

## Implementing efficiency measures? Efficient – if they are measured!

Energy efficiency projects can only be appreciated for their true value if their impact is measured and verified.

While there are many measurement methods, the **International Performance Monitoring & Verification Protocol (IPMVP)** is the most internationally recognized and used protocol for the measurement and verification of savings realized by energy efficiency projects.

### Rigorous measurement

The IPMVP was devised by the Efficiency Valuation Organization (EVO), an international non-profit organization run by a network of volunteers around the world that is headquartered in Sofia, Bulgaria.

The rigorous IPMVP requires applying a measurement and verification (M&V) protocol to reliably determine the real savings generated by the implementation of energy efficiency measures (EEMs).

The IPMVP defines a standardized approach for verifying the savings from a project to improve energy performance. Measurements are required in order to reliably determine the real savings generated in a specific location, and the IPMVP gives advice on compromises between the measurement precision required and the associated costs. The IPMVP assists those involved in a performance contract to create the appropriate, transparent contractual conditions for verifying the savings generated by a project.

### Flexible method

The IPMVP offers four options for determining savings. The option chosen has an impact on the type of measurement. The options offer a range of methods for evaluating energy savings, depending on the EEMs implemented and the balance sought between precision and cost.

The savings are determined by comparing consumption measured before and after implementation of the EEMs and by making appropriate adjustments for any change in conditions.

Several variations of this equation are detailed in the IPMVP. Demand can be substituted for consumption. Adjustments may be periodic or non-periodic.

The comparison base may also be modified: consumption in the period monitored and that in the comparison base may be changed from real conditions to commonly selected conditions. Mathematical models are also required to take any adjustments into account.

$$\begin{aligned} \text{Savings} &= \text{consumption in comparison base} \\ &- \text{consumption in period monitored} \\ &\pm \text{adjustments} \end{aligned}$$

### Credible energy efficiency projects

The IPMVP supports programs carried out by Energy Service Companies (ESCOs) because of the international recognition for how energy savings are validated. The IPMVP gives the requisite credibility to energy-saving projects and recognizes energy savings at their true value since they have been measured and verified.

Also, in the LEED certification of buildings, one credit is granted in the Energy and Atmosphere category for the continuous verification and optimization of a building's performance using IPMVP.

### Financial assistance for implementing your energy savings measures

Implementing efficiency measures calls for analyzing your consumption habits in order to determine the technologies, as well as the type of energy, that will meet your needs. The Gaz Métro team is on hand to give you sound advice and inform you about the financial assistance available to help make your project cost-effective.

**Contact your Sales Representative right away to learn about the financial assistance you may be eligible to receive.**