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# SUPPORT TO PROMOTE ENERGY EFFICIENCY IN BUILDINGS

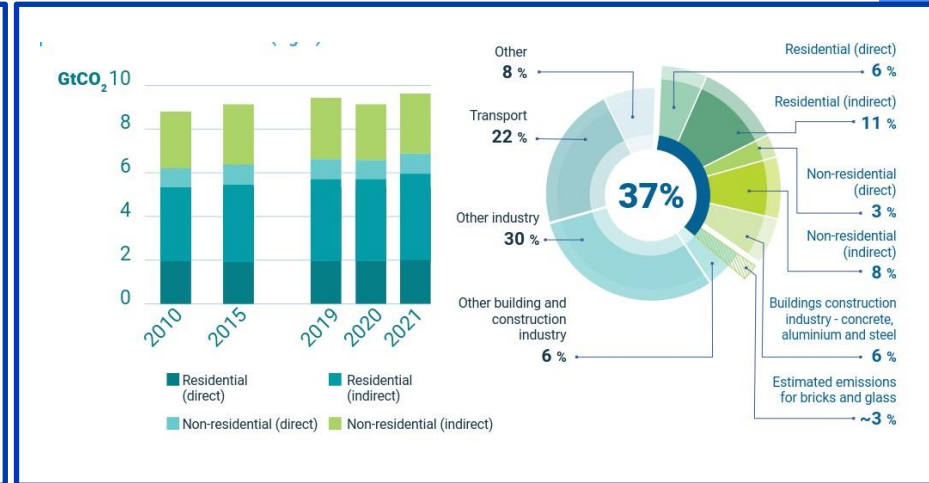
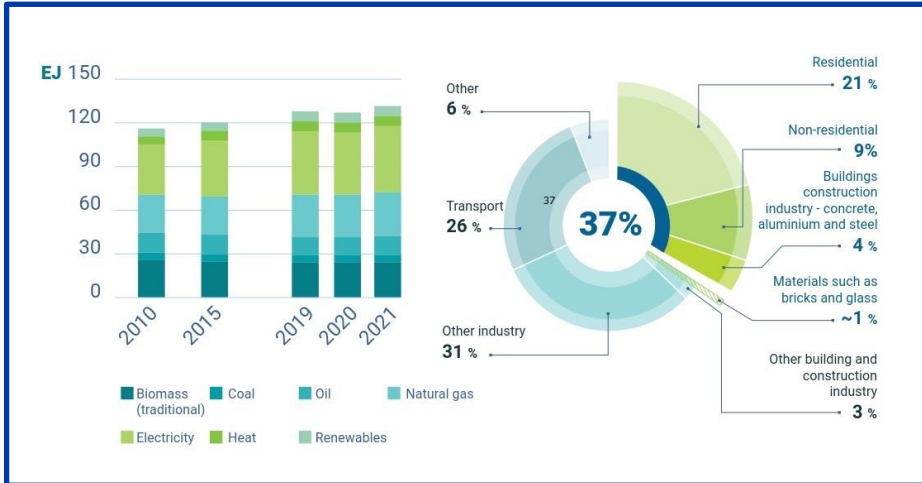


Presented by Dr. Nguyen Trung Hoa,  
Former Director of the Dept. of Science,  
Technology, and Environment under the  
Ministry of Construction (MoC)

# OBJECTIVES OF THE STUDY

- ❖ Evaluate the role and importance of the construction and building sector in saving energy and reducing greenhouse gas emissions.
- ❖ Review policies, identify gaps and legal barriers, and propose policies to promote energy efficiency in buildings.

# THE ROLE AND IMPORTANCE OF THE CONSTRUCTION AND BUILDING SECTOR



## Energy consumption and greenhouse gas emissions

[ Source: 2022 Global Status Report for Buildings and Construction, UN Environment Programme]

# INTERNATIONAL EXPERIENCE

1



Overview of experience from the five countries: the United States, China, Singapore, Malaysia and Thailand;

2



Issues to be considered: Energy conservation laws and policies to promote energy efficiency and reduce greenhouse gas emissions.

# INTERNATIONAL EXPERIENCE



**3**

Energy efficiency in the construction and building sector is regulated in the Energy Conservation Law;



**4**

The provisions of the Law:  
Regulations and standards;  
Energy benchmarks; Energy audit; Energy labeling for buildings; Financial and non-financial incentive policies; Research and Development; ESCO service model...



**5**

Developing energy efficient buildings, green buildings...

# GREEN AND ENERGY-EFFICIENT BUILDINGS IN VIET NAM



## United Nations Green One UN House (GOUNH) in Ha Noi

28.8% reduction in energy use; 42% reduction in water consumption; 408 solar roof panels, generating at least about 110,000 kWh/year. (LOTUS Platinum Certificate)



## Diamond Lotus Riverside Ho Chi Minh City

Reduce energy use by 51%; 47% reduction in water consumption;

100% of the space is naturally lit and ventilated. (LOTUS Gold Certificate)



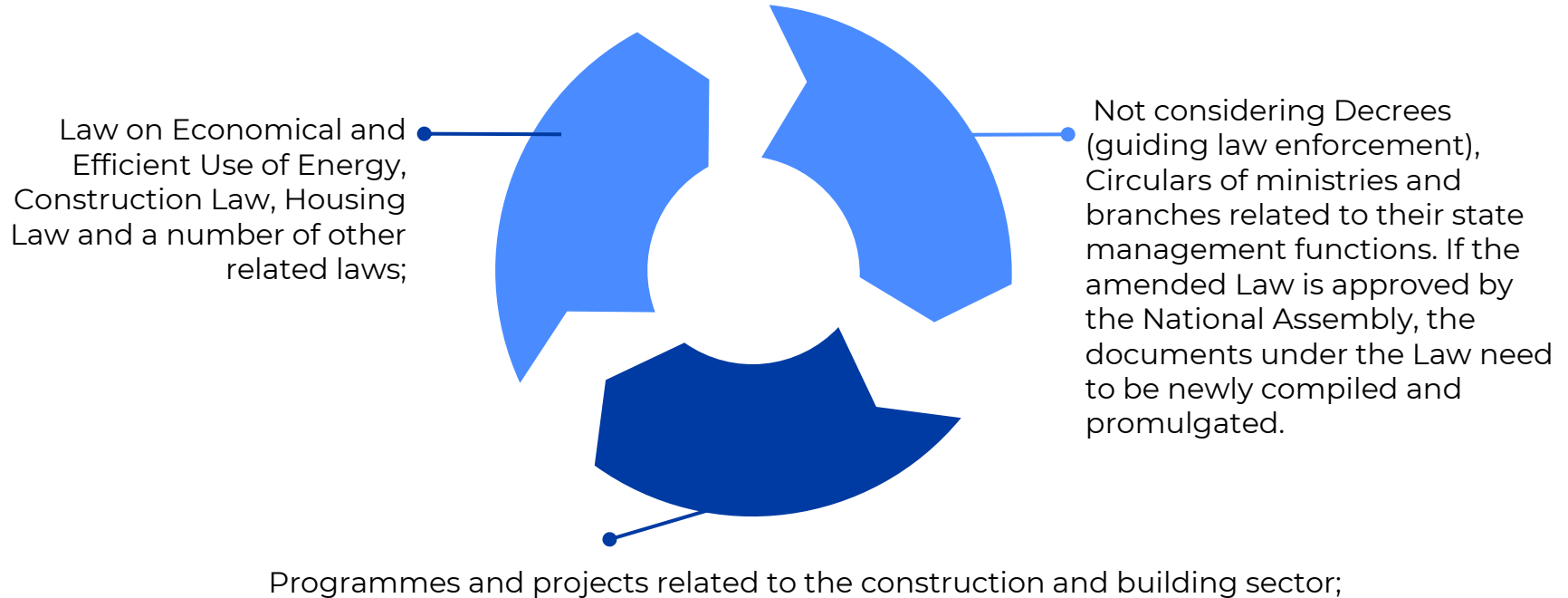
## CONINCO Tower Ha Noi

EECB Demonstration Project (funded by UNDP)

42% energy savings: 37% from air conditioning system and 51% from lighting system

CO2 emissions reduction: 923 tCO2e/year

# REVIEW OF VIET NAM'S POLICIES



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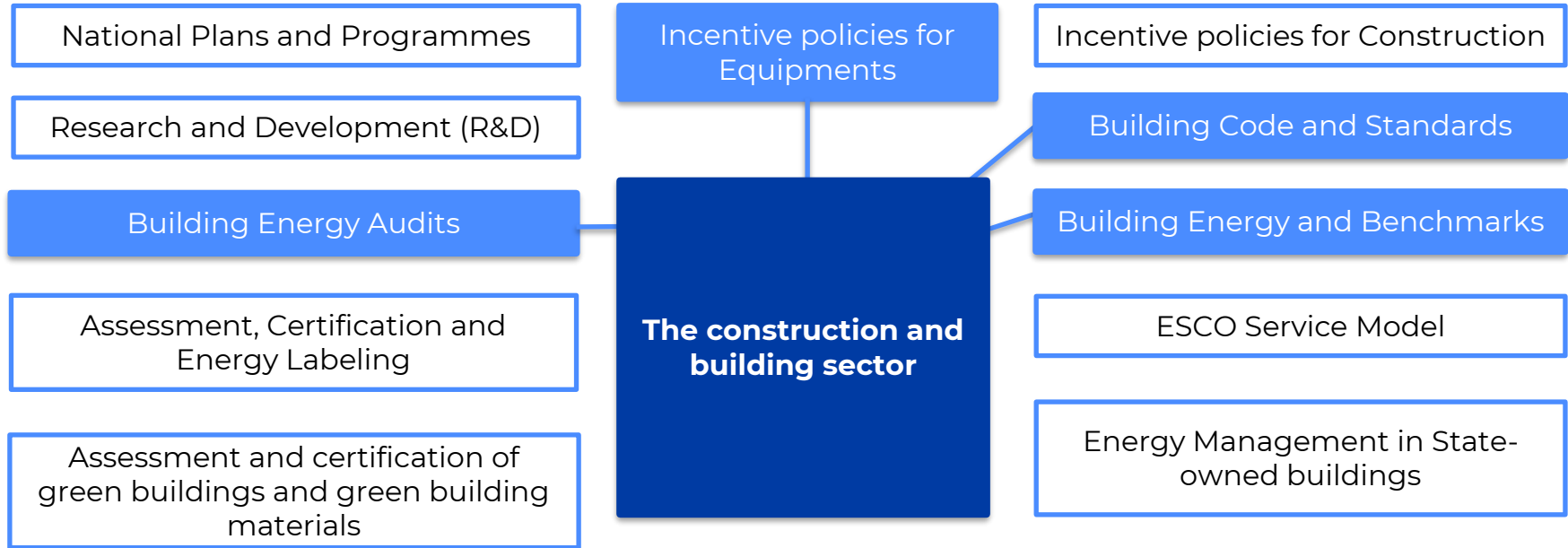
## ❖ Law on Economic and Efficient Use of Energy

- ❖ Construction and building sectors related to: Chapter III (Articles 15, 16, 17, 18); Article 29 (investment projects with state capital); Chapter VIII (Articles 32, 33, 34, 35, 36) key energy use facilities; Article 41 (incentive policies).
- ❖ Ministry of Construction: constructs buildings, issues energy benchmarks (?);



# REVIEW OF VIET NAM'S POLICIES

## Law on Economic and Efficient Use of Energy



# REVIEW OF VIET NAM'S POLICIES

## Relevant Policies

Investment Law

Construction Law

Housing Law

Tax Laws, Law on State Budget

- Propose principles to encourage construction of buildings to save energy and resources and meet environmental protection requirements
- Lack of specific regulations
- There are no incentive policies for the construction and building sector

- There are no incentive regulations on corporate income tax, VAT, etc
- There are no regulations on incentives and investment capital funding

# PROPOSALS AND RECOMMENDATIONS TO AMEND THE LAW ON ECONOMIC AND EFFICIENT ENERGY USE

- ❖ Purpose: improve the effectiveness of the Law in the field of construction and buildings, and serve as a legal basis for MoC to perform the function of managing and developing energy-saving buildings.
- ❖ Proposals and recommendations provide MoC, the Ministry of industry and Trade (MoIT) and the Law Drafting Committee with necessary information about the construction and building sector under the management authority of MoC

# PROPOSALS AND RECOMMENDATIONS TO AMEND THE LAW ON ECONOMIC AND EFFICIENT ENERGY USE

Contents that need to be amended:

01

## Article 3

Explanation of terms (addition of terms 'energy-efficient buildings,' 'green buildings,' and 'net zero emissions buildings')

02

## Article 6

Strategies, plans and programmes (conserving energy, resources and ensuring environmental protection requirements);

03

## Chapter III

Construction and public lighting (building energy labeling, construction materials labeling; building energy management under state management);

04

## Incentive policies

Incentive policies (financial, non-financial, architectural planning).

# PROPOSALS AND RECOMMENDATIONS TO AMEND THE LAW ON ECONOMIC AND EFFICIENT ENERGY USE

## Article 3: Explanation of Terms

- Add the terms 'Energy Efficient Building,' 'Green Building,' and 'Net Zero Emissions Building'

## Article 6: Strategies, Plans and Programmes

- The revised content aims to create a legal basis for ministries and branches to draft and submit to the Government for approval development plans and programmes under their management responsibility.

# PROPOSALS AND RECOMMENDATIONS TO AMEND THE LAW ON ECONOMIC AND EFFICIENT ENERGY USE

## Article 15

- Energy assessment and labeling for buildings under the scope of QCVN 09:2017/BXD, buildings under state management

## Article 16

- Electricity consuming devices in buildings and urban lighting systems must be labeled with energy labels.

# PROPOSALS AND RECOMMENDATIONS TO AMEND THE LAW ON ECONOMIC AND EFFICIENT ENERGY USE

## Article 17

- Encourage the production of green building materials, investment in and construction of green buildings and net zero energy/emissions buildings..

## Article 18: State management responsibilities

- Ministry of Industry and Trade: energy benchmarks, energy labeling for buildings.
- Ministry of Construction: evaluates and certifies green building materials, green buildings, and net zero emissions buildings.

# PROPOSALS AND RECOMMENDATIONS TO AMEND THE LAW ON ECONOMIC AND EFFICIENT ENERGY USE

## Article 41: Incentive Policies

- Activities eligible for incentive policies: investment in the production of energy-efficient equipment, green construction materials, investment and construction of buildings that save energy, resources and protect the environment.
- Financial incentives: taxes, capital, subsidies.
- Non-financial incentive policies: land, architectural planning norms and technical support.





# PROPOSED NATIONAL PROGRAMME TO DEVELOP BUILDINGS THAT SAVE ENERGY, RESOURCES AND MEET ENVIRONMENTAL PROTECTION REQUIREMENTS

- ❖ Legal basis: Construction Law (Article 10, Clause 4);  
Law on Economic and Efficient Use of Energy  
(amended as proposed in Article 6);
- ❖ Purpose: MoC submits to the Government for  
approval and organizes synchronous implementation  
of content promoting energy-efficient buildings,  
aiming at the goal of net zero emissions.



# PROPOSED NATIONAL PROGRAMME TO DEVELOP BUILDINGS THAT SAVE ENERGY, RESOURCES AND MEET ENVIRONMENTAL PROTECTION REQUIREMENTS

- ❖ Target to 2030, 2050, towards net zero emissions.
- ❖ Tasks and solutions: 12 tasks with the participation of MoC, the Department of Construction, investment and construction organizations, relevant ministries and branches.



# PROPOSED NATIONAL PROGRAMME TO DEVELOP BUILDINGS THAT SAVE ENERGY, RESOURCES AND MEET ENVIRONMENTAL PROTECTION REQUIREMENTS

- ❖ Main tasks: Developing construction materials to save energy, resources and protect the environment; renovating and developing energy-efficient buildings and green buildings; labeling energy efficient buildings, green buildings and green building materials; energy benchmarks; completing incentive policies; completing the system of standards; research and development; and improving capacity and awareness

**Thank you**

**Cảm ơn**