# Facility Explorer® Energy Dashboard









### Introduction

Globally, 38 percent of all energy consumption is used to supply energy services in buildings. Optimized energy consumption for higher efficiency of resources and lower operating cost enables a green environment and reduces carbon footprint.

Facility Explorer® Energy Dashboard is a software solution designed specifically for addressing the needs of energy management in buildings. It has been conceived over many years by using Johnson Controls' in-house understanding of energy management and input from subject matter experts.

## **Technology**

Facility Explorer® Energy Dashboard fetches energy data from the Facility Explorer® building management system (BMS) and stores the data into separate application database for analysis. Energy data is the information coming from meters and contains data related to metered consumption as well as other powerrelated parameters like voltage, peak load, power factor.

The data is processed and validated in the application database and further used for dashboards and report creation. The application database is an SQL database (server / express based) and stores all the data i.e. user information, configuration information and point / tag data for the application. This tool also provides the capability to export data in multiple user selectable formats.

Key features are:

- Segmentation of energy information at a glance
- Customizable energy dashboard
- Energy report generation according to time period and frequency
- Carbon dioxide emission calculation and reporting
- Web-based tool. No additional software required
- Email / SMS options available upon on request
- Multiple database sources / site can be integrated
- Multi-lingual support available in Dutch, French, German, Italian, Japanese, Simplified Chinese and Spanish

#### Administrative Reporting **Custom Software** Dashboard Charts, Tailored for Trends, Graphs, etc. **Specific Needs Email Reports FX Supervisory Application Database** Controllers Work Station

## **Key Modules**

#### 1. Energy

This module is for those with an interest in the monitoring, trending, analyzing and reporting of energy consumption in their buildings. Users can create dashboards of their choice with real time view of energy and associated performance index information and create custom analysis reports using pre-defined reporting templates - all delivered using a dynamic and intuitive user interface.

- Numeric display of energy consumption by different sources
- Consumption display via dials & pie chart formats
- View data across multiple time slices (current day, current week, current month & current year)
- Dashboards with print, excel export and benchmark definition functions
- More than 15 reporting templates, with multiple user selectable parameters

#### 3. Tenant Billing

This module is for building owners to view and manage the utility consumption and billing for their tenants.

- Consolidated information on a single dashboard
- Automatic generation and mailing of utility and after-hours consumption bills
- Creation of customized tenant consumption analysis reports with the ability to filter values by tenant name, date 

  Tenant communication window with the facility range and utility type among other parameters
- Monitor, measure and quantify any after-hours tenant

#### 2. Equipment

This module is for those with an interest in the monitoring, trending, analyzing and reporting of energy consumption and the performance of their mechanical equipment units in their buildings. Users can create dashboards of choice with real time view of performance index information related to their equipment, and create custom analysis reports using pre-defined reporting templates - all delivered on a dynamic and intuitive user interface.

- Capture details of facility / building assets
- Capture details of the building cooling load profile, chilled water performance, cooling tower performance and perform instantaneous analysis using current and past data to evaluate efficiency of equipment
- More than 15 reporting templates, with multiple user selectable parameters

#### 4. Tenant Portal

This module is for building tenants to track their energy spend and consumption, as well as to benchmark and make afterhours requests through the online portal.

- Snapshot dashboards of the tenant's current utility usage
- Dashboards of tenant's past consumption history and archive of past utility bills
- management team to make after-hours consumption and



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# Benefits & Applications

#### **Benefits**

Facility Explorer® Energy Dashboard is perfect for organizations that need energy, cost and savings reports, verification of utility bills, cost avoidance results etc.

#### Some of the benefits include:

- Lower utility costs, material use and waste
- Lower environmental risks and impacts
- Supports compliance with legislation
- Lower workload in managing energy or environmental programmes
- Ability to obtain true measure of performance to maintain efficiency improvements
- Provision of transparent and comprehensive financial tracking and reporting
- Integrated data from multiple sources
- Benchmarking and forecasting
- Historical data availability
- Extension of visualization and real-time decision capabilities to browser-based remote users
- Ability to monitor performance variation and increased agility
- Lower overhead costs by saving time in collecting data and preparing reports



## Facility Explorer® Energy Dashboard is ideally suited for:



**Educational Institutions** 



**Multi-tenanted Facilities** 



**Defense Installations** 



**Universities** 



Retail



Hospitals



**Government Offices** 

