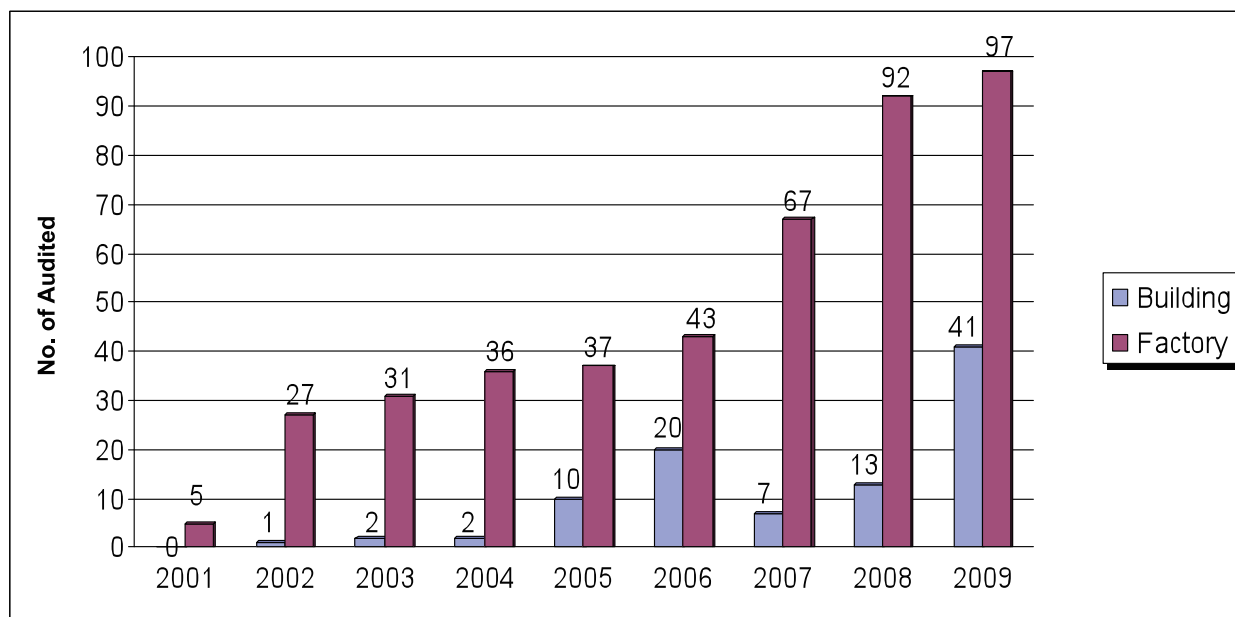




## Number of energy audit statistics of ECC-HCM 2009



### Best Practice on EE&C of Factory

- SAIGON EXPORT FOODSTUFFS AND AGRICULTURAL PRODUCTS JSC .
- Number of staffs : 60 persons
- Main product : Different kinds of food
- Designed Capacity : 10,000 tons/day
- Energy Consumption : **Electricity 12,578 kWh/day**
- Annual energy costs: ~ 4.1 Billion VND (~ 227,000 USD)
- Operational time in a year : 5490 hours/year



|              | Options   | Energy Saving<br>(TOE/ year) | CO2 reduction<br>(ton/year) | Notice      |
|--------------|---|------------------------------|-----------------------------|-------------|
| 1            | Using energy saving <b>Fluorescent lamps (T5)</b>                 | <b>6.3</b>                   | <b>47</b>                   | Electricity |
| 2            | Replaced <b>cold storage system</b> 100 metric tons by new system | <b>7.2</b>                   | <b>54</b>                   | Electricity |
| 3            | Using <b>high-performance motor for fan</b>                       | <b>0.4</b>                   | <b>3</b>                    | Electricity |
| 4            | Adjusted appropriate <b>air excess</b> rates for boiler           | <b>2</b>                     | <b>15</b>                   | Diesel oil  |
| 5            | Wrapping <b>insulation</b> for steam sterilization room           | <b>0.5</b>                   | <b>4</b>                    | Diesel oil  |
| 6            | <b>Reducing load</b> of air conditioner room                      | <b>1.1</b>                   | <b>8</b>                    | Electricity |
| <b>Total</b> |   | <b>17.5</b>                  | <b>131</b>                  |             |





## Best practice on EE&C of building

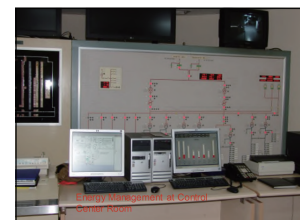
- International Commercial Centre Joint – Venture Company, IBC Diamond Plaza.
- Commercial and services, shopping, entertainment and offices and rental apartments.
- Building area: 6,146m<sup>2</sup> (Total area: 57,144m<sup>2</sup>)
- Energy Consumption : **Electricity 12,417,815 kWh/year**
- Age of building: 7 years
- Number of storey: 19
- Total number of occupants: 2400 people



Using sun control film

## EE&C measures of building

- Good natural **ventilation**, **lighting devices** are 36W, tubular fluorescent lamps 36W, **electronic ballasts** 3.5W, **compact fluorescent lamps** 10W and 20W, etc.
- Overall heat transfer through building envelope : Walls 32.81 W/m<sup>2</sup>, Ceiling 8.84 W/m<sup>2</sup>
- Building indoor environment: Temperature: 25°C, Relative humidity: 60%.
- *Energy Efficiency Index: air-conditioned area: 112.34 kWh/m<sup>2</sup>/year*
- Lighting load: 7.8 W/m<sup>2</sup> (terrace roof area)
- Energy consumption: 64.41 kWh/m<sup>2</sup>/year
- **Annual energy saving: 1,997,280 kWh**



Energy Manager system  
at control center room

## Energy conservation equipment and trend of industrial

- More interested in the use of renewable energy and alternative energy forms
- Traditional industry needs technological innovation to reduce emissions and enhance energy efficiency (such as brick, seafood processing, textile ...)
- The trend of improving old production line/equipment is most important in recent time.
- Some equipment: **compact fluorescent lamps**, **solar water heater**, **inverter**, energy measurement/manager devices, **sensors for automatic control** ...

