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Building Energy Saving Management means Building Energy Saving Genius. Reviewing the Construction and Building globally, energy saving has been one of the fastest growth in industry during the last decade. It is hard to formatting from ?Building Energy Saving Management? into work and the construction industry, in particular. It is grave on Building Energy Saving Management for construction. This onionskin devotes through statistics in Hong Kong and China (Asia) and Euro how to implement Building Energy Saving Management. There is a demand in expediting our culture of environmental friendly atmosphere. Buildings like this are all over China. Beijing (AFP) Jan 11, 2012 - The Chinese tycoon behind a 30-storey energy-saving building that went up in just 15 days. Energy saving contributed in China establish the Management Approach notion in Construction concern. The results focus on an important issue of ?Energy Saving Management? which is critical to the success of Engineering Company in Construction Industry in Asia and worldwide. The Stages in the Appraisal of Building Energy Saving Management is embraced into practice in which Building Energy Saving Genius is an urge

Index terms— certified system, whole building energy saving management, occupation risk assessment, building energy saving management pledge, building energy savin

1 Introduction

o one is perfect. Energy saving is performing far from perfect. Building energy saving management is uneasy to attain and it is far from reach to working out building energy saving. Though some measures might build in and some forms of figures come up by the evaluation of the variables get along. Subjective approach is dared to say. Iceberg Theory” quotes one see only the top cannot know the problems and difficulties at the bottom.

Monitoring is the necessary tools to go into right track. The following advocates the stages in the succession of Building energy saving management. (See Figure 1) The following study sequences should be performed on order to achieve energy efficiency & intelligence. We analyzed the calculation results to determine if the project would pass the building energy performance evaluation. We hoped that this research would help the designer to design better ventilation operations to achieve reduced energy consumption.

2 II.**3 Several Circumstances Turn New Era**

The pollution in China made it worst from acceptable ranges. The construction wastes and chemical sludge damage the sea, farm and economy as a whole. It pollutes over 70% of fresh air. Even worst, the spread out is hazardous to neighboring cities such as Hong Kong, Macau and Japan. ”Hot Bomb” destroys the weather and consequently difficult to survive for both work and live. New Era is ready to call over the world. The general adoption of Building energy saving management (BESM) is covered up by public and private sectors. (See Figure 1) Structure shift for private Building Energy Saving Genius is everywhere in Mainland china. This

is also applicable to Hong Kong as well. Hong Kong should reshapes its own character and put the environmental awareness into building culture. The very good examples are the public housing estates and Tsing Yi College and more.

The construction for the bridges and buildings are encouraged to accustom the prefabricated products. Diversification is contemporary approach for the building production so as to compete in the industry. Hong Kong is in famous link between China and Europe as its oriental international trade. Let the construction rule over the market in its fiscal policy freehand that share about 70% of the Hong Kong industry. Building energy saving management is the prosperous fore step construction industry.

The following advocates the Achievement to Energy Efficiency & Intelligence. (See Figure 2)

Structure shift for public The slogan quoted "Recycle, reuse and refill in the use of building materials and any kinds.

BESM is the wise in the control of waste products. Micro organisms are therefore adapted to eat up the pollution oil and dirt in the river. The better is the environment, the better our human beings. Good Environment is at its best for pleasure and lives and work.

Environmental awareness, political concern and general public urge the Building energy saving management approach a success. With our higher education, controlling the resources and reduction of wastes call for people in the street in a position to new era of BESM. The Building energy saving genius is the brainstorm for public to such a change. The value for energy saving is now in line with money saving. We are asked to pare down our construction wastes. The Governor announced in 2010 that in order to building energy saving management the plastic bags, construction wastes should be kept to the minimal. A fine is imposed on handling these products. The Government implements the certification scheme under (HKBESA) that it is the quality management certification authorized bodies which is the government ownership to very company the cortication system. ii. Controversial Issues It is to gain a overall view of the situation comprising of nearly Zero Energy Buildings, skills, deficiencies, green skills The development of Net or Nearly Zero Energy Building (NZEB) definitions and the implication for regulatory reform Regulatory frameworks for energy efficient buildings Affordable solutions in sustainability for new building developments such as innovative materials and methods to improve sustainability Skills to implement successful collaborative and multidisciplinary environment for building design, engineering, building and construction Building Energy Saving Management is to prevent loss and wasted protection. It is the better use of limited resource. The Environmental system in construction is the control of its availability of the goods and products simultaneously keep the standard in utmost condition. Maintaining Environment Management in high standard is our human phenomenon. The goal is the minimal cost in handling goods and products simultaneously keep the standard in utmost condition. The implementation of BESM is through trial and fault that we learn finally the success. Success is the mother of failure. It is what the BESM about.

4 e) Targets of the Research

What we achieve as follows ? Investigate the objectives of BESM and the development of BESM to the international growth in construction industry. ? Forecast the characters of clients, engineers, architects, and main contractors have insights towards the BESM in construction works, and ? View the spectacular requirements for the building projects.

5 f) Study Methodologies

The studies of this methodology are analysis as follows

? BES Plans drives to construction projects as necessity made either the technical and contractual skeleton of the construction industry.

? BES Plan uplifts the Building Energy Saving Management of construction projects contractually.

? By virtue of the special nature of the construction industry, there is no necessity to adopt a 'Whole Building Energy Saving Management' approach in all construction projects. Feedbacks from the construction are demanded to the survey and a number of charts drawn out. (See Figure 3) Data taken on: 418 Main contractors; 260 Large/small sized developers; 336 Professional civil/structural/building engineers; 279 Registered engineers/architects (See Figure 3). The Genius in Energy Saving and Quality Status Award Scheme BESM Performance pledge will be presented to the one who has the willingness to work with energy saving management into practice in the industry. Through assessment and recommendation by the Independent Examination Board. Once can attain the Certificate for Appraisal in a year. The one has award chosen to be the brilliant energy saving in the year who has strong sense of energy saving, leadership with quality management improving the performance of work and enhance the productivity in the industry. Green Environment Practice always in the mind of the continents. h) Outcomes in Setting up of a Building Energy Saving Management Approach Around the World Under the historical in Beijing (AFP) on Jan 11, 2012, the Chinese built tycoon behind a 30-storey energy-saving that used only 15 days. China Engineering Company reshapes the construction to formulate new energy. Reduction of energy consumption similar to the least waste is our Environmental Science. Working on the goal of minimizing the cooling load and eliminating the need for auxiliary heat, various passive improvement strategies were first brought in. These strategies included insulation, double glazing, vented roof, shade trees, reduced glass area, overhangs, and high efficiency mechanical systems on roof and wall.

6 i. Structure Shift for Private Building

Energy Saving Genius is everywhere in Mainland china. This is also applicable to Hong Kong as well. Hong Kong should reshapes its own character and put the environmental awareness into building culture. The very good Portfolios:

Building Energy Saving Management Plan adopted all over the world relatively to Change:

ii. China Air-con tycoon moves into eco-friendly building the Chinese tycoon behind a 30-storey energy-saving building that built up in 15 days only. China should come up effective systems for building energy saving evaluation and certification, implement economic incentive policies for building energy saving, and enhance the popularization of building energy saving knowledge.

iii. Australia Constructing the energy flows through an environment is not new. In the 2000s drought conditions in Australia pushed in the use of embodied energy analysis methods to water. The study of embodied water is prompted. (Boutique hotel Stendhal, Vienna, Austria Boutique hotel Stendhal was the first hotel to achieve a zero energy balance France Very low energy buildings are enlarged with standard of high energy efficiency by national Building Regulations. They neglected traditional heating systems and active cooling resulting in a saving of energy consumption of 70 to 90% compared to the existing building stock. iv. Germany Saudi Arabia and Germany put a joint cooperation agreement with the two countries in the field of energy efficiency in buildings, maintain the electrical energy that official estimates enhance in consumption in the country v. Britain Biodiversity Assessment In our philosophy, development governs the environment. Natural environment including the biodiversity assessment is to be worked out for developments situated nearby areas with high ecological value. UK Estate reshape is a symbolic illustration. Blossom vegetation in the existing estate is to be shielded as an integrated landscape strategy.

7 vi. Canada

Endowed 22 months to build a leading edge manufacturing facility is one certified under the LEED (Leadership in Energy and Environmental Design) program which rises up the adoption of sustainable green building design techniques and construction practices by tools, materials and performance criteria, pertaining to all aspects of the building. "The whole idea behind LEED is not only energy efficiency, sustainable design or indoor air quality (IAQ), but also an overall improvement of construction practices to reduce waste and/or contamination caused by the construction process," said Daniel.

8 vii. Hong Kong

Energy is heat and light, and in more complex mechanical, electrical, chemical and nuclear forms requires energy efficient. Voluntary is the framework of energy efficiency in Hong Kong, the Government is to further facilitate the public in choosing energy efficient appliances and raise public awareness on energy saving, the Government has brought in a imperative Energy Efficiency Labeling Scheme (EELS) through the Energy Efficiency (Labeling of Products) Ordinance. Renewable with the gradual reduction of available fossil fuel reserves and the unfriendly impacts on the environment made by the burning of fossil fuels, the use of renewable energy is becoming increasingly important, especially in Hong Kong, which is highly energy dependent. Learn more about renewable energy.

9 viii. Japan

Avail laws, regulations, technical standards, evaluation systems and energy-saving services. Japan intends to study in building energy saving management carried out. The Building-Energy Manager's Association of Japan (Source: Managing Energy-Saving Technology in the Building) this association has been conducting an energy-saving diagnosis project as an aid project of the former Ministry of International... (Source: Managing Energy-Saving Technology in the Building) This association has been conducting an energy-saving diagnosis project as an aid project of the former Ministry of International Trade and Industry since the fiscal 1996. This diagnosis service is a free project, which is conducted taking two days in principle. Two professionals, partner-up, selected from member companies of this association, and are sent to the client's office. Diagnosis items are listed below: (1) Analysis evaluation of real energy consumption in the building (2) Energysaving diagnosis and measure planning on the building and the facility (3) Report of an improvement proposal below is a flow chart that shows a process of energysaving diagnosis. xv. Switzerland IWB Energy Customer Centre, Basel, Switzerland with a view that this seven-storey building is situated with poor solar access. Organizing Minergie-P energy standard Gundeldinger Field, Basel, Switzerland, engineering works industrial site has been delocalized to community business, activity and leisure centre with a public character. Sustainability measures induce renovation rather than demolition, water saving devices, sensor-controlled energy lighting, recycled and green building materials, ecological paint, roof gardens and a370m2 photovoltaic solar installation.

The statistics on BES are tabulated in the world as follows: (See Figure 4). The puzzling we face is impoverished workmanship by the contractors in completing the works. Poor compliance appears in the drawings and specifications between different parties. MC has the intention to target the works to cost and schedule rather than the Building Energy Saving Management in construction. Communication and hence the cooperation problems among the parties exist. One design, one builds make conflict and errors. The consequences affect

human beings and the works affect the life of people. Works for maintenance have extended the real facts for buildings period. The setting up of a Building Energy Saving Management is difficult. The misused materials add up the defects ground and not up to standard laid down by Building Authority.

10 k) Discussion

In this study research we notice that the design misinterpretation, craftsman training and the waste of materials greatly the leading of energy loss. There will be a saving if everything go better fall in the right pathway. The materials should be planned ahead such reuse, recycling and refill tin order to avoid the wastage. The on-site workers should attend the training course necessary for energy saving consumption in construction industry. The contractors should bear in mind that energy saving is the first hand solving instead of the profitability. We should maintain our energy saving in our workplace and work it out in practice.

Energy saving team should set up to supervisor the more appropriate use of material and products. Energy Saving Management is a long-term planning we should devote more time in designing the subjects occasionally in the three main scopes namely Design Stage, Construction and Erection of Building components. Though there are many contingent factors to hinder our way such as political concerns, human psychology, social ethics, and the surroundings, pirate pace rule over finally. Feedback, decision-making, inspection, testing, sampling energy saving control, production, pre-casting, and the instruction control all count on the coexistence among themselves.

Hong Kong face more or the less the situation as in Mainland China. Pollution climb up the peak and the severe weather we count on. Major problems in energy saving work on the first hand, communication skills and know ledges are the key strategy of sustainable development towards the energy saving approach laid down by Government. The leaflet hand in between the parties concerned energy saving management is not established well among the trade are the problems. On the second hand, the laws and regulations are malfunctioned. Some even not building up energy efficiency codes not up to standard log for their industries. One trade one policy. Unfortunately the building design codes for assorted climatic zones marking 50% energy saving, have been directed but only worst than 5% of newly-elongated buildings as a whole in the country adopting the design codes of building energy saving. Design codes and practice are published on the vellum only not in force. On the third hand, though the "China Energy Saving Law" was trumpeted and also activated in 1998. Non-government intervention is a fiscal policy let the market walk in their way. The chisel is not clearly rehearsed in every walk of life. Fourthly, the environment publication such as the mass media the TV tend to bring out green cycling is good. However, in reality the on-site workers, contractors and consultants not accustomed and easily fake out. More, the platform is too lack in energy saving management and far from exercising. The equipment, technology and process are not accomplished towards the goals of energy saving management. Failure is the consequences the foundation of miserable BESM SKELETON.

11 III.

Change in Current Situation in China 30-storey energy-saving building mark a change that built up in 15 days with the intention to duplicate the model across the vast and heavily polluted nation. a) New Features 30-storey energy-saving building The prefabricated building, the five-star T30 Hotel at Dongting Lake, Hunan province which opened on January 18. It is an Internet sensation after time-lapse video posted online showed it being constructed by 200 builders in just 360 hours. Zhang Yue is the billionaire chief executive of the Broad Group air conditioning company always find ways of speeding up the buildings with rollback of waste of materials and energy. The feature is emphasized that quadruple-glazed windows which use energy-saving lighting.

In feeding up with the green environment, the pre-fabrication used much more than most European buildings. In 2013 20 building built up a month and by 2014, up to 50 buildings a month as summarized in the mainland China.

China is much more polluted than Europe and harmful to our health and will offset the economic benefits of our growth The president that constructed the building won a UN Environment Programme "Champions of the Earth" award last year. The cities of China are among the world most polluted after three decades of rapid urbanization. Zhang founded Broad in 1988 with his brother, Zhang Jian that studied thermo dynamics and that revived an old energy-saving technology for non-electric air conditioning which they have now sold in 75 countries around the world. The hotel which is composed of prefabricated parts were made at a factory owned by the Broad Group in Hunan that employs 10,000 people, using steel, glass and insulation sourced inside China. The group has three such factories in China and plans to expand that number to 40 to promote its patented Broad Sustainable Building model at home and abroad.

Energy efficiency indicators of major energy consuming equipment: By 2010, energy efficiency of newly added major energy consuming equipment is expected to reach or approach international advanced level, and some automobiles, motors and household electric appliances are expected to reach the international leading level (See Table 5 & Figure ??)

12 Conclusion

BES is a relatively new concept in China and Hong Kong, there are at present no courses available to train works, supervisory staff, managers and chief executive officers in the techniques of implementing Building Energy Saving Management Plans in the construction industry. This is one area, which the construction industry in China and Hong Kong should address urgently. In the training programmers, some of the potential problems, as noted in this paper, which are likely to arise during the implementation of BES Plans in the construction industry, must be highlighted. This will help to building industry will function in the manner intended to achieve Building Energy Saving Management construction effectively all around the world. Construction industry is the great demand for energy saving were the problems of our wastes is announcing. Survey has its own constraints. The size we use for sampling is too board in a sense and cannot reflect the specified the real situation details.

The survey cannot truly tell us the inside story of the particular projects. Training is an essential tool to tailor made for our contractors, developers, consultants and engineers and concerned on-site staff. It is recommended that energy saving prove to be the new features of cost-effectiveness in the nowadays economy and is cozy to program the green strategy and peek at the internet or website. More importantly, it is to sum up the medication and modification of the harmful products in industry as they danger our lives. The option of energy culture in the life cycle is a continuous process and cultivation practice is our major issue. Enlightening policies such as labeling the slogans on the site and guiding our ideas and minds on the right track on the energy saving. Once uses the environmental friendly energy saving components in the authorized list is our first step.

The methodology is to quicken the aim of energy saving we should raise up the standards and specification in our countries relatively with the prey and hasten our Government laid down laws and regulations on the energy saving a starting stone. Fine and impose punishment on those who exhaust the energy wrongly. One puts on energy saving technology policy on contour much easy for workers. Energy saving highlights through the mass media deliver the message on energy consumption information, energy saving technology, processing and equipment development in the workplace. The mechanism on the supervision of the energy control on site and accomplish our purpose of energy saving by volume of publications, TV, radio and newspapers. Competition on energy saving is also helpful in our industries compared with overseas. Tailor-made courses for energy saving should be provided to the workers on-site, contractors, engineers and people involved in construction. Energy saving management should be initiated in primary stages in the technical institute and vocation education.

The European Union is setting stringent targets for energy efficient buildings-in very specific carbon emission reduction targets to be finished by 2050. There is an acknowledgement that buildings have a long lifespan (and long intervals between significant refurbishments). Significant change needs to be implemented in the very near future to cast on long term goals.

Europeans have strong sense of urgency and commitment to tackling the condition and throughout Europe there are a variety of concepts and voluntary standards for energy effectiveness and efficiency of buildings comprising of Passivhaus, Zero-energy, 3-litre, Plus-energy.

Simultaneously, energy saving is a long-term strategic guideline in China own economic and social development. It is urgently that the NDRC has therefore commutated the plan of Energy saving, which aims to the whole society towards energy saving and energy intensity reduction, to removing energy bottlenecks, to building an energy saving society, and to promoting a sustainable social and economic development. The objective of building a society that is seeing each side in every aspect. The programming period is divided into the Eleventh Five Years Plan period running to 2010 and the period from 2010 to 2020. The energy saving objectives and the focus of development by 2010 are implemented whereas the objectives stated for 2020 are proposed. The Plan is as follows: key areas and key energy saving projects; implementation measures; the current situation in respect of energy utilization in China; tasks for energy; the way forward for energy saving, principles and objectives.

There are hundreds of Building Energy Saving Management services (BESM) companies in China and worldwide including both multi-national and domestic industries. However, this research only focus on couple world-wide largest Energy Saving Management services provides engaged with China's operations. Finally, the study sequences should be performed on order to achieve energy efficiency & intelligence. Building Energy Saving Management is Building Energy Saving Genius. ¹



Figure 1: Figure 1 :

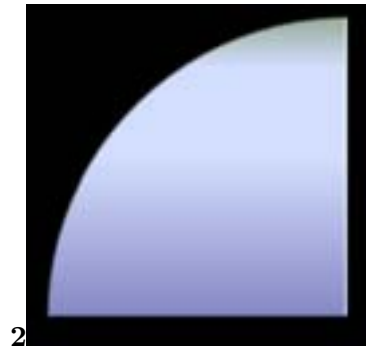


Figure 2: Figure 2 :



Figure 3: Figure 3 :

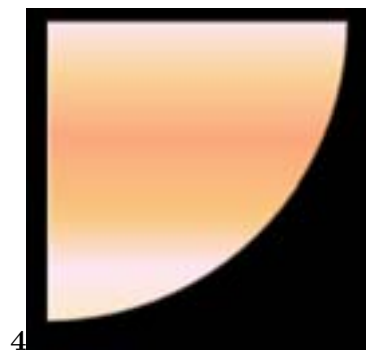


Figure 4: Figure 4 :

<p>ix. South Africa</p>	<p>environmental and economic sustainability is one that involves xiv. Germany Empowering and involving the residents Neue Burse Student Residence Hall, Wuppertal, Germany Two near identical student residence buildings originally constructed in 1977 have been extensively upgraded for improved functionality and thermal performance, one to</p>
<p>Building energy management, electricity saving,</p>	<p>Low Energy building standard and the other to</p>
<p>Energy Consulting, Energy Saving, franchise, grid feed,</p>	<p>Passivhaus standard information regarding energy</p>
<p>Industrial Energy, Industrial Energy Saving, Inverters, low</p>	<p>monitoring, occupant behavior and education, commissioning and</p>
<p>power lighting Industrial & Commercial Industrial and commercial generators in nine are sold out in Southern</p>	<p>defects rectification is included in addition to the sustainability measures undertaken to achieve</p>
<p>African countries. Heavy duty high output permanent installed sets designed to be reliable and cost effective. Prime Power Operations Users reliant on diesel power</p>	<p>Disposal Unit was constructed in 1968 and completely sustainable retrofit buildings Waste Disposal Building Remscheid, Germany The office building of the Waste</p>
<p>as primary source of power effective power station designs with reliability Residential 2-3 bedroom free standing houses with 60A single phase connection Permanent installation in sound attenuated enclosure delivery good quality of power x. Taiwan Towards very low energy buildings provide a significantly higher standard of energy efficiency than the minimum required by national Building Regulations. They are very often designed without tradi-</p>	<p>2013</p>
<p></p>	<p>Year</p>
<p></p>	<p></p>
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<p></p>	<p>XIII</p>
	<p>Issue</p>
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	<p>Version</p>

5

Consuming Equipment Items	Unit	2000	2010
Coal-fired industrial boiler (under operation)	%	65	70-80
Medium and small sized motor (design)	%	87	90-92
Fan (design)	%	75	80-85
Pump (design)	%	75- 80	83-87
Air compressor (design)	%	75	80-84
Average oil consumption of automobiles (for passenger purpose)	L/100km	9.5	8.2-6.7
Room air conditioner (energy efficiency ratio)		2.4	3.2-4
Electric refrigerator (energy efficiency index)	%	80	62-50
Household gas cooker (thermal efficiency)	%	55	60-65
Household gas water heater (thermal efficiency)	%	80	90-95

[Note: A Figure 5 : Energy Efficiency Indicators of Major Energy Consuming Equipment IV.]

Figure 6: Table 5 :

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