CURRENT STATUS FOR IMPLEMENTING ENERGY EFFICIENCY AND GREEN BUILDING IN VIET NAM

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1. Current status on housing development & energy consumption in Viet Nam;

2. Energy Efficiency and Green Building
   + Building Code on Energy Efficiency;
   + Green Building Awards
Energy consumption and Current status on housing development in Vietnam
Along with the growth in terms of number of buildings and scale of floor area, the energy consumption in this sector has significant increased year-on-year. In 2016, energy consumption in the residential sector accounted for 32% of total national energy consumption and estimated about 34% in 2018.
The growth of buildings

in square meters

- Multi-Unit Residential (m²)
- Transport (m²)
- Warehouse (m²)
- Institutional/Assembly (m²)
- Hotels & Restaurants (m²)
- Healthcare (m²)
- Education (m²)
- Retail (m²)
- Office (m²)
Survey on the current status of energy efficiency buildings in some provinces/cities in Vietnam

Statistics of construction works over 2,500m² in 5 cities
Source: Clean Energy Program USAID Vietnam, 2015

TOTAL: 1,431 BUILDINGS WITH THEIR FLOOR AREA OVER 2,500 M² IN 5 PROVINCES
- Hanoi: 441 buildings
- HCM: 540 buildings
- Danang: 316 buildings
- Can Tho: 83 buildings
- Hai Phong: 51 buildings
• The forecast growth of Vietnam Construction Market

- In recent years, the total average area of new building floor has taken up for VN 80-90 million m² year. The offices, hotels, commercial centers has been rapidly increasing along with the growth rate of big and medium scale buildings throughout the country, especially in big cities.

- Vietnam's construction market is expected to reach by US $ 14 billion in 2021.

Source: Business Monitor International, the Ministry of International Trade Foreign Affairs Canada, Bloomberg, International Energy Agency
In 2013, Building Code (QC 09/2013- BXD) was issued and enforced in Viet Nam, the code are for building envelope, ventilation and air conditioning, lighting, escalators and elevators, electric power consumption and service water heating system.

Last year 2017, the QC 09/2013- BXD was revised with higher performances for ventilation and air conditioning, lighting and water heating system such as COP (AC, Chile, heat pump, heat water system and lighting system), the revised version, namely, QC 09/2017- BXD.
Now, the policy is understudying based on criterias:

1. Efficiency in Design and Structure;
2. Energy efficiency of building;
3. Water effect;
4. Embodied Energy of Materials;
5. Quality of the indoor environment.
GREEN BUILDING AWARDS

In 2010, The LOTUS was introduced as a voluntary rating tool by the Vietnam Green Building Council (VGBC).

The aim of LOTUS is to guide the local construction industry towards energy efficiency, and to promote environmentally friendly practices. The rating system applies to three building types namely LOTUS Non-Residential, LOTUS Residential and LOTUS Buildings in Operation to accommodate for various building types.
ENERGY EFFICIENCY - GREEN BUILDING

LOTUS CERTIFICATES IN VIET NAM

![Bar chart showing number of certifications and registrations from 2010 to 2017](chart.png)

- **Certified**
  - 2010: 0
  - 2011: 0
  - 2012: 1
  - 2013: 4
  - 2014: 7
  - 2015: 9
  - 2016: 12
  - 2017: 15
- **Registered**
  - 2010: 2
  - 2011: 6
  - 2012: 6
  - 2013: 11
  - 2014: 12
  - 2015: 14
  - 2016: 22
  - 2017: 27

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FUTURE PLANS

1. ...
2. ...
Thank You!

- Questions/ Feedback  NOW