## Total Energy Efficiency Assurance Solution

**Green and Sustainability** 

## KILOWATT HOURS

# **Building Energy Efficiency Measurement and Verification Service**

Intertek provides the Measurement and Verification (M&V) service to help you achieve your carbon reduction and energy saving target. Delivering professional and advisory consultancy and report evidence on energy efficiency facilities upgrades including the lighting and air-conditioning system.

## Adding value to your Sustainability

 Can fulfill regulatory challenges on Building Energy Efficiency Ordinance (e.g. BEEO) in implementation actions

- Able to achieve national carbon reduction and energy saving target (e.g. target of Hong Kong Government 50-60%)
- Easily reporting to investor on new facility's performance and demand result of energy saving as well as the reporting process on company energy management system and the policy



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# Internet of Things (IoT) adopted in Building Management System (BMS)

### What is IoT?

- Inter-networking of physical devices and other items embedded with electronics, software, sensors, actuators, and network connectivity
- These objects enable to collect and exchange data by different technologies, i.e. Wi-Fi, Bluetooth, ZigBee, etc.
- No human-to-human or human-to computer interaction required

## Intertek makes it happen when Energy Management Solutions meets IoT.

Internet of Things (IoT) offers infinite possibilities in building energy efficiency. Our smart and intelligent solutions are:

- Real-time smart data monitoring
- Advanced analytics capabilities of big data
- Provide decision making for optimized usage of energy
- Achieve energy saving and cost reduction
- Equip with cyber security solutions to secure protocols for communication

### The data transmit can be:

# Roof coatings and insulation Advanced window film Efficient appliance and office equipment Energy efficient lighting and motion sensors Efficient chillers Efficient HVAC

# Green Building & Environmental, Carbon and Energy Consultation Service

Intertek provides the project management service including energy review, energy simulation in building design and also document review services for the <u>BEAM Plus Labelling Scheme</u>. We are providing two steps of advisory services:

#### **Pre-assessment Service**

To review your building situation and your on hand materials, provide gap analysis in achieving the rating and advise alternative solutions of supplementary testing and measures.

### **Helpdesk Service for BEAM Plus Application**

To consolidate the materials for the requirements of application and offer technical guidance on any application issues.



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# Environmental, Social and Governance (ESG) Advisory Service

Intertek conducts carbon/energy audit, and below approach steps in ESG advisory service:

- 1. Provide gap analysis in existing materials
- 2. Offer awareness training for staff
- 3. Collect stakeholder concerns by stakeholder engagement
- 4. Materiality assessment to find out the significant impacts
- 5. Consolidate existing environmental and social information
- 6. Provide data review based on environmental KPI and result from the following 2 items
- 7. Deliver energy audit for energy efficiency measures, energy analysis and improvement plan review
- 8. Conduct carbon audit in order to collect carbon emission data
- Report review based on <u>HKEX ESG reporting</u> as well as other sustainability standards, e.g. GRI standard



### Audit and Certification Service for Environmental and Energy Management Systems

Intertek provides the verification service and issue the certificates for both systems —

- Environmental Management System (EMS) <u>ISO</u> 14001:2015 and
- Energy Management System (EnMS) <u>ISO</u> 50001:2011.

We can also provide the energy review, document preparation, training courses and system build-up on EnMS.



### **ONE-STOP SERVICE:**

With Intertek's network of offices and status of certification body, we can offer the support of project coordination and arrange verification schedule as well as issue the certificate.



