



# Buildings for Sustainable Future

**Prof. Ranjith Dissanayake**

Senior Professor, University of Peradeniya  
President, Institution of Engineers Sri Lanka  
IP Chairman, Green Building Council of Sri Lanka

# Construction and Economic Development



GDP from Agriculture	246416.00	226505.00
GDP from Construction	181921.00	183680.00
GDP from Manufacturing	1535958.00	1888667.00
GDP from Mining	36398.00	40000.00
GDP from Public Administration	175386.00	150884.00
GDP from Services	1944088.00	1778118.00
GDP from Transport	393956.00	334663.00
GDP from Utilities	44427.00	39349.00



Source: Trading Economics (2024)

GDP from Construction in Sri Lanka averaged 232667.27 LKR Million from 2010 until 2023. The GDP from Construction in Sri Lanka saw a decrease in the fourth quarter of 2023, dropping to 181,921 million LKR.

The Sri Lanka GDP From Construction is projected to trend around 192036.00 LKR Million in 2025 and 199717.00 LKR Million in 2026, according to our econometric models.



❖ According to a BIMhow study, the construction sector contributes to,

- ✔ 23% of air pollution
- ✔ 50% of the climatic change
- ✔ 40% of drinking water pollution
- ✔ 50% of landfill wastes.

“

In separate research by the U.S. Green Building Council (USGBC), the construction industry accounts for, 40% of worldwide energy usage, with estimations that by 2030 emissions from commercial buildings will grow by 1.8%.

”





# Green Building

1



Management

2



Sustainable Site

3



Water Efficiency

4



Energy &  
Atmosphere

5



Materials and  
Resources

6



Indoor  
Environmental  
Quality

7



Innovations &  
Design Process

8



Social & Cultural  
Awareness

# BUILDING RESILIENCE *for Climate Change*

07  
AFFORDABLE  
AND CLEAN ENERGY



13  
CLIMATE ACTION



15  
LIFE ON LAND



# BUILDING RESILIENCE *for Economies*

08  
DECENT WORK  
AND ECONOMIC  
GROWTH



09  
INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



12  
RESPONSIBLE  
CONSUMPTION AND  
PRODUCTION



# BUILDING RESILIENCE *for People*

03  
GOOD HEALTH  
& WELL-BEING



06  
CLEAN WATER  
AND SANITATION



07  
AFFORDABLE  
AND CLEAN ENERGY



10  
REDUCED  
INEQUALITIES

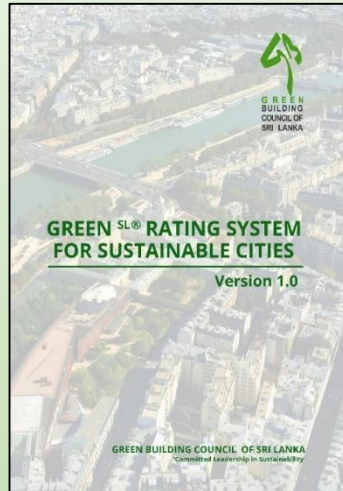


11  
SUSTAINABLE CITIES  
AND COMMUNITIES





# Green Building Certification (GREEN<sup>SL</sup>® Rating System)



**Certified Green Building**

**40-49 Points**



**Silver Green Building**

**50-59 Points**



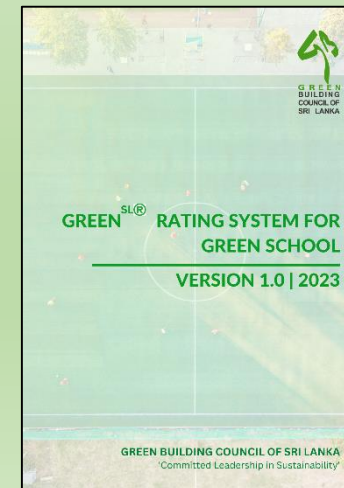
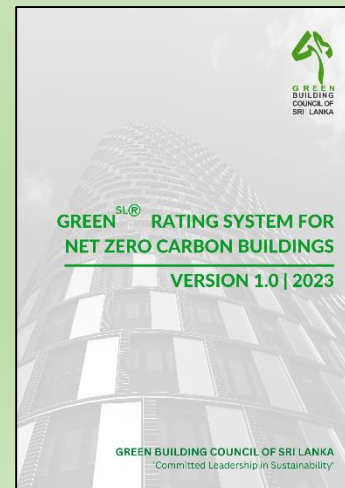
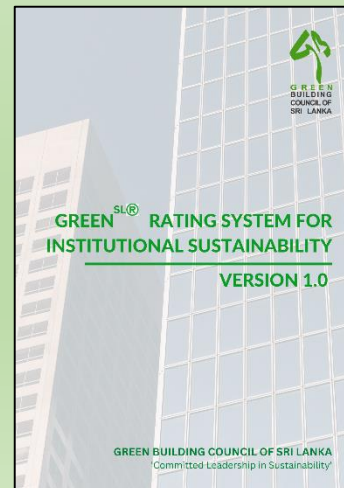
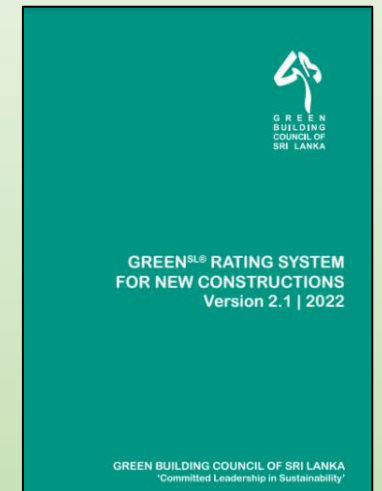
**Gold Green Building**

**60-69 Points**



**Platinum Green Building**

**Over 70 Points**



# Benefits of using Green Building Standards

Energy, Carbon, Water,  
and Waste can be  
reduced, resulting in  
savings of  
**30% to 97%**

Operating costs can be  
reduced by,  
**8% to 9%**

Green Building value can  
increase up to,  
**7.5%**

Returns on investment  
increase by up to  
**6.6%,**  
**3.5%** increases in  
occupancy, and rent  
increases of  
**3%**

*Source: The US Green Building Council (USGBC)*



# Case Studies – Success Project



## Clear point Residencies

- Project Size:  
**604,049 square feet**
- Building/Project Type:  
**Residential**
- Achieved Certification Level:  
**GBCSL Platinum**



### Clearpoint Residencies becomes highest-rated green building in Sri Lanka

Friday, 25 January 2016 00:00 - [\[http://www.valuest.com\]](#)



From left: Mega Engineering Director Finance and Planning Mega Kularatne, and Mega Assistant General Manager and Clearpoint Residencies Project Manager Saman Mahawatte receiving the award from Green Building Council of Sri Lanka Chairman Prof. Ranjith Dissanayake. Chief Guest of the event Prof. Ajith De Alwis of Department of Chemical and Process Engineering, University of Moratuwa is also seen

### World's tallest vertical garden blooms in Sri Lanka

[mfa.gov.lk/worlds-tallest-vertical-garden-blooms-in-sri-lanka/](#)

Friday 3rd October 2014

Global property portal Lamudi to list Clearpoint Residencies development online



Property seekers with a love of the great outdoors could soon call the world's tallest vertical garden home, with a unique sustainable development currently on the market in Sri Lanka.

Stretching 50 floors high, Clearpoint Residencies near Colombo city will be the world's tallest residential vertical garden when construction is completed in April 2016. It is also Sri Lanka's first sustainable high rise.

The building is a joint project of Milroy Perera Associates and Mäga Engineering. Leading property portal Lamudi recently signed with the developers to list Clearpoint Residencies on its website. Properties ranging in size from two-





# Case Studies – Success Project



## PARKLAND

- Project Size:  
**54,711.34 square feet**
- Project Type:  
**Office**
- Achieved Certification Level:  
**GBCSL Gold**





# Failed Project





“Advancing Sustainable Building Practices to Forge a Greener Tomorrow and Mitigate Climate Change.”

*Thank you*

**Ranjith Dissanayake**