

‘Deep Green Approach’
to create sustainable built environment
and neighborhoods,

Case study of

LUMPINI PLACE RAMA 4 - RATCHADA



Organisers:



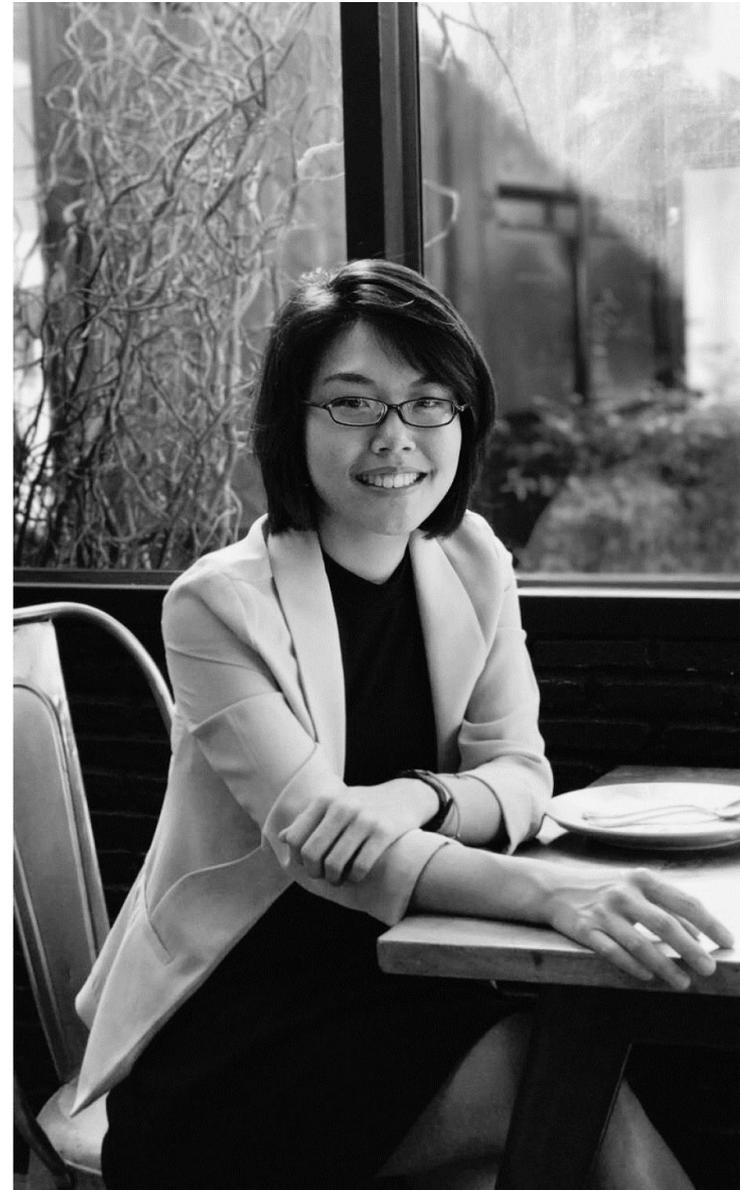
International Co-owners:



DIRECTOR
SUSTAINABLE DEVELOPMENT DEPARTMENT

Panita Vara-urairat,
LEED AP, TREES-A, TREES-EB

- Director of Sustainable Development Department (2017-Present)
- Senior Sustainable Development Coordinator , Wisdom Consulting and Solution Co., Ltd. (2015-2016)
- Thai's Rating of Energy and Environmental Sustainability Associates
- Leadership in Energy and Environmental Design Green Associate
- Part-time instructor at Faculty of Architecture, Chulalongkorn University.
- MSc. (Advanced Sustainable Design), University of Edinburgh, UK
- Architect (Plan Architect Co., Ltd., 2009-2012, Nava Design Studio Co., Ltd., 2007-2009)
- B.Arch Chulalongkorn University

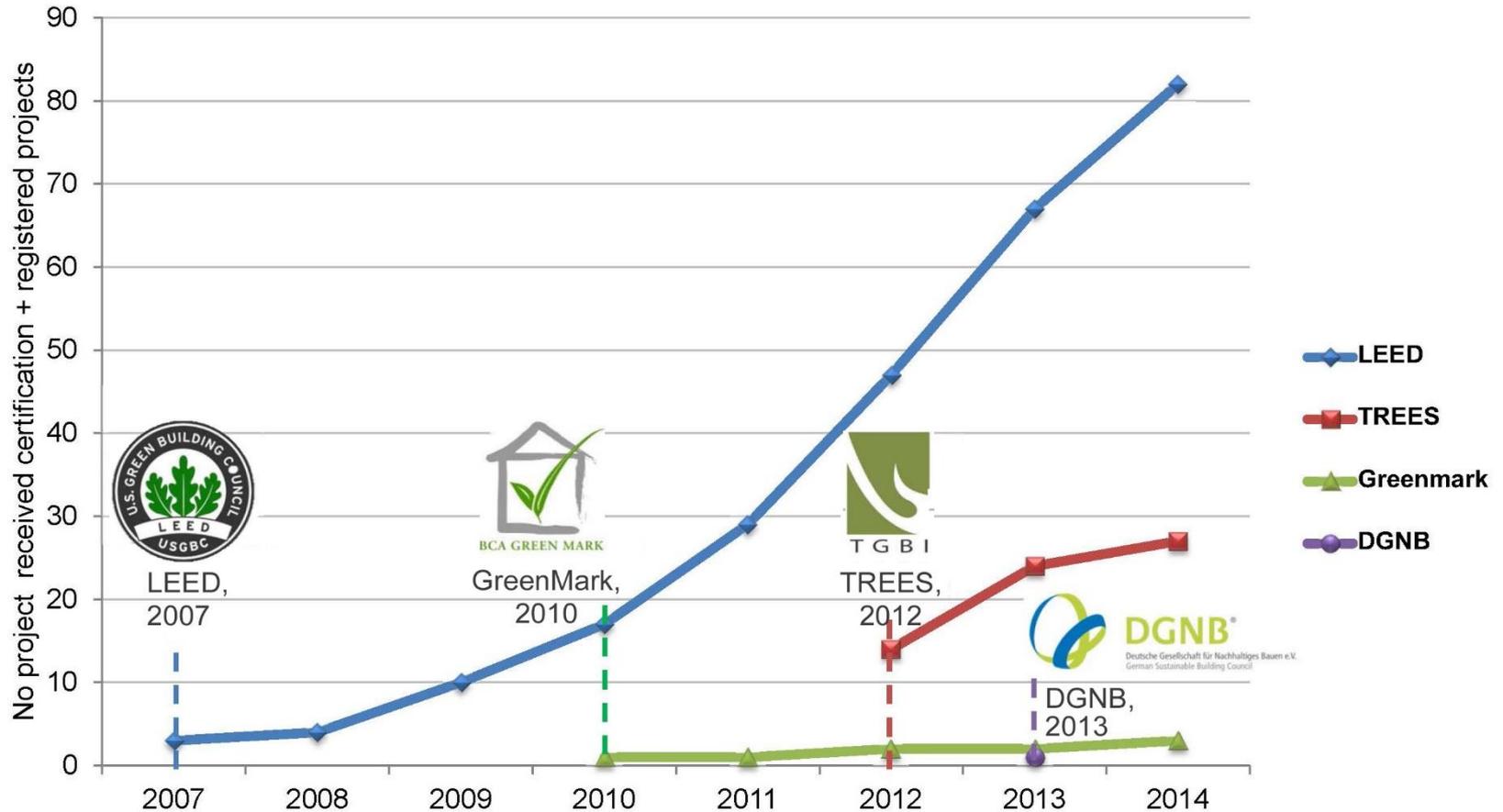


Green building industry expansion in Thailand

an accelerating effect that reflected in **a rising number** of projects applying for **green building rating system**.



Green Building Rating in Thailand



Trend of buildings that applied for green building certification in Thailand from 2007-2015

Most developers have started to incorporate green design strategies into their projects in order to create **product added values** and **strengthen their market positions**.



Tangible and measurable benefits

focused in Thailand green building market



Lower monthly costs



Better indoor air quality



Better resale value



Greater Durability



Peace of mind

Green features are usually included as **fancy items** in buildings to promote the projects as **'eco-friendly'**



How about **key objectives** of green building in enhancing quality of life?



Lower monthly costs



Better indoor air quality



Better resale value



Greater Durability



Peace of mind

'Deep Green' Approach;

A New Dimension of Green to Provide Sustainability in All Facets



A Case Study of **LUMPINI PLACE RAMA 4- RATCHADA**

LIGHT green environmentalism

- believes in green technologies
- advocates change at the individual level
- is criticized to be a 'shallow green'
- views architecture as stand-alone objects

DEEP green approach

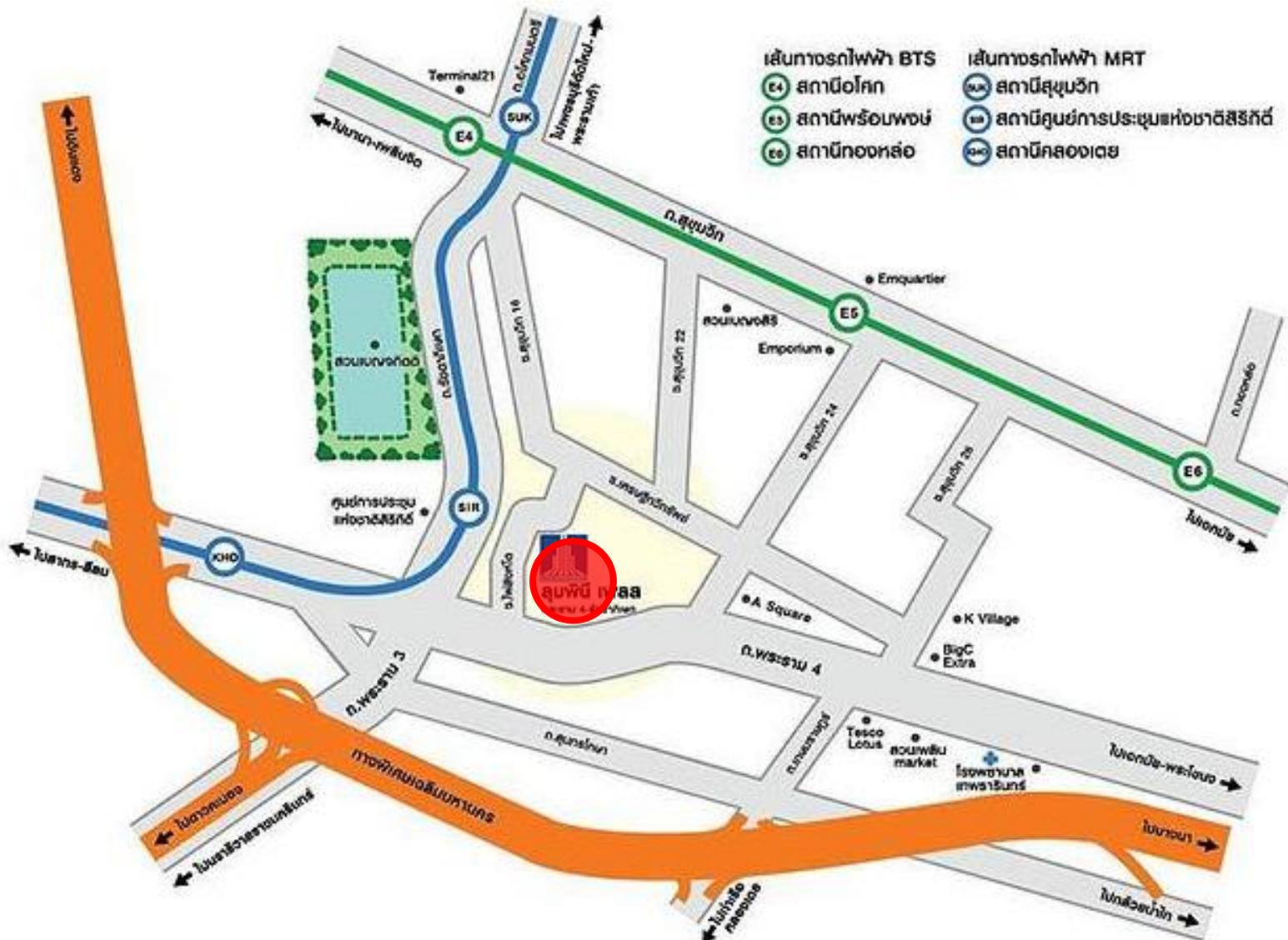
- values the concept of the triple bottom line
- pays respect to the interrelation between building and its surroundings in all dimensions
- promotes changes at the community level

A Case Study of **LUMPINI PLACE RAMA 4- RATCHADA**



Project Information

- **Leased-hold** low-rise condominium
- 595 square yards 193 units
- located in 'Phaisingto' alley near 'Klong Toey'
- a low development area with canal side settlement.
- the land owned by the '**Crown Property Bureau**' (CPB)



เส้นทางรถไฟฟ้า BTS

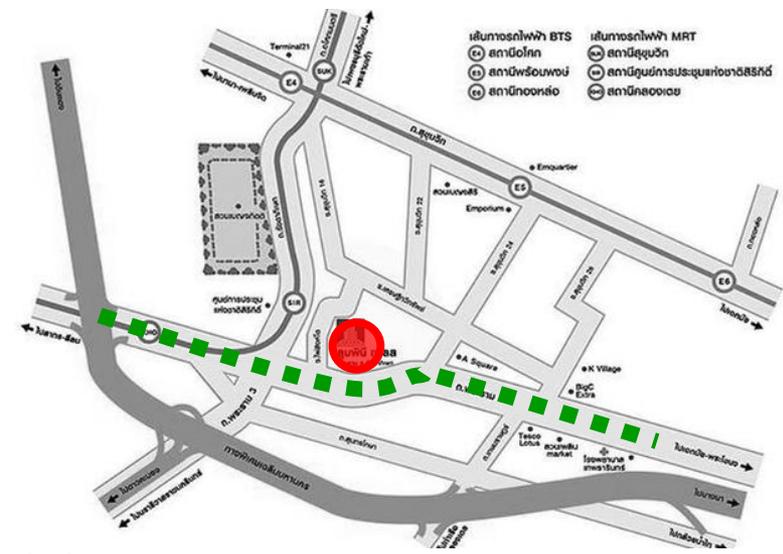
- E4 สถานีเอก
- E5 สถานีพร้อมพงษ์
- E6 สถานีคลองเต้

เส้นทางรถไฟฟ้า MRT

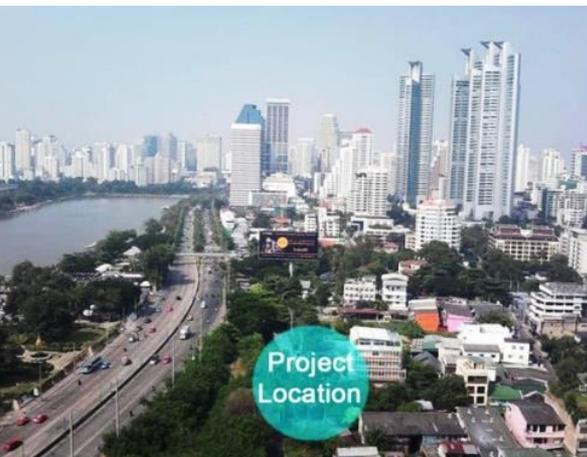
- RR สถานีสุขุมวิท
- RR สถานีศูนย์การประชุมแห่งชาติสิริกิติ์
- RR สถานีคลองเต้



Site Potential

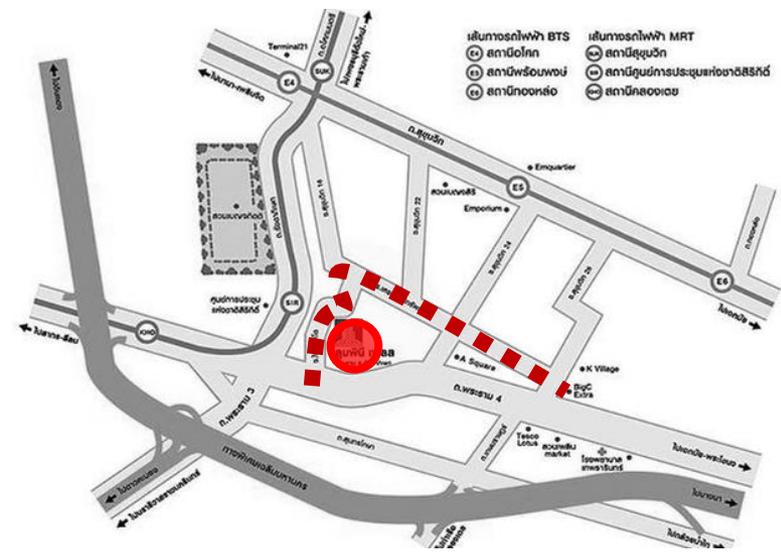


- located in a **prime location** in the city center of Bangkok,
- only 80 m. from underground train station (MRT),
- and one stop from Asoke interchange station.
- Plus, **Queen Sirikit National convention center** is on the opposite site.



PROPHIC

Problematic Issues



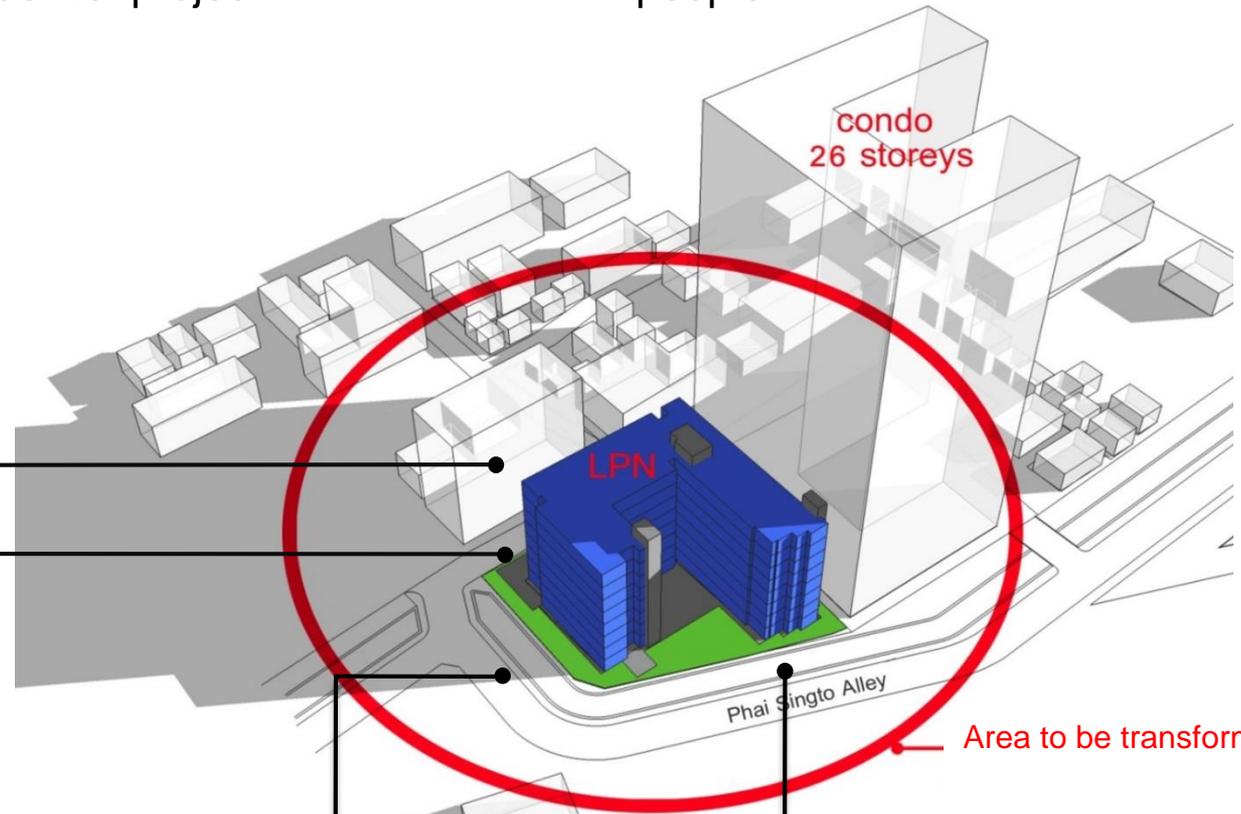
- Several **poor conditions** from its surrounding contexts.
- Phasingto district has a small slum called ‘**Phasingto Community**’
- **Overcrowding** problem
- Environmental issue; **polluted water** bodies
- Local people are confronted with **poverty**, **crime** issues and **downgraded well-being**.



City Transformation



The CPB planned to **transform** this area into a better environment by developing a new residential project **for low-income** people.



8 storeys apartment



View from the side road



View from the front



Water body next to the site

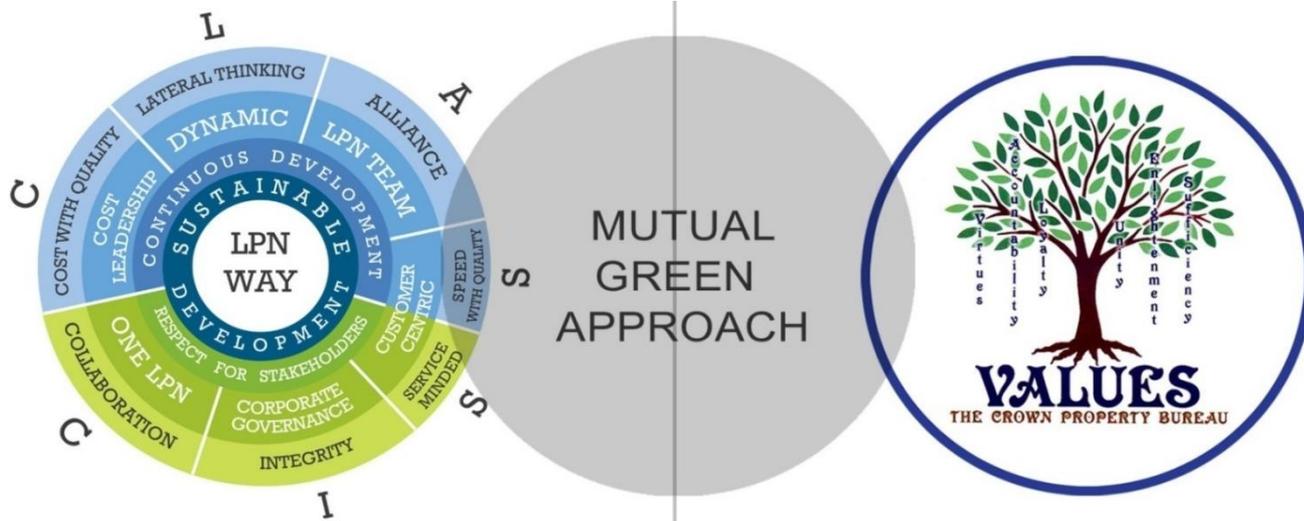


LPN Development PCL. & The Crown Property Bureau

- A real estate developer that has an ambition to deliver sustainability to all its customers.
 - The main goal of the company is to obtain sustainability by emphasizing on the 'Vibrant Community' which has been a signature of L.P.N. for years.
 - With an intensive 'green program' to create a new standard that specifically suits the organization's culture.
- the quasi-government agency responsible for managing
 - the property of the crown of the Kingdom of Thailand

Share Business Values

“To create a community where residents & neighbours can happily live together”



C-L-A-S-S-I-C

- C ost with Quality
- L ateral Thinking
- A lliance
- S peed
- S ervice Minded
- I ntegrity
- C ollaboration

V-A-L-U-E-S

- V irtues
- A ccountability
- L oyalty
- U nity
- E nlightenment
- S ufficiency

Social Problems as the key obstruction



A Case Study of **LUMPINI PLACE RAMA 4- RATCHADA**

Deep Green approach as a [more profound solution](#) to provide sustainable environment for all residents.

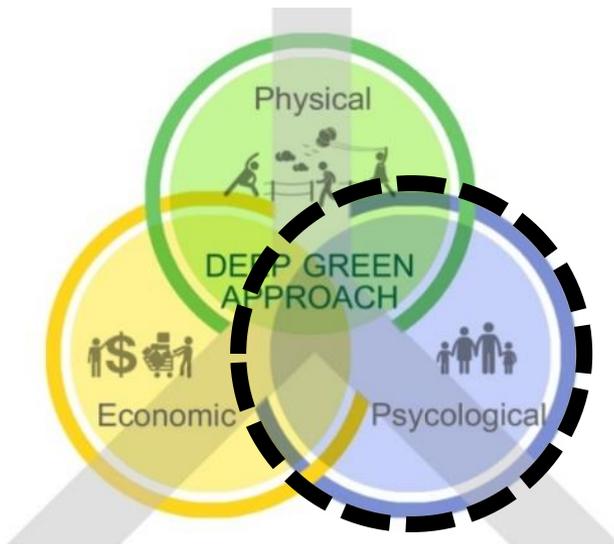


A Case Study of LUMPINI PLACE RAMA 4- RATCHADA

Deep Green approach as a **more profound solution** to provide sustainable environment for all residents.



1. Social Psychological Approach



a strong community

'Phaisingto Community'

rely on people perception

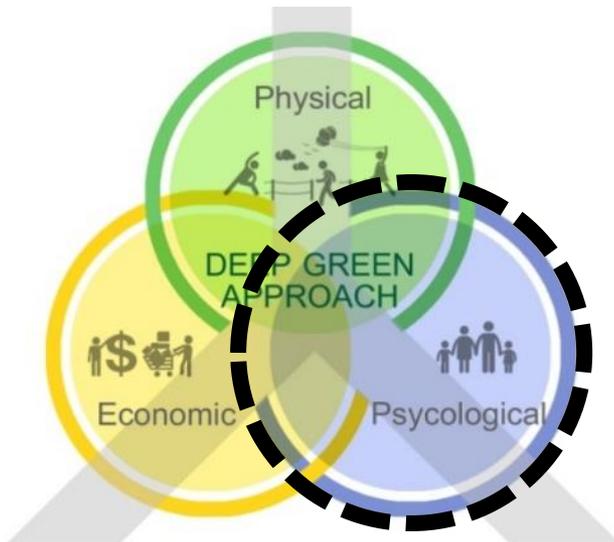
community settlement groups

mutual activities

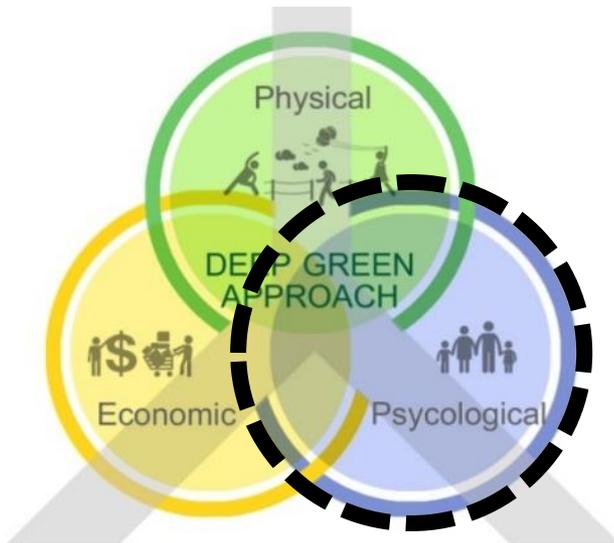
close relationship
among each other

social events

1. Social Psychological Approach

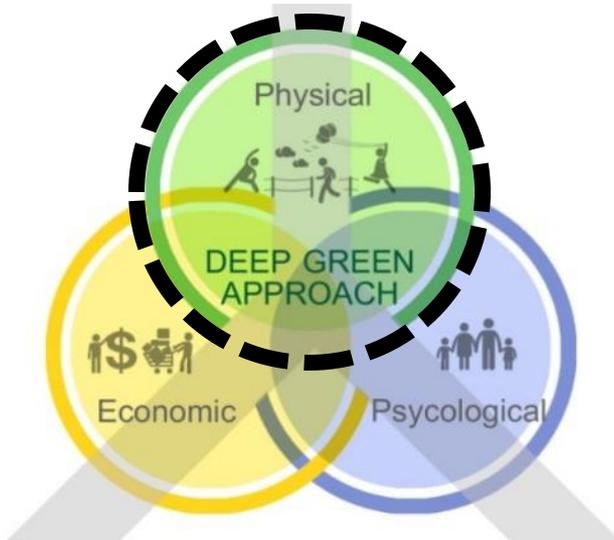


1. Social Psychological Approach



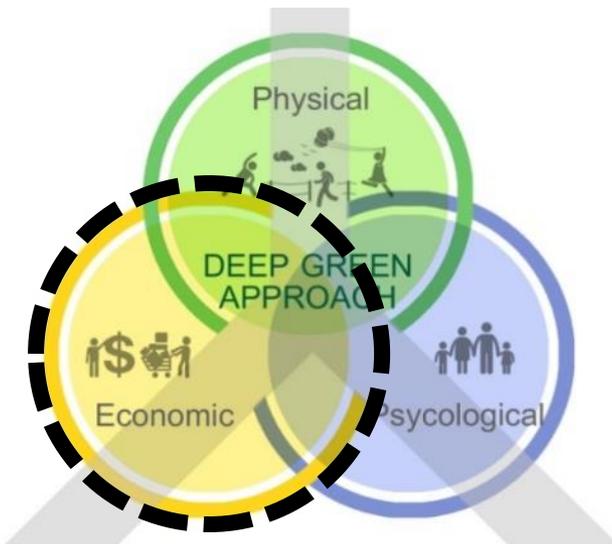
- By **promoting** physical and economic **benefits** provided by the project
- Build **better perception** and cooperation between the project and the community
- Enhance mutual **environmental concerns** and awareness

2. Physical Approach



- Passive design strategies
- Creating green walls & areas to **enhance biodiversity** in the project boundary
- L.P.N. 'green construction site program' to lessen negative impacts from construction activities
- Outdoor lighting fixtures and CCTV cameras installed at the site boundary and some areas nearby to **improve security** within the project neighbourhood
- Create **community playground** and exercising park for children and elderly to spend time together.

3. Economic Approach



- Provide rental retail spaces in the project
- Launch a cooperative small store network program to collect existing store information and advertise condominium residents about various local products and store locations
- L.P.N. housemate training program to create jobs for disadvantaged women in the community
- Offer more job opportunities and revenues for local people

...an integrative process is a key



Project participants and responsibilities of each working step



5 Steps of Implementation

to Change the Project and Its Neighborhood into a Sustainable Environment

Step 1: Conducting a site survey

- explore all circumstances at the beginning
- problem identification
- provide more precise solutions
- collect community feedback

5 Steps of Implementation

to Change the Project and Its Neighborhood into a Sustainable Environment

Step 2: Implementing sustainable construction strategy

- L.P.N. 'green construction standard'
- Conduct monthly site inspection
- Ensure strategy implementation

5 Steps of Implementation

to Change the Project and Its Neighborhood into a Sustainable Environment

Step 3: Community development in physical, economic and social aspects

Physical aspects

- physical improvement of site surrounding area by project contractor
- security system installation
- provision of community common spaces for activities

Economic aspects

- a cooperative store network program to stimulate community economy

Social aspects

- arrange social activities and facilities
- trade waste-recycling program
- walkway and water body cleaning program
- local and workers' children education program

5 Steps of Implementation

to Change the Project and Its Neighborhood into a Sustainable Environment

Step 4: Create community participation

- The project is opened for comments
- advocates local people to participate in the development plan
- to encourage partnership among the community
- build positive attitude about the project

5 Steps of Implementation

to Change the Project and Its Neighborhood into a Sustainable Environment

Step 5: Public relation of the project operation

- Public relation campaign after the project construction is completed
 - to communicate about L.P.N. approaches and operation
 - Build a positive attitude to the community
 - influences public awareness & environmental concerns in a wider and deeper facets

In conclusion, the key seed of success in this project is how we can raise awareness, create mutual understanding among all project participants and drive everyone to deeply engage in the project.

The challenge of sustainability and green design is more a matter of local interpretation than of the setting of universal goal.



THANK YOU



Organisers:



International Co-owners:



Sustainable Buildings and Climate Initiative
Promoting Policies and Practices for Sustainability



Global Alliance
For Buildings and
Construction