









Mitigation Enabling Energy Transition in the MEDiterranean region

GREEN SITES – GSO - Introduction

Presented by Sabine SAAD, ALMEE

Training on GRASSMed – meetMED II

WP3_A3.1.6 February 27, 2023







OUTLINE

- ✓ Chapters of Green Sites
- ✓ What is a Sustainable Site Plan?
- ✓ How to Select a Site for Green Buildings?
- ✓ What Factors are at Play when Choosing a Site?
- ✓ What are the Major Goals of Sustainable Site Planning?



Chapters of Green Sites

- GS1 Pre-Developed Sites
- GS2 Existing Infrustructure
- GS3 Proximity to Basic services
- **GS4** Site Plantation
- **GS5** Green Parking Structure
- **GS6** Green Parking Capacity





GRASS Tool

Green Sites

Predeveloped Sites

Existing Infrastructure

Proximity to Basic Services

Site Plantation

Green Parking Structure

Green Parking Capacity

% of Developed Land

Infrastructure Availability

Maximum Distance to Basic Service

 $PAP = \frac{Plantation Area}{Site or Building Area} \times 100$

% of Underground Parking

Reduced Empty Spaces, Multi-story Parking and % area of buses



What is a Sustainable Site Plan?

Site Planning and Design are essential when creating Green Building!

Site Planning and Design help:

- Creating affordable housing to access critical services and transportation.
- Reducing physical footprint by creating more compact designs of buildings and parking lots as well as taking care of the conditions of trees and soil during construction.



What is a Sustainable Site Plan?

The process of sustainable site planning helps to develop the site without diminishing or interrupting natural processes and characteristics.



Site Planning

https://www.architectsjournal.co.uk



Sustainable Site Planning



Follows Three Steps:

- 1. Understanding and mapping the local conditions around the property.
- 2. Assessing and sketching existing conditions on the site itself.
- 3. Creating a plan for developing the site.



Considers Three Points:

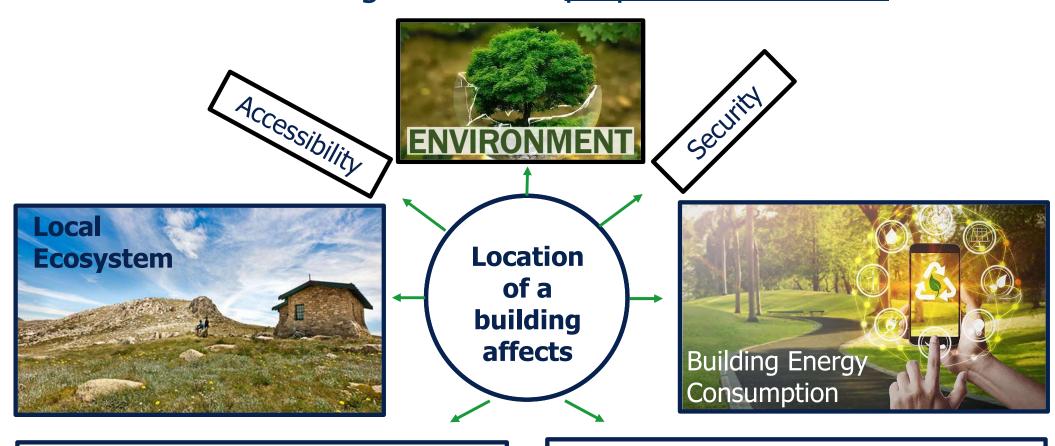
- 1. Long and short-term costs.
- 2. Human safety.
- 3. Natural ecosystems.





Why the Site Selection is important?

Green Buildings start with proper site selection!



Energy consumed by transportation needs of occupants for commuting

Use/Reuse of existing structures or infrastructures



What Factors are at Play when Choosing a Site?

When selecting a site, the team must consider many attributes of the overall system:

- What is the local climate of the project?
- Has the site been previously developed?
- Is it connected to local infrastructure and public transportation?
- What species in the area might use the site as habitat and be affected?
- What is the nature of the street life in the area, and how can the project contribute to community?
- Where do people in the area live and work, and how do they get back and forth?



Site Selection

https://thearchspace.com/





Sustainable Site Planning consist of a Whole System Approach





- Minimize land disturbance
- Restore the health of degraded sites
- Understand existing watershed plans and environmental goals that may be regulated
- Consider energy implications and carbon emissions
- Minimize habitat disturbance





- Provide wildlife corridors across a large campus whenever feasible
- Apply best practices for erosion control
- Use native plants and remove any invasive species at the site
- Reduce the heat island effect
- Reduce, control, and treat surface runoff





- Locate the building within a walkable distance to a range of other destinations such as places offering goods and services;
- Incorporate transportation solutions into site plans that acknowledge the need for bicycle parking, carpool staging, and proximity to mass transit.
- Consider site security concurrently with sustainable site issues.
- Respect existing aesthetic view sheds from existing buildings, landscape features, and historic sites.



Contact us!



For any inquires or comments, please don't hesitate to contact us

















