BUDIARSA SASTRAWINATA
FIABCI WORLD PRESIDENT-ELECT 2022- 2023

IWAN PRIJANTO
CHAIRPERSON OF GREEN BUILDING COUNCIL INDONESIA (GBCI)

DADAN KUSDIANA
DIRJEN EBTKE, KEMENTERIAN ESDM

IGNESJZ KEMALAWARTA
VICE PRESIDENT LEGISLATION AND ENVIRONMENT FIABCI

FARIDA LASIDA ADJI
REGIONAL LEAD EAST ASIA, GREEN BUILDING MARKET TRANSFORMATION PROGRAM,IFC – INTERNATIONAL FINANCE CORPORATION.

VICTORIA BURROW
ADVANCING NET ZERO, WORLD GREEN BUILDING COUNCIL (WGBC)

PRIYENDISWARA A. B. IR., M.COM.
UNIVERSITY EXPERT TARUMANAGARA UNIVERSITY

RUSMIN LAWIN
FIABCI PRESIDENT ASIA-PACIFIC REGION (MODERATOR)

WEI FENG PH.D
CHINESE ACADEMY OF SCIENCE
SHENZHEN INSTITUTE OF ADVANCED TECHNOLOGY
RESEARCH SCIENTIST

REGISTER HERE

FRIDAY, MAY, 12TH 2023

14.00 – 17.00 WIB,BANGKOK
8.00AM – 11.00AM CEST

JESSICA.AGUSNA@SINARMASLAND.COM

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INTERNATIONAL REAL ESTATE FEDERATION
Legislation & Environment Committee

LOW CARBON PROPERTY DEVELOPMENT

STRATEGIES AND BEST PRACTICES

FIABCI INDONESIA
The International Real Estate Federation
Secretariat : REI Office, Rukan Simprug Indah, Jl. Teuku Nyak Arief 9B, Kebayoran Lama,
South Jakarta 12220 - Indonesia. Ph. : +6221 72789105. Fax : +6221 72789155
Email : fiabci.indonesia@yahoo.com & secretariat@fiabci-indonesia.com

Term of Reference
"Low Carbon Property Development: Strategies and Best Practices"

Indonesia , May 12th 2023

I. Background

The Paris Agreement is a legally binding international treaty on climate change that was adopted by 196 countries at the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP21) in December 2015. The goal of the agreement is to limit globalwarming to well below 2 degrees Celsius above pre-industrial levels, and to pursue efforts to limitthe temperature increase to 1.5 degrees Celsius. It aims to achieve this by reducing greenhouse gas emissions and promoting adaptation to the impacts of climate change.

As we know, Greenhouse gases are gases that trap heat in the Earth's atmosphere, leading to global warming and climate change. The primary greenhouse gases include carbon dioxide, methane, nitrous oxide, and fluorinated gases. Human activities, such as burning fossil fuels and deforestation, have led to an increase in greenhouse gas concentrations in the atmosphere, whichis causing significant changes in the Earth's climate. Not only burning fossils, but the mass buildingand property development could also lead to an increase in greenhouse gas too.

A low carbon property development webinar is likely to cover topics related to the design, construction, and operation of buildings that have a reduced carbon footprint. This may include discussions on energy-efficient building practices, the use of renewable energy sources, the selection of low-carbon materials, and the implementation of sustainable building management practices. The webinar may also address the economic and environmental benefits of low carbon development, as well as government policies and incentives that support such initiatives.

II. Objectives

The purpose of a low carbon property development webinar is to educate and inform attendees about sustainable and environmentally friendly practices in property development. The webinar aims to showcase low carbon building materials and technologies, energy-efficient design, and renewable energy sources that can reduce carbon emissions and minimize the impact on the environment. Additionally, the webinar may address policy and financial incentives to promote low carbon property development, as well as showcase case studies of successful low carbon propertydevelopment

III. Participants

The webinar is intended for property developers, architects, engineers, building managers, otherprofessionals involved in property development and students involved in buildings, and propertymajoring.

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Business Entities, Civil Society and Associations in the Property Sector:

1. FIABCI International Federation
2. FIABCI Indonesia chapter
3. Real Estate Indonesia (REI)

Related Parties:

1. World Green Building Council (WGBC)
2. Green Building Council Indonesia (GBCI)
3. International Finance Corporation (IFC)
4. Tarumanagara University
5. International carbon expert

IV. Discussion Forum Format

The webinar will be conducted online using a video conferencing platform. Participants will be able to submit questions during the Q&A session via chat or video/audio. The webinar will be recordedand made available to participants after the event.

V. Speakers Role

General Note :

1. Each speaker is required to prepare presentation materials with a predetermined topic inEnglish.
2. Each speaker is required to prepare presentation materials in power point template sent bythe committee and should be submitted on May 3th - 5th to the committee.
3. Speakers will present on Panel Discussion in English, led by Moderator.

Topics Direction:

1. Ignesjz Kemalawarta – Vice President Legislation and Environment FIABCI
    - What is contribution from building sector in energy and carbon emission and how to make property sector start to think about lowering carbon contribution in the future?
    - What can property sector do to contribute the support of Net Zero Emission target by2050?

2. Iwan Prijanto – Chairperson of Green Building Council Indonesia (GBCI)
    - World target to have net zero emission in year 2050, based on G20 recommendationthere will be a transformation for energy towards clean and renewable energy to support Net Zero Energy 2050.
    - What mitigation towards low carbon can property sector develop?
    - What is practical method for carbon emission in building and site development?

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3. Victoria Burrow – Advancing Net Zero, World Green Building Council (WGBC)
    - The importance of a Net Zero
    - The role of WGBC to reduce it and go towards net zero emission in the future

4. Farida Lasida Adji – Regional Lead East Asia, Green Building Market Transformation Program,IFC – International Finance Corporation.
    - How can finance support the low carbon development in property sector?
    - What is the obstacle towards low carbon in property?
    - What support are needed from government to remove these obstacles especially infinancial scheme ?

5. Priyendiswara A. B. Ir., M.Com. – University Expert Tarumanagara University
    - Academic point of view how real estate and property sector can contribute lowcarbon effort as part of new integrated development scheme
    - Mitigation effort that can be developed by real estate and property sector towardssupporting Government target in achieving NZE in 2050

6. International carbon expert
    - Energy transition towards NZE in 2060 as International commitment
    - How to implement international collaboration towards achieving NZE in 2050 as stated in B20-G20 Summit.

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VI. Agenda

International Discussion Forum
Low Carbon Property Development:
Strategies and Best Practices
FIABCI International Webinar
May 12th 202

Time	Agenda	Notes
13.30 – 13.50 WIB	Re-registration of participants	20 minutes
13.50 – 14.00 WIB	Participants enter the Zoom Cloud Meeting	10 minutes
14.00 – 14.10 WIB	Opening by MC / Moderator	10 minutes
14.10 – 14.25 WIB	Keynote Address from **FIABCI Indonesia Chapter – Budiarsa Sastrawinata**	15 minutes
14.25 – 14.30 WIB	**Moderator: Rusmin Lawin**	5 minutes
	SESSION 1 : Private Sector point of View	
14.30 – 14.45 WIB	1. Vice President Legislation and Environment FIABCI - Ignesjz Kemalawarta	15 minutes
14.45 – 15.00 WIB	2. Chairperson of Green Building Council Indonesia (GBCI)-Iwan Prianto	15 minutes
	SESSION 2 : Regulator and Economic Sector's View	
15.00 – 15.15 WIB	1. Director of Advancing Net Zero, World Green Building Council-Victoria Burrow	15 minutes
15.15 – 15.30 WIB	2. International Finance Corporation – Farida Lasida Adji	15 minutes
	SESSION 3: Academic and expert point of view	
15.30 – 15.45 WIB	1. University point of view for low carbon in Property development – Ir. Priyendiswara A.B., M.Com	15 minutes
15.45 – 16.00 WIB	2. International expert point of view (TB Confirm)	15 minutes
16.00 – 16.45 WIB	**Q&A and discussion**	45 minutes
16.45 – 17.00 WIB	**WRAP UP SESSION**	15 minutes

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VII. Time and Location

Date **:** May, 12th 2023
Time **:** 14.00 – 17.00 WIB,Bangkok
8.00am – 11.00am CEST
Location : Zoom Cloud Meeting

VIII. Information Contacts

FIABCI Internation Webinar Committee

- CP 1 : Danny Mutaqien -FIABCI Indonesia / Real estate Indonesia
  Email: dani.muttaqin@gmail.com
  Contact number : +6282112658050
- CP 2 : Jessica Agusna
  Email: jessica.agusna@sinarmasland.com
  Contact number +628111609488

The Comparison of the Waste Management at three residential areas

Location	Implementation of Waste Management	Community involvement	Partnership
The Apartment at Mediterania Garden Residences in Tanjung Duren	Implementation of 4 R (Reuse, Reduce, Recycle, Replant) It has a temporary garbage dump, which is upgrade to Green Waste (make compost), in this place the garbage was sorted	Apartment residents automatically follow directions on how to dispose of garbage according to the building manager's instructions, eventhough the waste has not been sorted	Cooperate with scavengers and Cleaning Service to sort the garbage
Non Real Estate Residential Area at Kemanggisan in West Jakarta	Garbage is collected by waste officers who have been appointed by RT. Residents pay a monthly fee directly to the garbage collector. The collected waste has not been sorted	Residents hand over garbage to garbage collectors	No partnership, garbage was sorted by the garbage collectors and sell it to the trash collector
Real Estate Mutiara Depok housing complex	The Residential has a garbage bank managed by resident. Resident are educated to sort waste properly and transported by garbage collector appointed by RT the Garbage was handling over to the waste bank or the resident directly bring the waste to the garbage bank.	All residents in the Mutiara Depok housing complex are involved in sorting waste at home and handling over the waste to the garbage bank.	Waste is managed together with the government.

Academic Point Of View On The Effort Of Real Estate And Property Sector can contribute Lowcarbon As Part Of New Integrated Development Scheme and Mitigation effort that can be developed by real estate and property sector towards supporting Government target in achieving NZE 2050

Ir. Priyendiswara A.B, Mcom.

Tarumanagara University

Presentation Background

Based on The Result of Researchs, as follows :

- The Implementation Of Household Waste Management in Apartments And Residentials Area in the West Jakarta and Depok.
- The Implementation of regulations of the Republic of Indonesia Number 18 of 2008 Articles 3&4 about the Implementation of Household Waste Management and the Like (Case Study: Apartments, Residential Areas) in the West Jakarta and Depok.
- The Waste Management processing that can produce useful recycled products to improve environmental quality and economic life of community

Points to be presented :

- Literature Review about Waste Management (The regulations of the Republic of Indonesia Number 18 of 2008 Articles 3&4 , Types of Waste, etc)
- The Comparison of the Waste Management of those three residentials area
- The Waste Management processing that can produce useful recycled products to improve environmental quality and economic life of community
- Conclusions and recommendations

Literature Review

The regulations of the Republic of Indonesia
Number 18 of 2008 Articles 3&4

Article 3

Waste management is carried out based on the principle of responsibility, sustainability, benefit, justice, awareness, togetherness, safety, economic value.

Article 4

Waste management aims to improve public health and environmental quality and turn waste into a resource.

The definition of "garbage“

Garbage is solid waste consisting of organic and anorganic substances which are considered useless and must be managed so as not to endanger the environment and protect development investments. Garbage is generally in the form of food waste (kitchen waste),leaves, tree branches, paper/cardboard, plastic, used cloth, cans, sweeping dust, etc. (SNI 19-2454-1993).

Types of Waste

Waste is divided into solid, liquid and gas (fume, smoke).
Solid waste can be divided into several types, namely:

1. Based on the chemical substances contained therein
    a. Inorganic waste, for example: metals, broken glass, and plastic
    b. Organic waste, for example: food scraps, leftover wrappers and so on
2. Based on whether or not it can be burned
    a. Combustible examples: paper, plastic, cloth, wood
    b. Not flammable for example: cans, iron, glass
3. Based on whether or not it can rot
    a. Easy to rot, for example: food scraps, pieces of meat
    b. Difficult to decompose, for example: plastic, cans, glass

Solid Waste Management

There are several stages in solid waste management, as follows:
1. The stage of collection and storage at the source Garbage that is at the source location (office, household, hotel and so on) is placed in a temporary storage area, in this case the trash can.
Wet waste and dry waste should be collected in separate places to facilitate their disposal.
2. Stage of transportation From the depot, the waste is transported to the final disposal site or waste destruction by using a garbage truck provided by the City Cleaning Service.
3. The extermination stage

In this waste destruction stage, there are several methods that can be used, including:

a. Sanitary Landfill is the best extermination system.

In this method, the destruction of waste is carried out by piling up waste by filling it with soil layer by layer. Thus, waste is not in an open space and certainly does not smell or become a nest for rodents. A good sanitary landfill must meet the requirements, namely the availability of a large area, available land to store it, and the availability of large equipment.

All types of waste are transported and disposed of somewhere far from residential areas.

b. ***Incenaration*** is a method of destroying waste by burning waste on a large scale using factory facilities. The benefits of this system include:

1. The volume of waste can be reduced by one third.
2. Does not require a large space.
3. The heat generated can be used as a source of steam.
4. Management can be done centrally with a schedule of working hours that can be arranged according to needs.

c. Composting

Garbage destruction by decomposition of organic matter by decomposing germs under certain conditions. This process produces materials in the form of compost or green manure.

4.4R (*Reuse, Reduce, Recycle And Replace*).

Reuse means reusing trash that can still be used for the same function or other functions.

Reduce means reducing everything that causes waste.

Recycle means reprocessing (recycling) waste into useful new goods or products.

And Replace (Replace) carefully on items that are used daily.

4R or Reuse, Reduce, Recycle and Replace is still the best way to manage and deal with waste with its various problems. The application of the 4R system is one of the solutions for waste management besides processing waste into compost or utilizing waste as a source of electricity (PLTSa; Waste Power Plant).

Precisely waste management with the 4R system can be carried out by everyone in their daily activities.

Managing waste with the 4R system can be done by anyone, anytime (every day), anywhere, and free of charge.

All it takes is a little time and care

Some of the following activities are related to 4R (Reuse Reduce Recycle Replace)
which can be carried out at home, school, office or in other public places.

Some examples of daily Reuse activities:

• Choose containers, bags or objects that can be used several times or repeatedly.
For example, use cloth bags for shopping instead of using plastic bags,
use recyclable and environmentally friendly containers.

• Reusing empty containers or packages for the same function or other functions.
For example: used beverage bottles are reused as cooking oil containers or processed kitchen spices.

• Using the blank side of the paper for writing.

• Using gadgets, for example: sms, whatsapp or e-mail (electronic mail) to send messages or letters.

• Sell or give segregated waste to those who need it, for example waste that has been processed into Compost

Some examples of daily Reduce activities:

• Choose products with recyclable packaging.

• Avoid using and buying products that generate large amounts of waste.

• Use products that can be refilled. For example stationery that can be refilled again).

- Maximize the use of electronic storage devices that can be erased and rewritten.
- Reduce use of single-use materials.
- Use both sides of the paper for writing and copying.
- Avoid buying and using unnecessary items.

Some examples of daily Recycle activities:

- Choose products and packaging that are recyclable and easily biodegradable.
- Recycle paper waste into paper or cardboard again.
- Process organic waste into compost.
- Perform non-organic waste processing into useful goods.

Some examples of daily Replace activities:

- Replace items that can only be used once with items that are more durable.
- Check to use only products that are more environmentally friendly.

For example, replace plastic bags with baskets when shopping, and don't use Styrofoam because these two materials cannot be degraded naturally.

The examples of product from The Waste Management processing that can produce useful recycled products to improve environmental quality and economic life of community

Rice Crackers from left over rice

Pouch from the rags

Shopping bags from Coffee packs

The Comparison of the Waste Management at three residential areas

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Conclusions

1. Residents don't know how to dispose of waste properly.
2. Residents do not know about the benefits and economic value that can be obtained from a good and correct way of managing waste.
3. An appropriate management is needed in managing waste in each community, as a result of the diversity of systems that apply in each location.
4. Waste management is a huge business potential if managed properly.
5. The existence of overlapping regulations means that good waste management cannot be implemented properly.
6. The City Government of Depok can carry out Waste Management very well, because it implements the Garbage Bank system, which is supported by the Depok City Government Waste Management Regulations.
7. The Waste Bank System has fully implemented the principles stated in the Law of the Republic of Indonesia number 18 of 2008 articles 3 & 4.
8. The implemention of Garbage Bank system can be used as an alternative way to reduce the volume of waste which can also increase the community's economic value

RECOMMENDATION

1. Residents need to be educated about how to dispose of waste properly and correctly.
2. Residents need to be informed about the benefits and economic value that can be obtained from the right way of managing waste.
3. It is necessary to draw up a regional regulation on solid waste, especially regarding solid waste management at the household level in Pemprov. DKI Jakarta.
4. The Jakarta Waste Management Regulation must be added the implementation of Garbage Bank, like Depok city waste management regulation

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INDONESIA

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