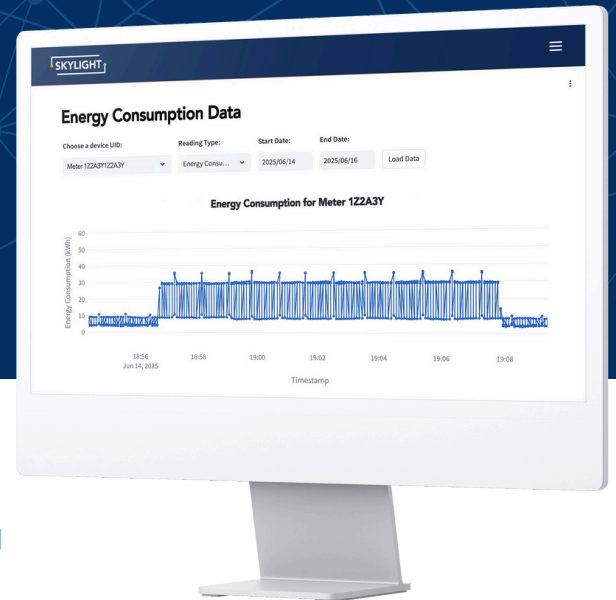




VIA: Unlocking Building Data for a Flexible Electric Grid

The electric grid faces unprecedented challenges. The rise of variable renewable energy and unpredictable consumption from electric vehicles (EVs) and heat pumps demand significantly greater energy flexibility and improved voltage and frequency regulation to avoid disruptions.



The Mandate for Grid Flexibility

Leading global authorities mandate a more flexible grid. The EU's Electricity Market Design Reform and Clean Energy Package, alongside the US FERC Order No. 2222, all underscore this critical need for a stable and sustainable energy future.

Buildings make up 30% of all energy consumption globally. Study after study has shown the potential of leveraging building energy to support grid flexibility.

The Problem: Trapped Data and Regulations

Knowing the energy consumption patterns of a building in real time is a prerequisite to enabling grid flexibility. Despite its value, critical building electricity data is **"trapped"** due to two main issues:

1 Infrequent Data Capture

Data is often only captured every 15 minutes, and transmitted daily. This isn't enough for grid flexibility, which needs data ideally every minute or even more frequently.

2 Regulatory Hurdles

Laws like GDPR in the EU prevent sharing individual-level data without explicit permission.

Building Data is Key To Grid Flexibility



The value of building data is increasing exponentially as it impacts grid flexibility.



VIA's Solution: Secure, Real-time Data for Grid Optimization

VIA offers a comprehensive digital solution that helps building owners and electrical equipment manufacturers unlock this trapped data. Backed by 19 issued patents, our technology enables smart devices (meters, IoT sensors) to securely stream data with regulatory privacy compliance.



How VIA Solves It:



End-to-End Encryption

Data is securely encrypted from the device to the user, meeting the latest NIST quantum-resistant encryption standards.



Device Agnostic

Customers can use their existing compatible equipment.



On-Device Anonymization

Where devices have computing power, VIA can anonymize data on the device itself, so individual permissions aren't needed.



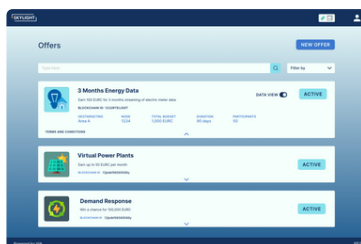
Permission Management

Where permissions are required, VIA asks and records data owners' consent. They can easily revoke permission, and VIA record that too, complying with GDPR.



High-Resolution Sensing

If buildings lack real-time IoT devices, VIA offers a sensor that collects data every 5 seconds and transmits it every minute.



VIA's Regulatory-Compliant Permission System



Proven Security and Innovation: Trusted by Leading Organizations

VIA's technology holds 19 issued patents. It's used by major security-conscious organizations, including the U.S. Department of Defense.



The U.S. Department of Defense and Fortune 100 companies around the globe trust VIA to help them solve their toughest data and identity protection challenges. Using its Web3, quantum-resistant, passwordless technologies (17 issued patents), VIA protects data against theft, manipulation, and misuse.

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