



BEAM

## ENERGY AUDIT SERVICES



BEAM NEW ENERGY LIMITED  
[www.beamsolar.com](http://www.beamsolar.com)



**ENERGY AUDIT****ENERGY MANAGEMENT**

One of the major operating costs is energy cost. Energy cost like electricity expenses incur with us in everyday. To keep energy cost minimum will reduce operating cost and increase profit. Small capital investment on reduction of energy cost can bring long term benefits of cost savings and increase market competitiveness of the organization. A good building energy audit can bring cost savings from 10% to 40% which is quite substantial for large organizations or for operation over a period of time. Registration of ENERGY EFFICIENT BUILDING to the Government will increase company reputation and may make more businesses.

BEAM NEW ENERGY provides quality ENERGY MANAGEMENT CONSULTANCY SERVICE. We propose the best solutions on energy cost reduction.

**BEAM NEW ENERGY PROVIDES THE FOLLOWING SERVICES:**

1. Retro-commissioning (Rcx) on existing systems
2. Perform Energy Efficiency Consulting on New Buildings
3. Conduct Energy Audit under Hong Kong Building Energy Efficiency Ordinance cap. 610 on the followings:
  - i. Electrical installations – distribution system, power factor.
  - ii. Heating and Air conditioning system  
– building insulation, VSD, waste heat utilization.
  - iii. Lighting – LED, PIR activated lighting, smart lighting
  - iv. Lifts and escalators – VFC, less dissipation equipment
  - v. Controls and automation



## WE PROPOSE SOLUTIONS TO MEET YOUR NEEDS

- I. Propose within existing system equipment repair, new equipment replacement and installation, re-design of existing system, new system design
- ii. Propose new energy system design like solar and wind power system design and installation
- iii. Assist customers in Hong Kong to apply for certificate of registration of ENERGY EFFICIENT BUILDING in Hong Kong if proposals have been implemented.
- iv. Implement Energy Improvement System – reduce energy costs, reduce operating costs, more greenable enterprises and more market competitiveness.

## WE ISSUE ENERGY AUDIT REPORT

- i. To analyze existing energy utilization performance
- ii. To identify Energy Management Opportunities (EMO)
- iii. To do cost benefits analysis of EMO
- iv. To make recommendations to achieve energy efficiency and energy cost reduction
- v. To propose financial measures and payback analysis



## PROCEDURES FOR GENERAL ENERGY AUDIT

- i. A site visit to assess the building and energy consuming equipment
- ii. Analysis of the utility bills to determine whether savings can be made by changing the utility rate
- iii. A summary of utility bill data
- v. Calculation of the energy use intensity (EUI)
- vi. Estimate of the energy and costs saved if the building met an energy use intensity target

## BUILDING ENERGY EFFICIENCY ORDINANCE CAP 610

### The 3 key requirements of the Ordinance

1. The developers or building owners of newly constructed buildings should ensure that the 4 key types of building services installation therein, namely, air-conditioning installation, lighting installation, electrical installation as well as lift and escalator installation, comply with the design standards of the Building Energy Code (BEC).
2. The responsible persons (i.e. owners, tenants or occupiers etc.) in buildings should ensure that the 4 key types of building services installation therein comply with the design standards of the BEC when "major retrofitting works" are carried out.
3. The owners of commercial buildings (including the commercial portions of composite buildings, e.g. shopping malls under residential storeys) should carry out energy audit for the 4 key types of central building services installation therein in accordance with the Energy Audit Code (EAC) every 10 years.

### Procedures for Energy Audit of Existing building in Hong Kong

- I. If you are the owner of commercial building or commercial portion of composite building, contact us to do energy audit for Central Building Services Installations.
- ii. We can conduct Energy Audit, "Energy Audit Form EE5" and complete Energy Audit Report.
- iii. We will submit to EMSD, within 30 days of the issuance of Energy Audit Form EE5, the Energy Audit Form and copy of Energy Audit Report.

iv. After the Energy Audit, building owner should display in visual location "Energy Audit Form" near main entrance of the building.

v. The "Energy Audit Form" will take into effect upon completion of the Energy Audit and is valid for 10 years. Before expiry date of 10 years, sufficient time should be allowed to do renewal of the Energy Audit.

## **Procedures of Energy Audit for Newly Constructed Buildings in Hong Kong**

i. Within 2 months of the "Consent to the commencement of Building Works" issued by Buildings Department, new building developer or owner shall recruit Registered Energy Auditor to submit to the Buildings Department "Stage One Declaration Form", ie. Ee1.

ii. After completion of the building works, Registered Energy Auditor shall carry out site inspection for Energy Audit and submit to EMSD "Stage Two Declaration Form", ie. EE2 within 4 month period after "Occupant Acceptance Form" issued by the Buildings Department. Under normal circumstances in the following 3 months, EMSD will issue "Certificate of Compliance Registration".

## **Procedures for Energy Audit of Retrofitting Works in Hong Kong**

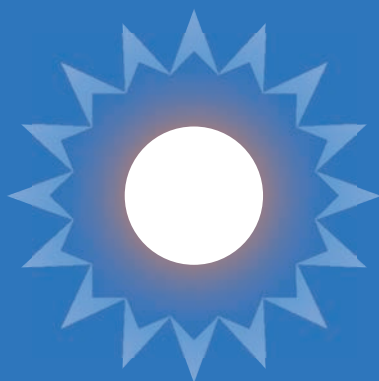
Before completion of retrofitting works, property owner, tenant or occupant shall recruit Registered Energy Auditor to inspect on site and submit to EMSD "Form of Compliance", ie. EE4 within 2 months after completion of the works.

Our Engineering Teams have been conducting Energy Audits over 5 years. Our customers include hotels, grade A offices, and shopping complex. We have Registered Professional Engineers, Chartered Engineers, Registered Energy Auditors and Experienced Professionals conducting quite a number of Energy Audits and Retro-commissioning studies.

## **EXPERIENCED ENGINEERING TEAM**

Our Engineering Team has been conducting Energy Audits for over 5 years. We have Chartered Engineers and Experienced Professionals conducting quite a number of Energy Audits and Retro-commissioning projects.

So, call us today at tel: [2620 1266](tel:26201266) or send us an e-mail at [sales@beamsolar.com](mailto:sales@beamsolar.com) to ask for a quote or consulting.



The Profession Creates the Quality. The Quality Wins the Market

**BEAM NEW ENERGY LIMITED**  
**強輝新能源有限公司**

Tel: (852) 2620 1266

Fax: (852) 3568 3578

Unit 927, 9/F Tung Lee Building,  
9 Lai Yip Street, Kowloon, Hong Kong

E-Mail: [sales@beamsolar.com](mailto:sales@beamsolar.com)

**BEAM SOLAR (SHENZHEN) LIMITED**  
**强辉太阳能（深圳）有限公司**

Website: [www.beamsolar.com](http://www.beamsolar.com)

