



FOCUS Billing

Energy Billing for Telecom
and Datacenter Networks



Experience - We Know Your Network

We have years of experience delivering network energy monitoring solutions to global telecom operators with complex networks. We've delivered hundreds of projects with thousands of sites, all over the world.



Where Do We Work?

Our solutions work in:

- Cell/Tower Sites
- Datacenters
- Fiber Repeater Sites
- Wireless Radio Sites
- Central Office Sites



Who Is Billing For?

- Datacenter Operators
- TowerCo's
- ISP's/Neutral Host Providers
- Any multi-tenant facility that meters power

We've delivered telecom network management solutions for 20 years.

There is a new and better way

FOCUS Automated Energy Billing

FOCUS delivers standardized data from a wide variety of power equipment in your network, which can be combined with other data sources to create completely new functionality. FOCUS Billing is an open-source based, cloud-native energy billing utility built to modernize energy cost management at scale — and prepare for the demands of AI.



Solve Today's Challenges - And Tomorrow's

FOCUS Billing supports energy metering across thousands of diverse sites, normalizing multi-vendor data into reliable, scalable, and audit-ready standardized data. It enables **scheduled reporting, automated billing, and seamless integration** with modern ERP systems.

Designed to **eliminate the cost and complexity** of spreadsheets, manual intervention, and hardware vendor lock-in, FOCUS delivers automated billing without relying on proprietary tools or siloed data — solving today's challenges while **preparing you for an AI future**.

Current Challenges

- **Proprietary Fragmented Data:** In almost any existing network, smart meters, generators, PDUs, rectifiers, multi-circuit panels, and software API's all speak different "languages" in reporting data on themselves. Each hardware vendor produces its own equipment management interface in order to differentiate their products from other competitors, not to adhere to any standard.
- **Gaps & Rollovers:** Meters get replaced, reset, or go offline, leaving gaps in usage data requiring manual estimates be made.
- **Tariff Complexity:** Electricity pricing varies by time-of-day, seasonal thresholds, demand charges, and taxes — often requiring custom formulas that spreadsheets can't reliably handle.
- **Manual Workflows:** Billing is often built on semi-automated spreadsheets, leading to human error, high cost to maintain, slow reconciliation, disputes, and unhappy customers.

Better Billing By Design



Open Data is Better

FOCUS Billing:

- Automates billing without replacing existing site hardware
- **Standardized energy data improves energy billing, reliability, and efficiency**
- **Applies tariffs** and identifies missing data instantly
- **Automates** reporting and can stream data to ERP or AI systems.
- Works with existing meters or any new meters with **no hardware vendor lock-in**

FOCUS Billing simplifies energy management today and creates open standardized billing data for whatever comes tomorrow.

What Is FOCUS Billing?



FOCUS Billing performs tariff calculations on standardized energy data gathered by FOCUS, and is one of the clearest examples of what standardized data unlocks. FOCUS Billing models your physical infrastructure from Regions down to Locations (data centers or sites), Subunits (rooms or floors), and individual Meters (PDUs) — with each Meter mapped to Clients for automatic consumption attribution. The system supports bulk import of all master data, Excel export, multi-user role-based access, and a clean React UI with inline search and an integrated consumption dashboard.

Data Collection & Integrity

- Collection — Connects read-only to InfluxDB databases created in FOCUS Data. No monitoring stack changes required.
- Integrity — Handles data validation, gap-filling, unit normalization, and tagging with a complete audit trail.

Tariff Engine

- Apply — Configure time-of-use tariff windows, monthly tariffs per location, PUE coefficients, and multi-currency rates. Every tariff is versioned to reproduce past bills exactly.

Professional, Auditable Billing

- Report — Monthly consumption reports per client and per PDU with one click. Export to Excel or push to ERP via REST API.
- Audit — Full traceability on every bill: source meter, timestamps, gap-fill method, quality flag, tariff version, and calculation path.
- Schedule — Automate billing runs on fixed monthly dates. Roll forward tariffs and PUE values from the prior month with one click.

Access & Security

- Role-based access: Viewer, Analyst, Manager, and Admin — with tenant data isolation (row-level security).
- Encryption in transit (TLS 1.2+) and at rest (AES-256); immutable audit logs; GDPR-ready retention controls.
- Deploys on a Linux VM within infrastructure operators typically already have.

Business Impact

Energy-as-a-Service (EaaS) Models

- Enterprises are shifting to usage-based energy **cost models aligned with SLA's** and consumption - a natural fit for FOCUS Billing's ability to integrate to and from other data sources.

ESG Reporting

- Stakeholders demand **visibility into carbon footprint and renewable energy mix**. FOCUS tracks actual and estimated energy usage and can be combined with energy source data, enabling ESG reporting.

Billing Information for Internal Energy Efficiency

- You can use generated billing data as part of your **internal network energy efficiency** efforts.

AI Integration

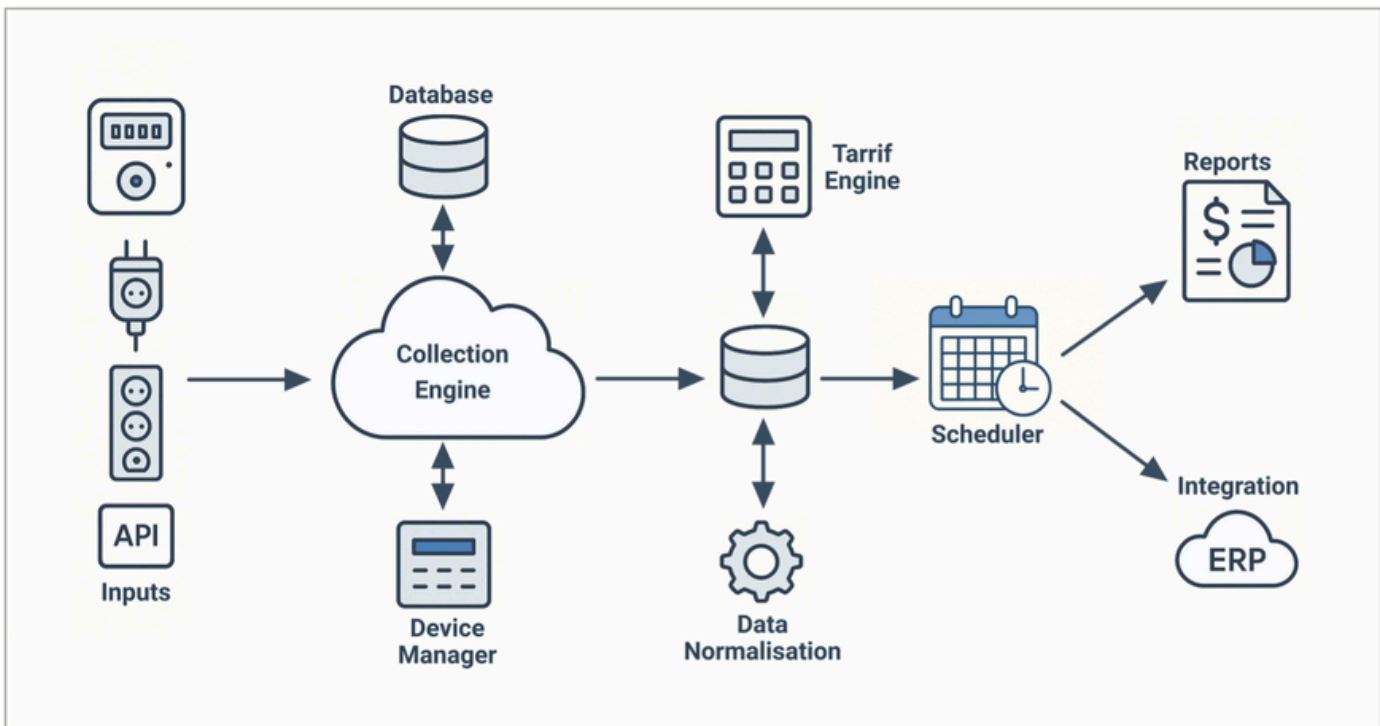
- FOCUS architecture ensures that standardized data and billing from FOCUS will be **prepared for whatever comes next**.



Architecture

Data Ingestion

- Connects read-only to InfluxDB time-series databases — no changes to your FOCUS monitoring stack
- Supports multiple data sources for environments where different sites run separate InfluxDB clusters
- Maps meter parameters to billable measurements with scale and offset normalization
- Handles unit differences across PDU brands transparently - well-suited to brownfield environments



Data Standardization Module

- Detects missing intervals, abnormal spikes, meter rollovers, or replacements
- Performs linear interpolation, carry-forward, or contractual estimation methods
- Tags each value with a quality flag (Raw, Interpolated, Estimated, Manual)
- Provides complete audit trails for regulatory compliance

Architecture (Continued)

Tariff Engine

- Allows creation of tariffs by combining time-of-use calendars, consumption thresholds, and fixed/demand charges
- Visual “Tariff Builder” offers drag-and-drop blocks and a formula engine built for energy billing, including operators and references relevant to tariff calculations
- Each tariff formula is versioned, logged, and stored to reproduce past bills exactly
- Supports multi-currency billing and tax application

focusBilling

Dashboard

Billing

Energy Tariffs

Configuration

Settings

Energy Tariffs

October 2025

+ Add Energy Tariff

Edit Energy Tariffs

Region: All Regions

Location: All Locations

Search Energy Tariffs

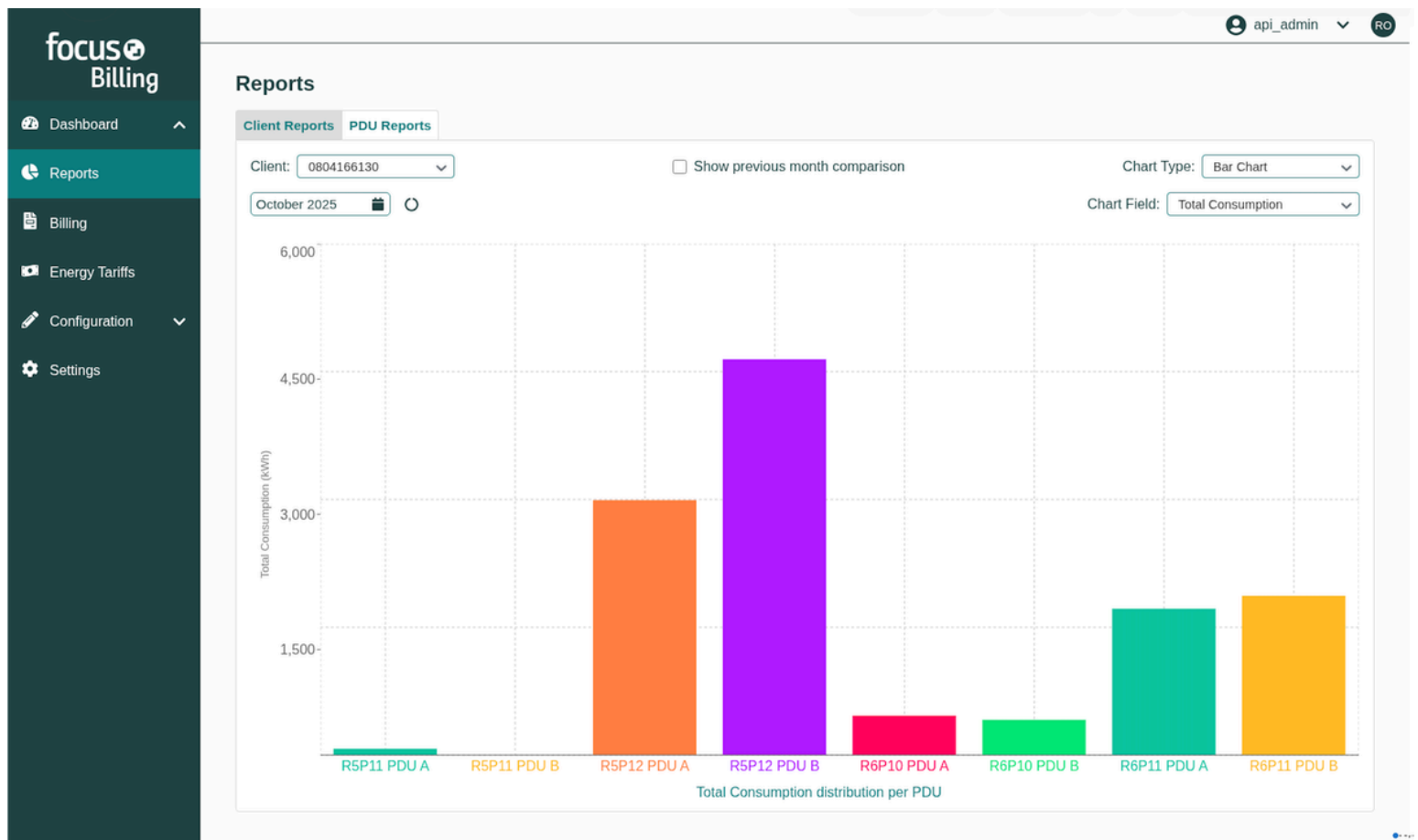
			Energy Price		PPA Price		Settlement Price		PPA Percent	
	Location	Hour Interval	Sep 2025	Oct 2025	Sep 2025	Oct 2025	Sep 2025	Oct 2025	Sep 2025	Oct 2025
	DT_Bucuresti	00:00 - 24:00		853.27		79.32		112.11		45.63 %
	Farm1_Bucuresti	00:00 - 24:00		861.51		77.46		106.61		65.63 %

Scheduler & Orchestration

- Automates billing runs on fixed monthly dates or custom schedules
- Supports retries, backfill, and approval workflows
- Ensures consistent execution through workflow orchestration

Report Builder

- Drag-and-drop UI for assembling billing reports
- Group data by customer, site, or meter hierarchy
- Generate outputs in multiple formats: database tables, XML, PDF, and Excel
- Built-in traceability:
 - Source data: which meter(s), which timestamps, which readings were used
 - Transformations: whether data was raw, interpolated, or estimated, and which method was applied
 - Tariff rules: which tariff components, thresholds, or time-of-use bands were applied
 - Formula execution: the exact calculation path (e.g., 400 kWh @ €0.15 + 200 kWh @ €0.38)
 - Quality flags: showing if a number is raw, interpolated, or estimated
 - Audit metadata: who ran the billing job, at what time, with which tariff version



Technical Features

Integrations & Export

- REST APIs expose all metadata, readings, bills, and reports
- One-click Excel export of full billing data for finance teams
- Push exports via SFTP for integration with ERP and financial systems
- Webhooks notify external systems about billing events or anomalies

Security & Compliance

- Role-based access control with roles like Viewer, Analyst, Manager, and Admin
- Tenant isolation with row-level security in the database
- Encryption in transit (TLS 1.2+) and at rest (AES-256)
- Immutable logs for audits; GDPR-ready retention controls

Scalability

- Handles any number of sites, meters, and tenants
- Bulk import available for all master data: Clients, Locations, Meters, Tariffs, Suppliers
- Onboard new tenants quickly without rebuilding billing infrastructure
- What works for 50 meters works for 50,000

Workflow & Operations

- Dashboard with month-picker-driven consumption view and previous-month comparison overlay
- Client Reports aggregate all meters assigned to a tenant; PDU Reports show raw per-meter data
- One-click rollover of tariffs and PUE values from prior month reduces recurring setup effort
- Billing table shows consumption, cooling allocations, total costs in local currency and EUR

Contact Us :

If you'd like to learn more, would like to see a live demo, or are interested in a trial, please contact us via the email below.



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