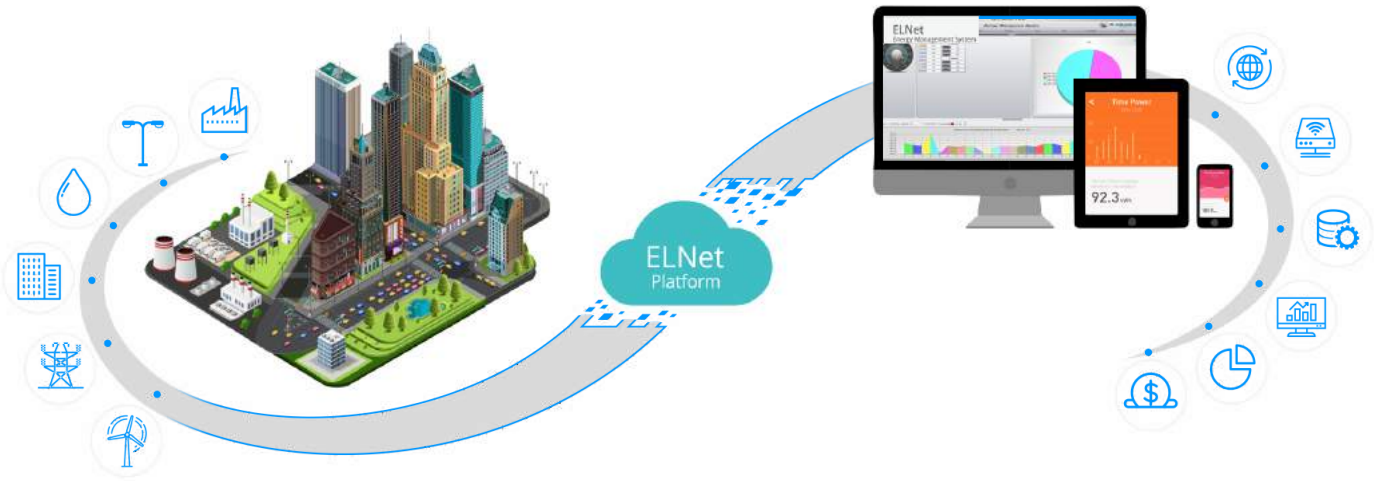


A COGNITIVE AND AN INTUITIVE **SOLUTION - ARCHITECTURE**



MEET EL-NET EMS

FOR ALL YOUR ENERGY RELATED ISSUES.



IOT PLATFORM For Comprehensive Monitoring

Our Solution designs are based on classical MSP430 to arm cortexm4 based SOC's.

WIRED COMMUNICATION

Modbus
DLMS
MQTT
MQTT-S
PLC
LON
BACnet

WIRELESS COMMUNICATION

- Zigbee
- Wi-Fi
- GPRS communication.

WE ARE BUILT ON

- Net-C#
- Vb.Net
- ASP.Net
- Java
- C/C++
- HTML5
- CSS
- Java Script

- Supports third party server integration
- Compatible for OPC connectivity
- Process parameter integration.

ROBUST PRODUCTS For Accurate Data Readings

Our Products are developed at the **DSIR approved Research & Development Center.**

GATEWAY



- Programmable DG switchover time
- Manual reset
- Communication option
- DIN Rail
- SMPS based design
- Intelligent re-connection

MULTIFUNCTION METERS

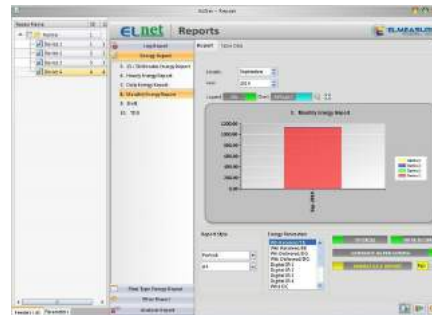


- Viewing present, forecast max demand and additional load on the same page
- Compact 96x96x45mm
- 4 Relay control output
- Remote firmware

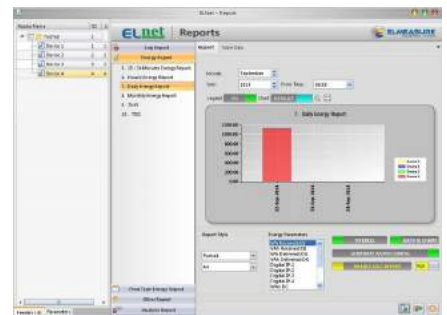
- Compatible with third party devices through RS485 & Modbus RTU protocol.

SCREENS & REPORTS

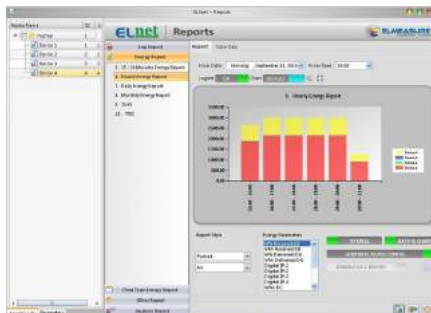
LOG REPORTS



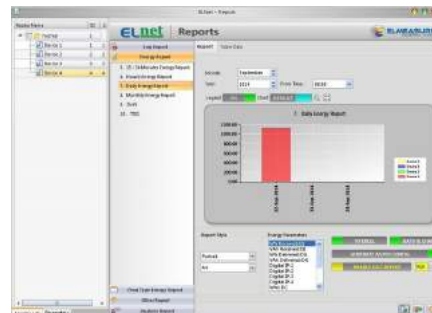
ENERGY REPORTS



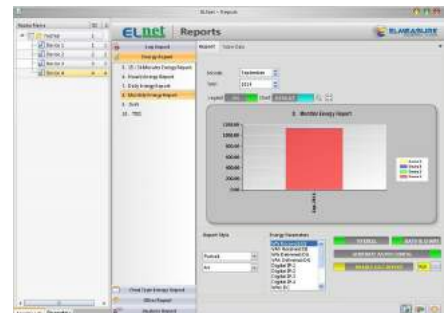
FLEXI ENERGY REPORTS



ANALYSIS REPORTS



OTHER REPORTS



APPLICATIONS: UPSTAGE THESE MAJOR HURDLES

- Energy Cost Vs. Production/Utilization/Loss
- Raise in Energy Cost adding to Production Cost
- Production Loss
- CAPEX Decision
- Manpower Planning
- Accurate MIS Reporting/Decision Making
- Productivity Study/Control
- Breakdowns, Process Interruptions
- Frequent Equipment Tripping/Equipment Deterioration
- Equipment inefficiency

ENERGY BILLING SYSTEM

A Consolidated system for a group of individual shops, malls, flats, etc. to get,

- Energy Bill for any shop/office/residence/meter
- Consolidated Energy Bill

AT A GLANCE

- The EBS generates the individual tenant bill and consolidated bill with just one click.
- Common area power charges are automatically calculated and distributed between the users based on floor area. This gives complete confidence to the user and great relief to the Service provider.
- The option of data entry for No. of slabs, Slab rates, Fixed charges, Bill No. & Date, Tax percentage, Special instructions, Miscellaneous charges etc.
- Other billing information like Registration Nos, Terms and conditions etc.. can also be integrated into the bill.
- Dual Source Energy Meters are used to read EB as well as DG energy consumption.

THE BEST PART?

EL-NET witnessed the fastest average ROI in the Industry.

**A COMPREHENSIVE SYSTEM
REFINED FOR THE FUTURE.**

HIT A SNAG



Street Light
Management
System



Textile Process
Management
System



Breaker
Status
Monitoring



Pump
Automation
System



Data Center
Management
System



Water
Management
System



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ELMEASURE
Possibilities... Infinite