

# The Importance of Accurate Electrical Metering



Accurate metering is the cornerstone of effective energy management, regulatory compliance, and fair tenant billing. For commercial and multi-tenanted buildings in the UK, critical insights influence operational efficiency, financial transparency, and environmental performance. Technik Intelligent Systems, with a combined 60 years of expertise in billing, installation, and networking of meters, offers a uniquely agnostic approach to data capture and extrapolation. This ensures that our clients can seamlessly integrate their metering data into ESG reporting systems, headends, and portals of their choice.

# Regulatory Compliance and Standards

In the UK, accurate electrical metering is both a best practice and, in many cases, a legal requirement. Building owners and operators must ensure sub-metering for tenants is accurate to comply with contractual and statutory obligations.

**1**

## **UK nationally approved electricity meters**

UK nationally approved electricity meters are approved under the Electricity Act 1989 and the pattern or construction of the meter type must conform to the requirements specified in the accompanying regulations

**2**

## **Measuring Instruments Directive (MID)**

Any meter used for billing must be MID-approved.

**3**

## **BS 7671 The IET Wiring Regulations**

Ensures electrical safety and compliance in metering installations.

**4**

## **Building Regulations - Approved Document L2 (England & Wales)**

Buildings with a useful floor area over 1,000m<sup>2</sup> should have an Automated Meter Reading (AMR) system installed with submetering designed so that at least 90% of the annual energy consumption of each fuel can be assigned to an end-use.

**5**

## **CIBSE TM39**

Best practice guidance for implementing effective sub-metering strategies.

In addition to these, schemes such as NABERS UK — focused on measuring and improving the energy performance of office buildings — rely on accurate metering data. Without precision measurement, benchmarking and performance ratings become unreliable, undermining the credibility of sustainability efforts.

# Accurate Tenant Billing

In multi-tenanted commercial environments, accurate MID compliant metering ensures that tenants pay only for the energy they consume. This not only avoids disputes but also encourages responsible energy usage. Poorly calibrated, faulty and non-MID approved meters can lead to significant financial discrepancies as well as falling short of regulatory requirements whilst eroding trust between landlords and tenants.

With the growing emphasis on sustainability and transparency, tenants are increasingly seeking evidence-based billing. Our validation process ensures that electrical meters perform to specification and intention, thereby guaranteeing that tenant invoices reflect actual consumption.



# Why Accuracy Matters

Accuracy in metering is not just a technical goal—it underpins compliance, trust, and sustainability.

Inaccurate readings can lead to:

## **Non-compliance Penalties**

Failure to meet regulatory standards can result in financial penalties and legal complications

## **Billing Discrepancies**

Overcharging or undercharging of tenants damages landlord-tenant relationships, and even lead to non-recovery of energy costs

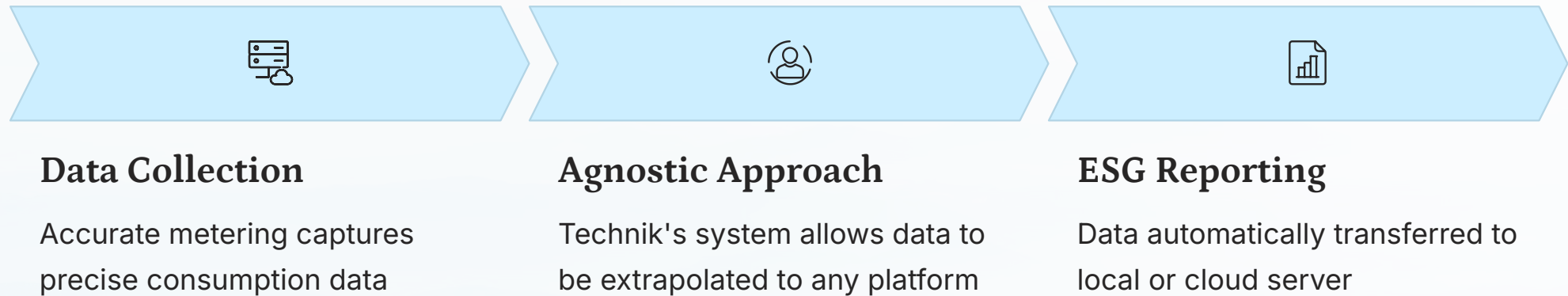
## **Distorted Reporting**

Inaccurate data undermines sustainability claims and ESG reporting credibility

In a UK regulatory landscape increasingly focused on decarbonisation and efficiency, precise metering is a non-negotiable requirement.

# ESG Reporting and Data Integration

Accurate metering data is a critical enabler for Environmental, Social, and Governance (ESG) reporting. Organisations are now expected to disclose detailed energy consumption metrics as part of their corporate responsibility frameworks.



Technik Intelligent Systems takes an agnostic approach to metering data aggregation, meaning clients can channel validated consumption data into any chosen analytics or ESG headend or portal without being locked into proprietary systems.

This flexibility ensures long-term data accessibility, interoperability with future reporting platforms, and alignment with global sustainability reporting standards such as the GHG Protocol, CDP, and SECR.

# Lost Revenue

Our comprehensive validation process has over the last 12 months identified over £200,000 of lost rechargeable revenue for Landlords. This has resulted in unnecessary complications with recovering lost consumption charges.

## 5%

### Average failure rate

In 2024/25 we found that on average 5% of all inspected meters were reading incorrectly

## 4 weeks

### Average ROI

The average ROI on a meter validation for a full building.

## £200k

### Recouped Revenue

In 2024/25 we helped several landlords recover a substantial amount of what would be money lost into the service charge.



# Pricing and Service Delivery

Technik Intelligent Systems offers a comprehensive meter validation service designed to ensure that all meters perform within specification under a nominal amount of load. Validation is conducted by comparing each meter's readings against a calibrated power analyser. This process can be conducted during or outside normal working hours, depending on the meter's physical location and accessibility.

**20**

**Meters Per Day**

On average, with clear and unobstructed access, 20 meters can be validated in a single day.

**£1,920**

**Daily Rate**

The cost for the physical validation service is £1,920 per day (in central London in hours).

**£480**

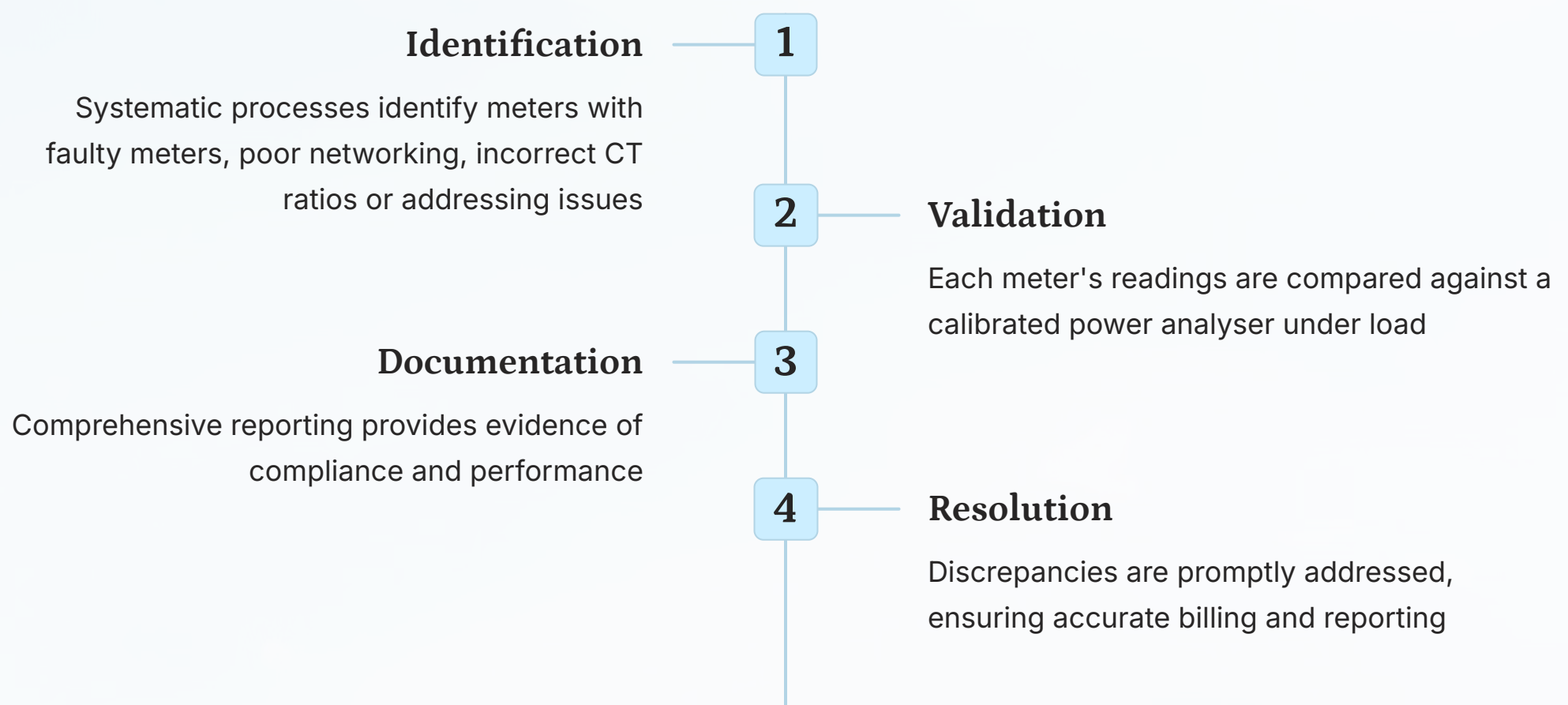
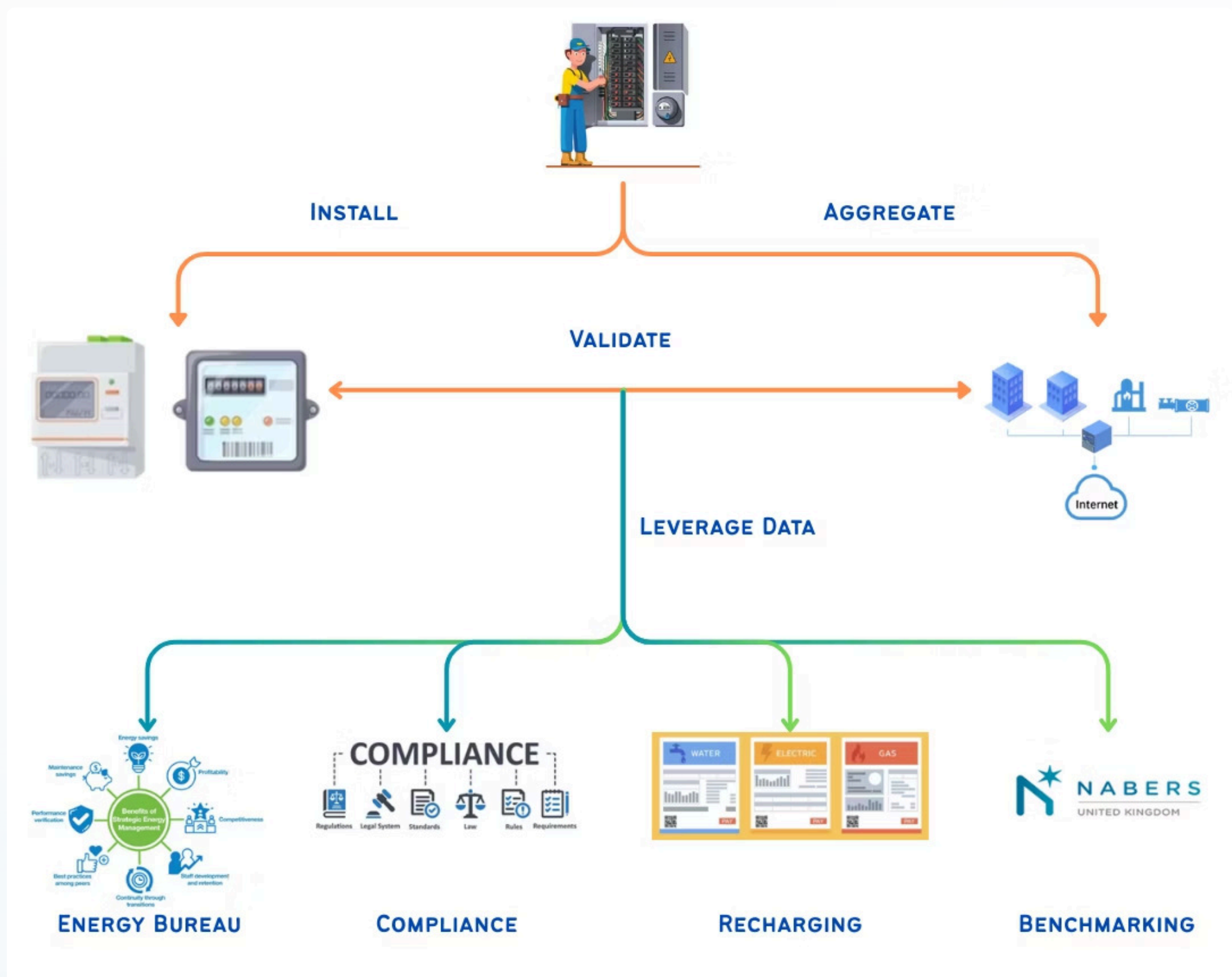
**Reporting Cost**

Per batch of 20 meters for result comparison and reporting, covering documentation, test results, and compliance reports.

This structured approach ensures accuracy, compliance, and clear reporting for all stakeholders.

# Technik's Turnkey Metering Process

We also have the ability to install new meters, repair existing networks and implement data aggregation platforms.



Technik's systematic validation processes ensure such discrepancies are identified and resolved promptly, protecting both landlords and tenants from financial and operational risk.

# Optimising Metering Infrastructure

Beyond validation, Technik Intelligent Systems offers comprehensive services to establish and maintain a robust metering infrastructure, ensuring optimal performance, compliance, and energy efficiency from the ground up.



## Right Meter, Right Place

We provide expert consultation and installation services to ensure the correct meter types are deployed in appropriate locations, guaranteeing accurate data capture from the outset and full compliance with industry standards.



## Advanced Power Monitoring

Our team installs and maintains sophisticated power monitoring systems, offering continuous oversight of energy consumption and enabling proactive management of your electrical infrastructure's health.



## In-house Power Quality Analysis

Leveraging our specialist in-house capabilities, we conduct comprehensive power quality analysis to detect, diagnose, and address issues such as harmonics, voltage sags, and swells, safeguarding equipment and optimising system reliability and efficiency.

This holistic approach ensures that your metering systems not only meet current demands but are also future-proofed against evolving regulatory and operational requirements.

# Conclusion

Accurate electrical metering is essential for:

- Regulatory compliance with UK standards
- Fair and transparent tenant billing
- Credible ESG reporting and sustainability initiatives
- Building trust between property managers and tenants

With Technik Intelligent Systems' expertise and agnostic approach to data management, organisations can ensure their metering infrastructure delivers accurate, reliable, and compliant performance.

In a UK regulatory landscape increasingly focused on [decarbonisation and efficiency](#), precise metering is a [non-negotiable requirement](#).

📄 Contact Technik Intelligent Systems today to learn more about our comprehensive meter validation services and how we can help ensure your building's compliance and operational efficiency.

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