Speak Designing Liveable Communities Homes and Buildings:

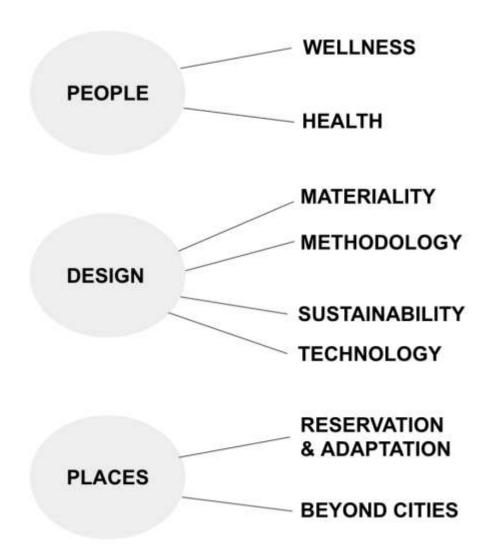
# SUSTAINABILITY, TECHNOLOGY AND GREEN INNOVATIONS IN HOUSING

By Arch. Cathy S. Saldaña



# SUSTAINABILITY

#### CIRCULAR DESIGN THINKING



By Arch. Cathy S. Saldaña



#### **MIXED USE COMMUNITIES**

**COMBINATIONS** 

Retail

Residential

Hospitality

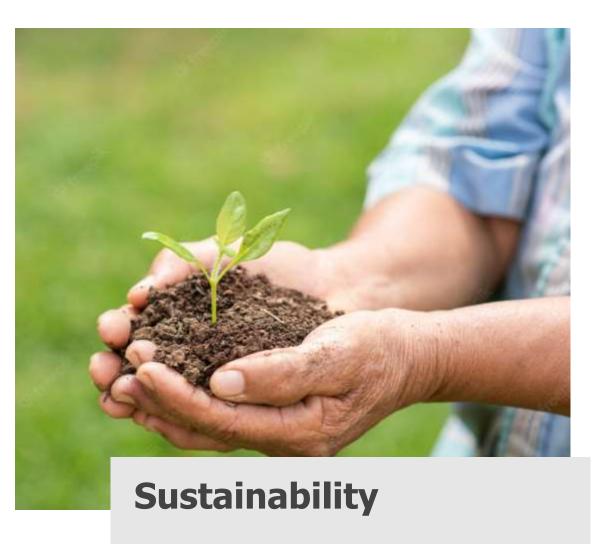
**Anchor-Service** 

**Anchor-Feature** 

**Site Specific Character** 

Resorts





**Post-pandemic: Mandatory** 

Symbiotic relationship between Man and Planet

Government and Regulatory Laws/Rules

#sdg17 UN: 17 Sustainable Development Goals



Green Building Framework
World Green Building Council
Healing the Earth
Renewable Energy

By Arch. Cathy S. Saldaña









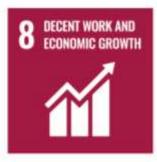
































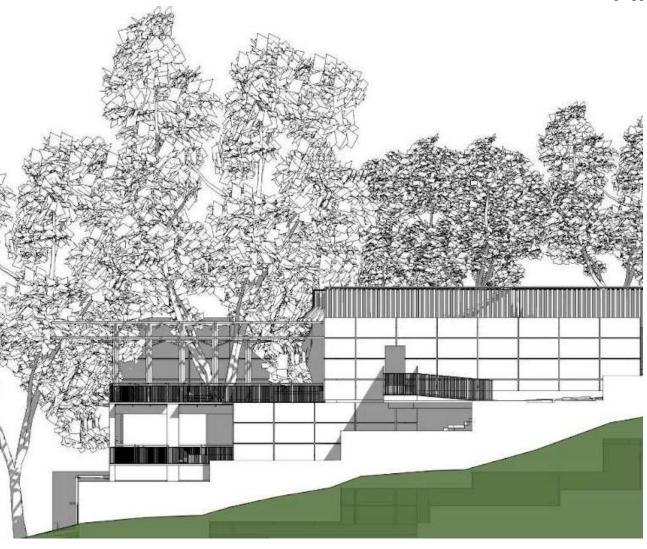
# **TECHNOLOGY**

## DESIGN TYPOLOGIES: NEW STANDARDS

Understanding Human Space Bubble (Global, Western, Asian, Filipino)

Widths of Corridors, Stairs
Elevator Configurations
Ceiling Heights
Distance Definition: Physical x Social

#### ARCHITECTURAL DESIGN PRACTICE



**TECHNOLOGY** ARTIFICIAL INTELLIGENCE **BIM DERIVATIONS** DATA ANALYTICS VIRTUAL REALITY 3D PRINTING DIGITAL PRINTING **VISUALIZATION REMOTE WORKING** 

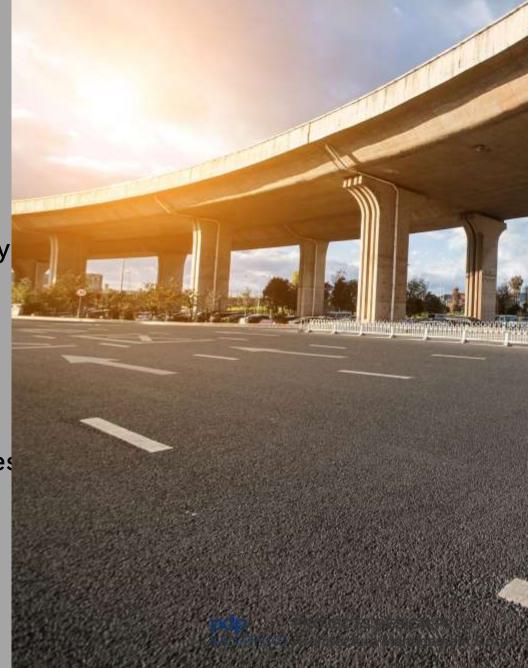
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# SPECIALIZATION & NICHE DEVELOPMENT

#### 2021 - 2025

- Infrastructure, Government Projects
- New Urban Centers → Post-covid Standards
- Healthcare Centers & Facilities, Testing & Specialty Clinics — Redistribution of Medical Complex
- Wellness
- Luxury Hospitality, Remote Escapes
- Upscale Residential High End
- Manufacturing, Food / Distribution
- Reconfigure: Retail, Public, Liturgical & Civic Spaces
- Residential Towers New Design Typologies
- Transformation: Airports & Other TransportTerminals



Speak Designing Liveable Communities Homes and Buildings: Sustainability, Technology and Green Innovations in Housing

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#### **HUBS & SPACES**

Industrial Warehousing

Food Production Logistics

Food Storage Delivery Depots



#### **SMART DESIGN**

PLATFORMS – BIM, GRASSHOPPER
VISUALIZATION
3D MODELLING
VR (VR) AI IN DESIGNING
PARAMETRICS SUSTAINABILITY
DOCUMENTATION

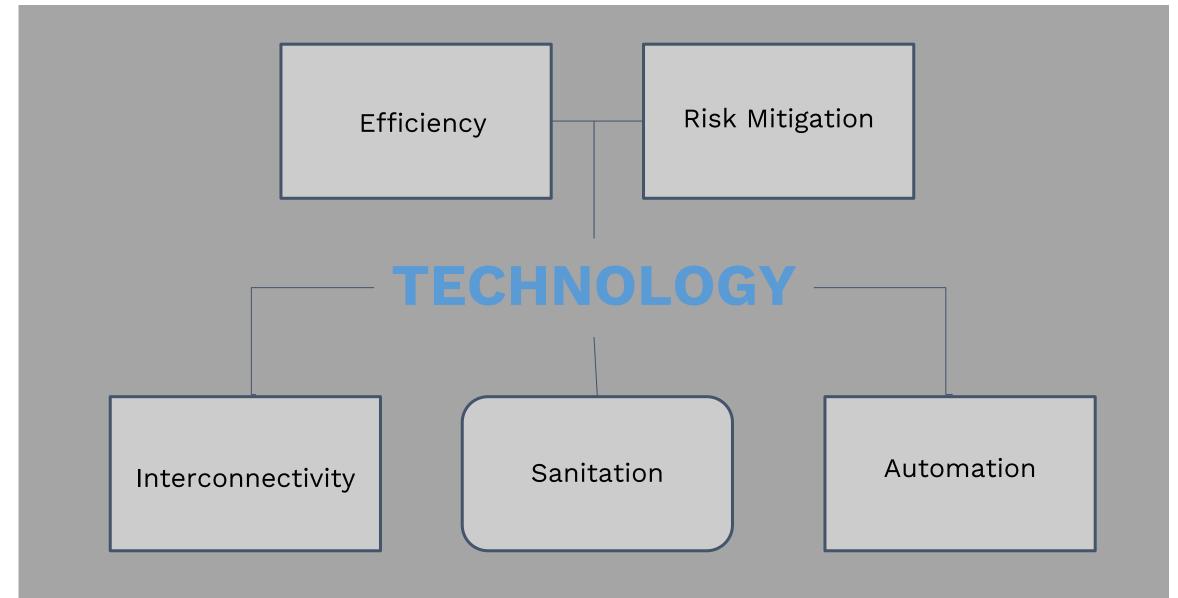












# GREEN INNOVATIONS

#### GREEN BUILDING CERTIFICATIONS











**BREEAM** 







**Green Star** 

**FITWEL** 

**Green Globes** 

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# Sustainability, Technology and Green Innovations in Housing GREEN BUILDING FRAMEWORK



Management



**Use of Land and Ecology** 



**Energy Efficiency and** Conservation



Reduction of total energy consumption and the use of renewable energy

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# Sustainability, Technology and Green Innovations in Housing GREEN BUILDING FRAMEWORK

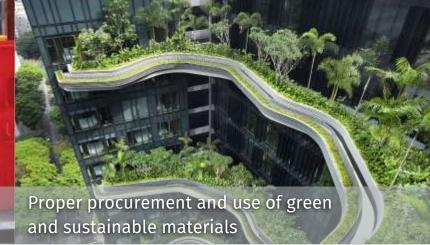












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#### **GREEN BUILDING FRAMEWORK**













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#### **GREEN BUILDING ELECTIVES**











**SOURCE:** 

**Philippine Green Building Council:**Building for Ecologically Responsive Design Excellence

By Arch. Cathy S. Saldaña



#### **OUR GOAL FOR THE FUTURE**

PEOPLE

HEALTH AND

WELLNESS

**EFFICIENCY** 

children

HEALTH AND work-life balance

FUTURE EFFECTIVITY

COMMUNITY

### Thank you!



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