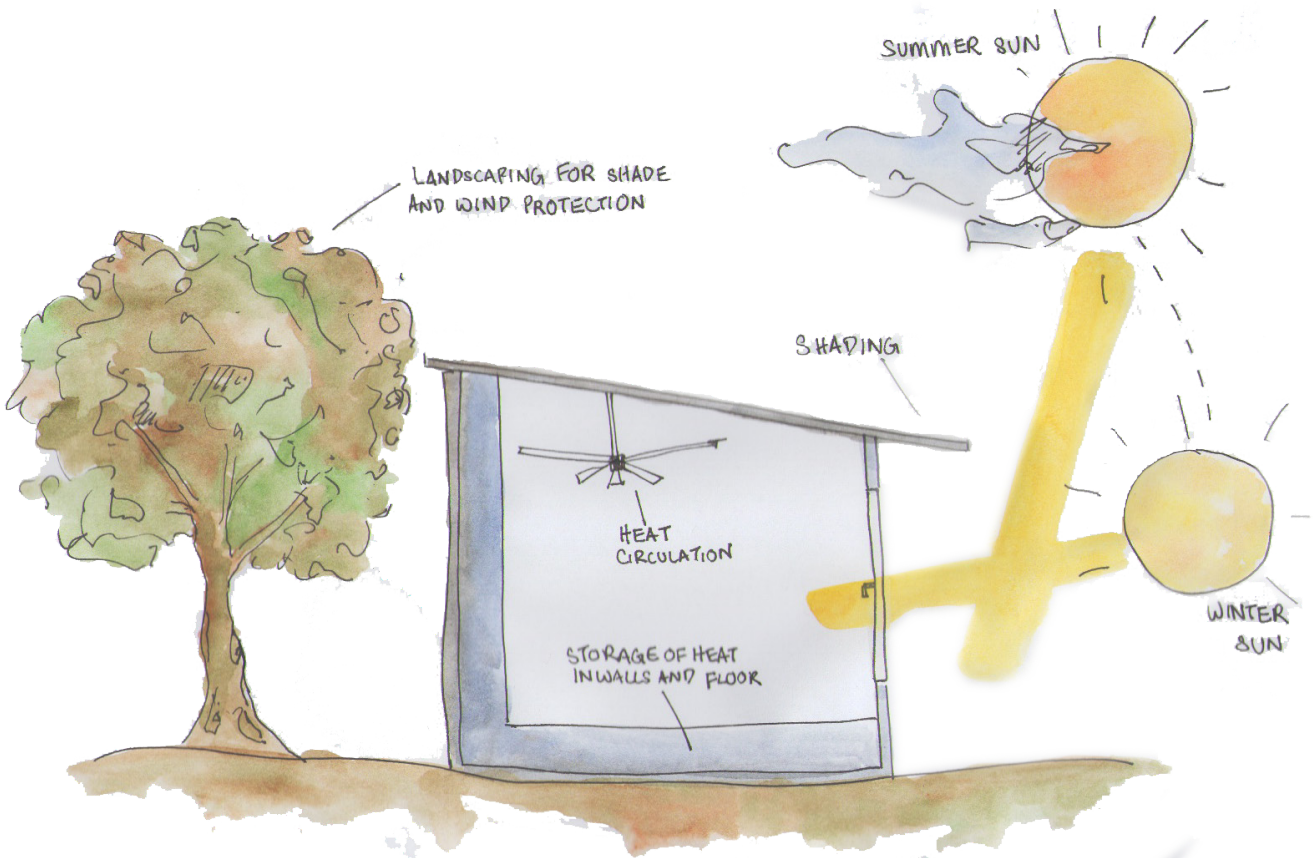


Passive Energy and Building Integrated Energy

Introduction to Solar Design

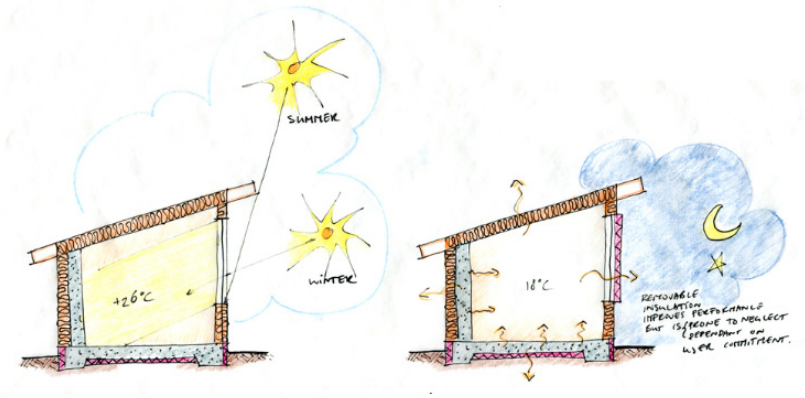
Windows/walls/floors made to collect/ store/distribute solar energy in the form of heat (winter) and reject heat (summer)

Harnesses natural energy

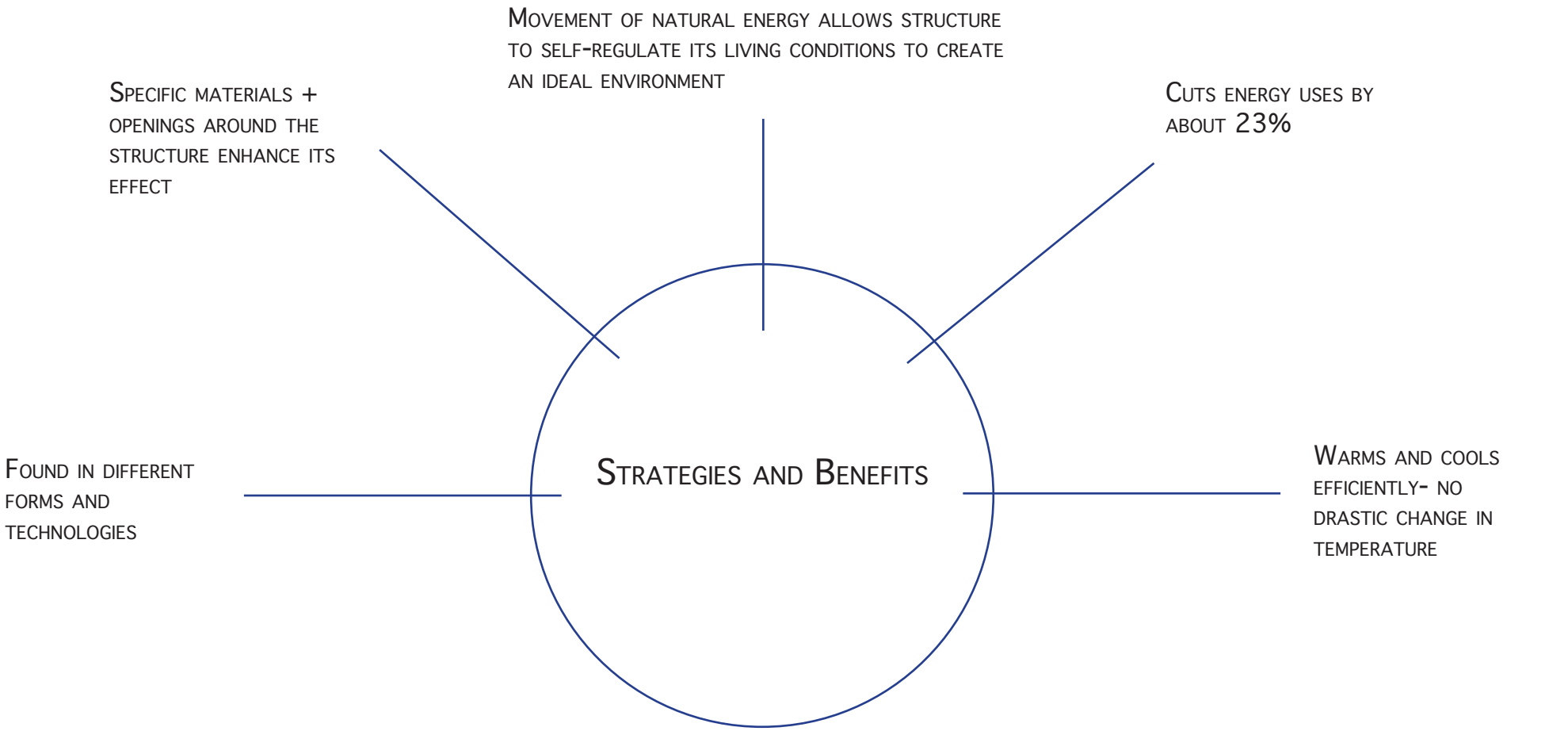
Doesn't involve use of mechanical and electrical devices

Requires little energy and low maintenance

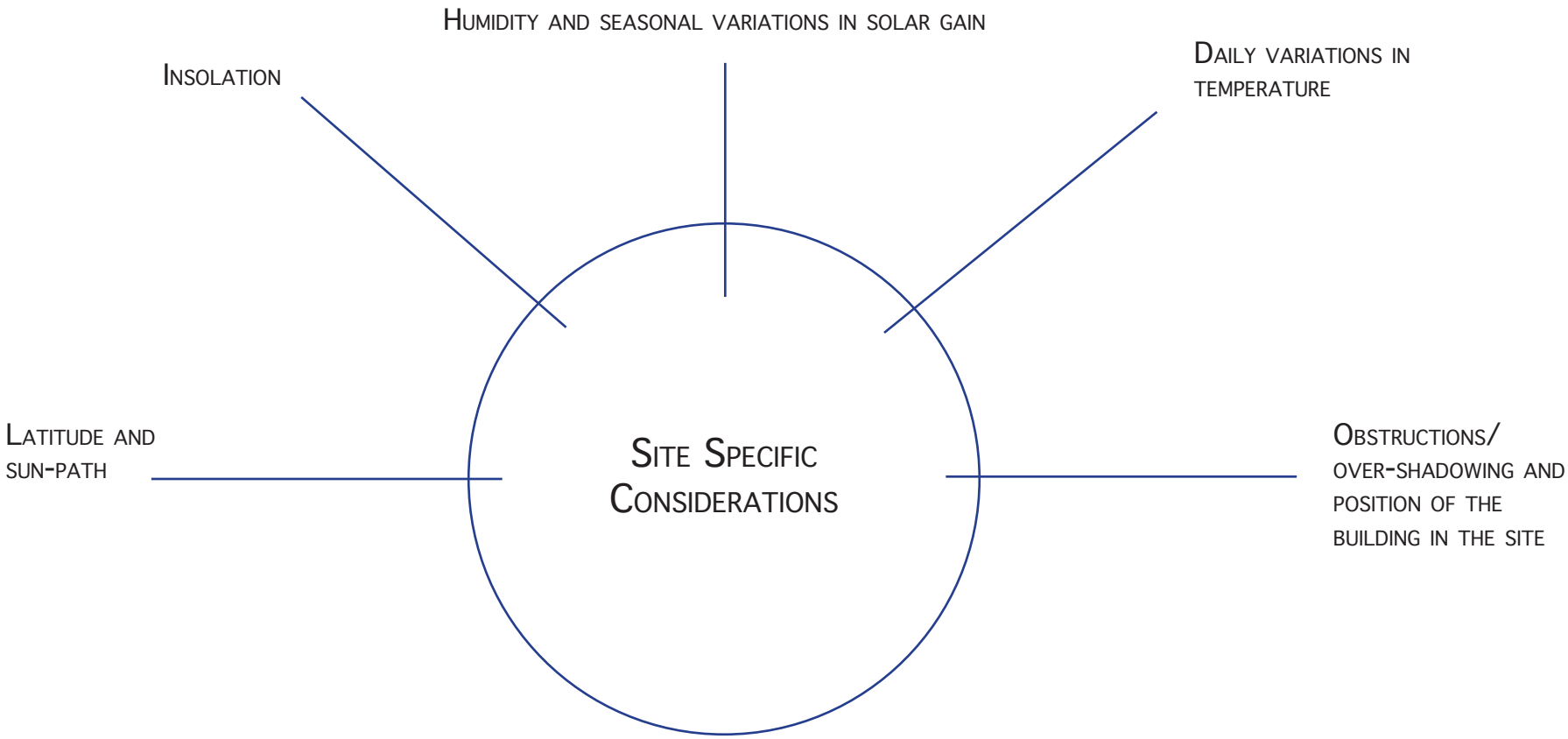
Makes the most of the local climate- movement of natural energy



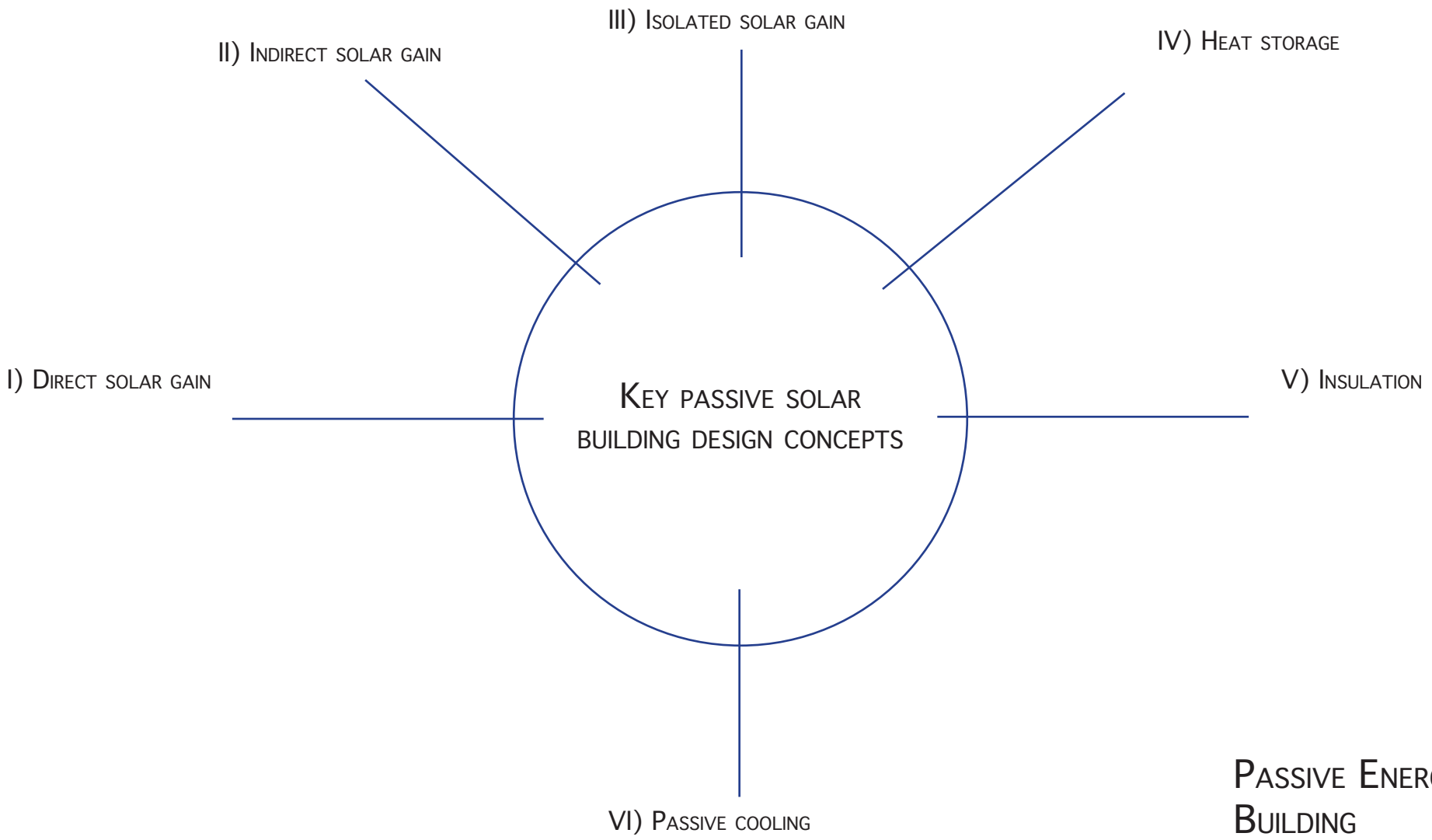
Passive Energy and Building Integrated Energy



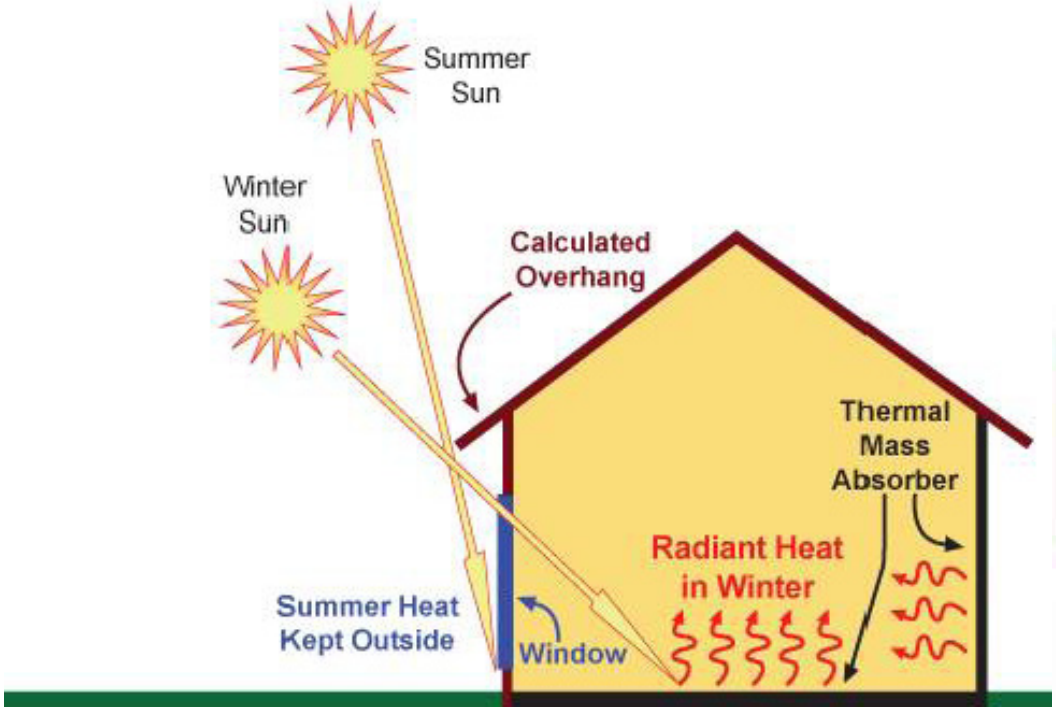
Passive Energy and Building Integrated Energy

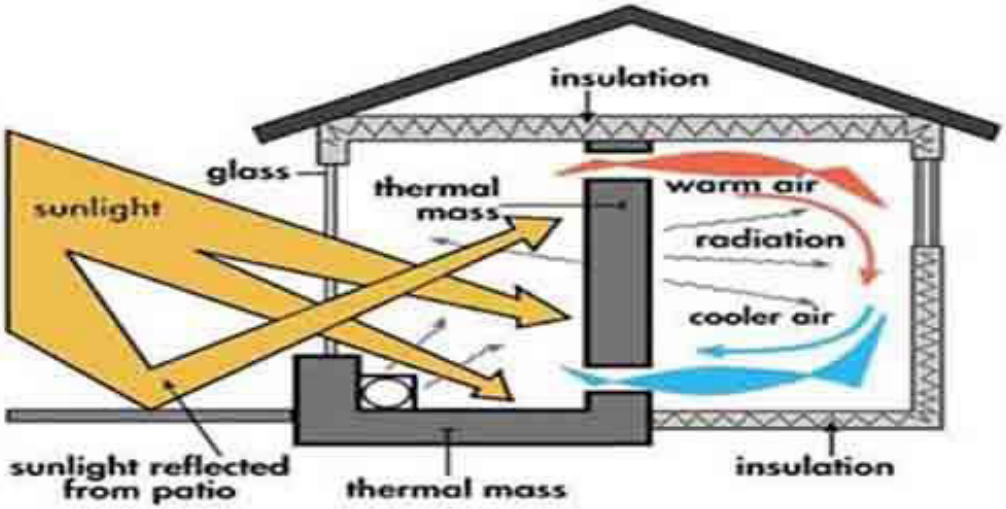


Passive Energy and Building Integrated Energy



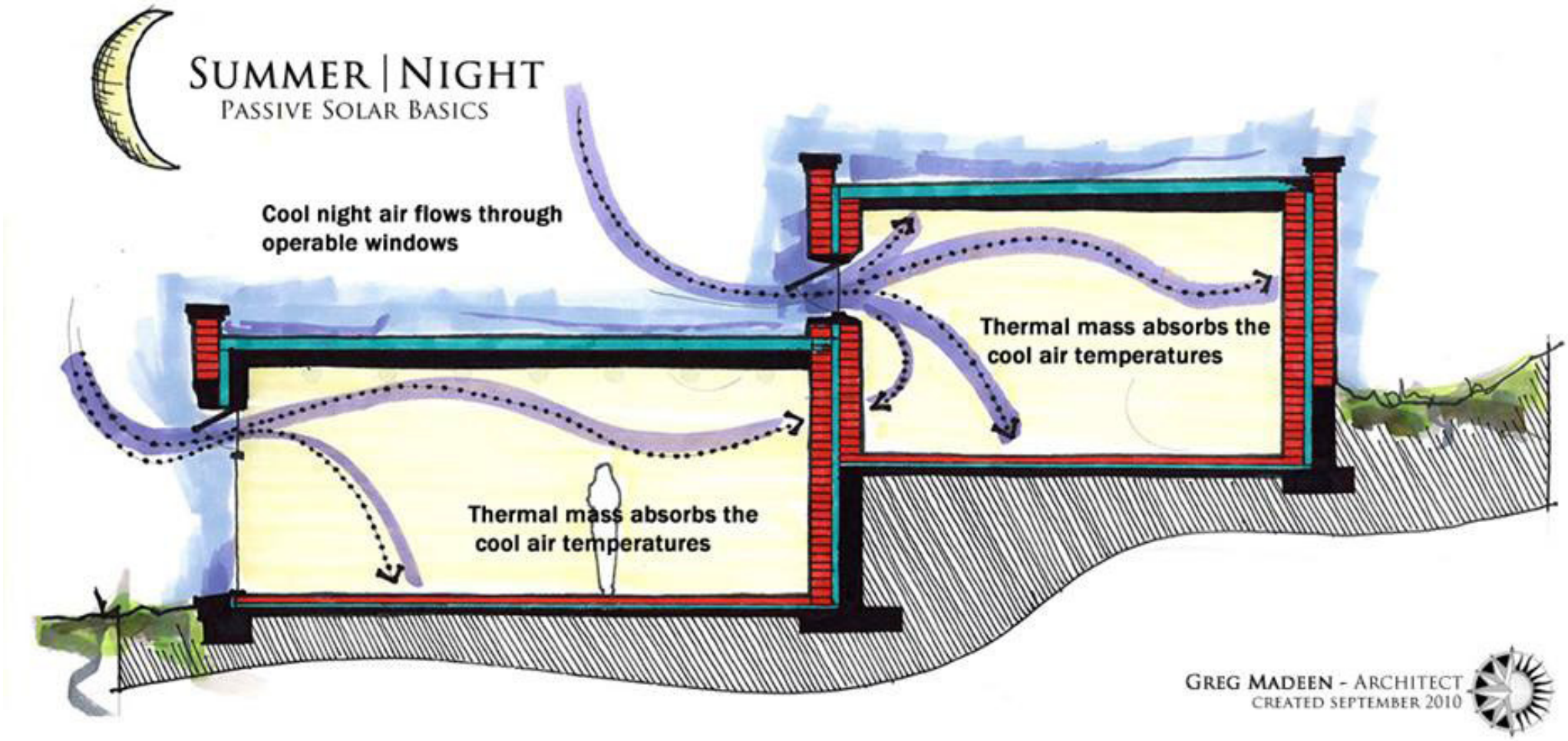
Passive Energy and Building Integrated Energy





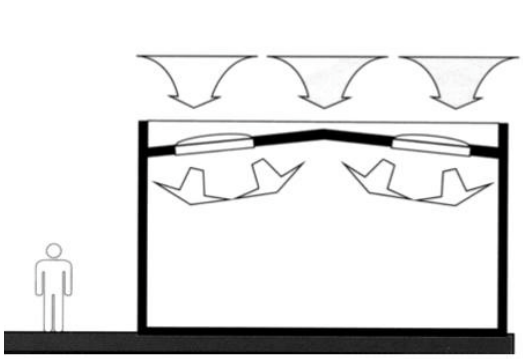
Passive Energy and Building Integrated Energy

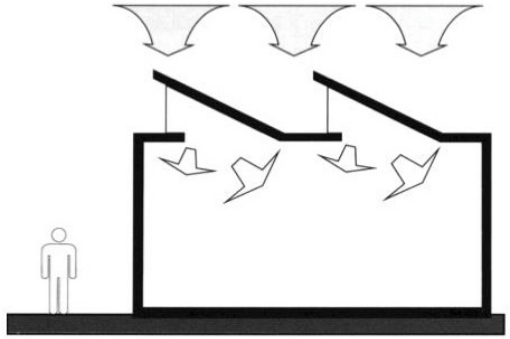
- Passive Solar Design

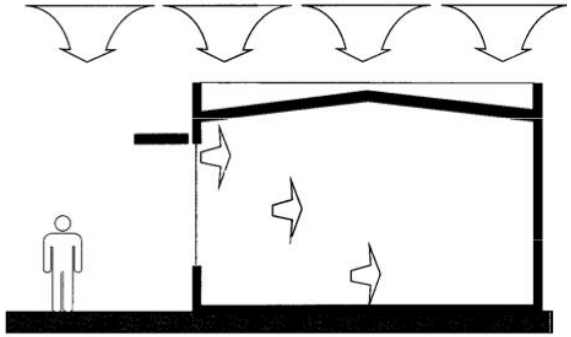


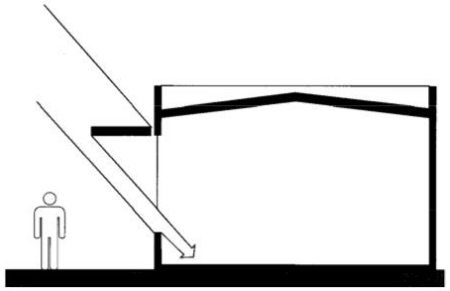
PASSIVE ENERGY AND BUILDING INTEGRATED ENERGY

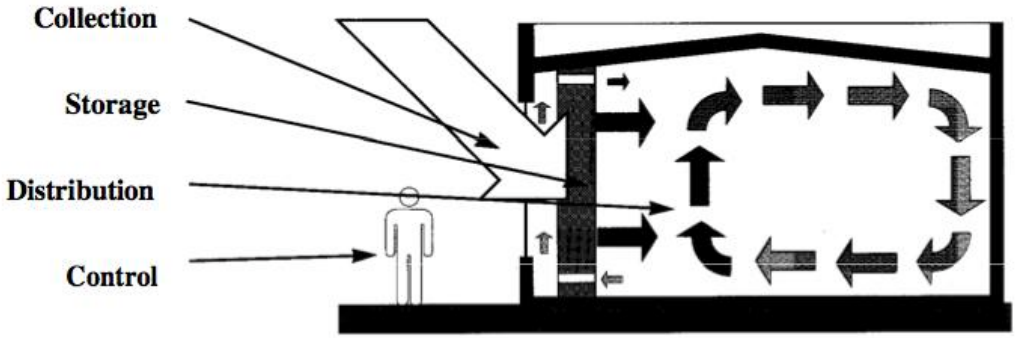
- BASIC PROCESS

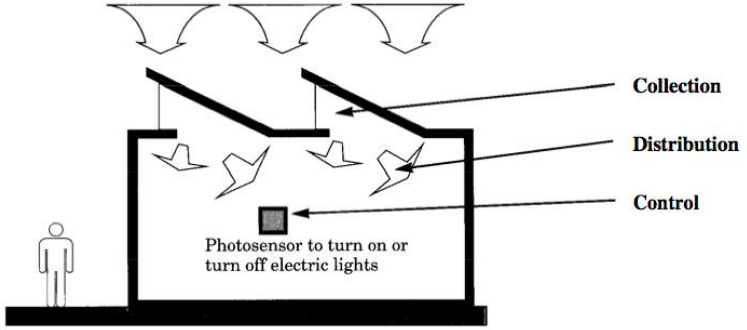


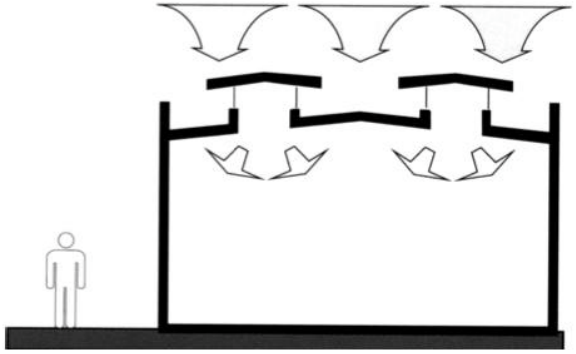


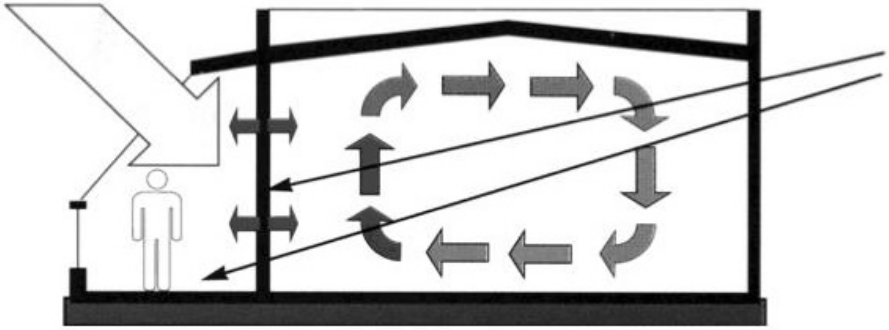


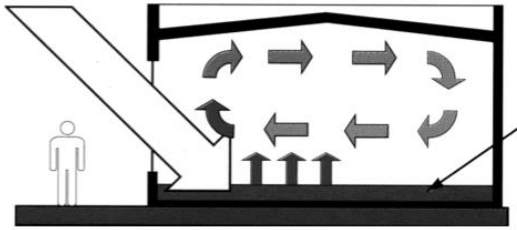


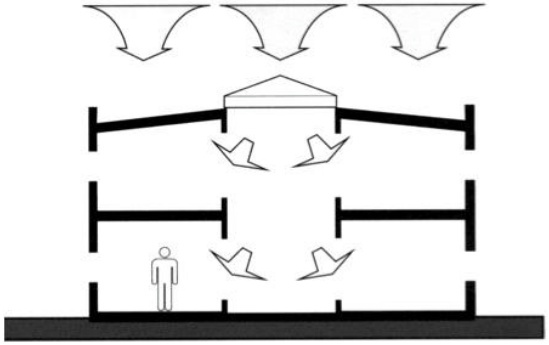










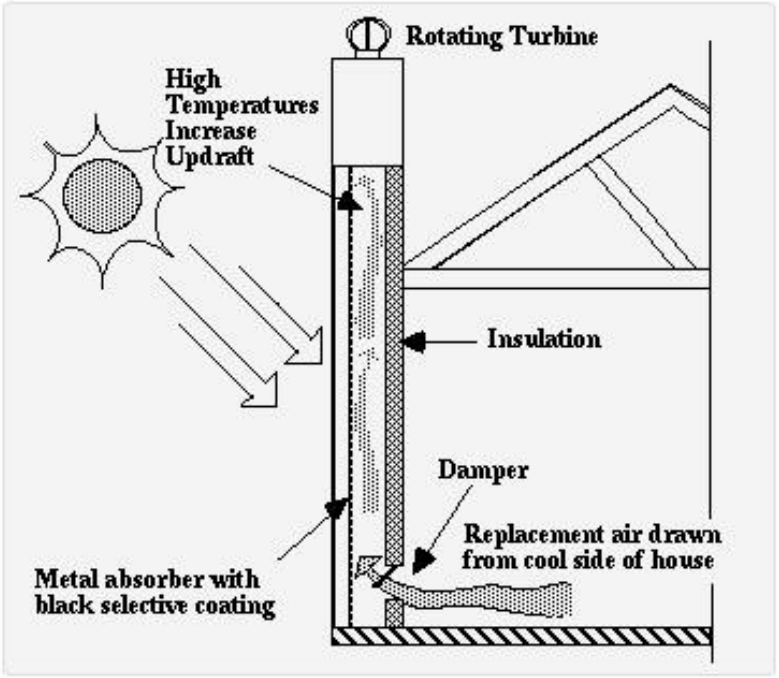


Passive Energy and Building Integrated Energy

- Heat Circulation

	Commercial Status			Implementation Issues		
	TECHNOLOGY	SUPPLIERS	COST	FINANCING	ACCEPTANCE	REGULATORY
Operable Windows						
Thermal Mass						
Passive Solar Design						
Wing Walls						
Thermal Chimney						

- Satisfactory
- Satisfactory in most conditions
- Satisfactory in Limited Conditions
- Unsatisfactory or Difficult



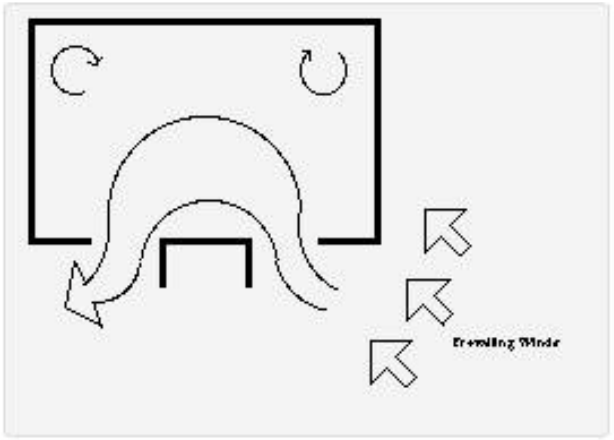
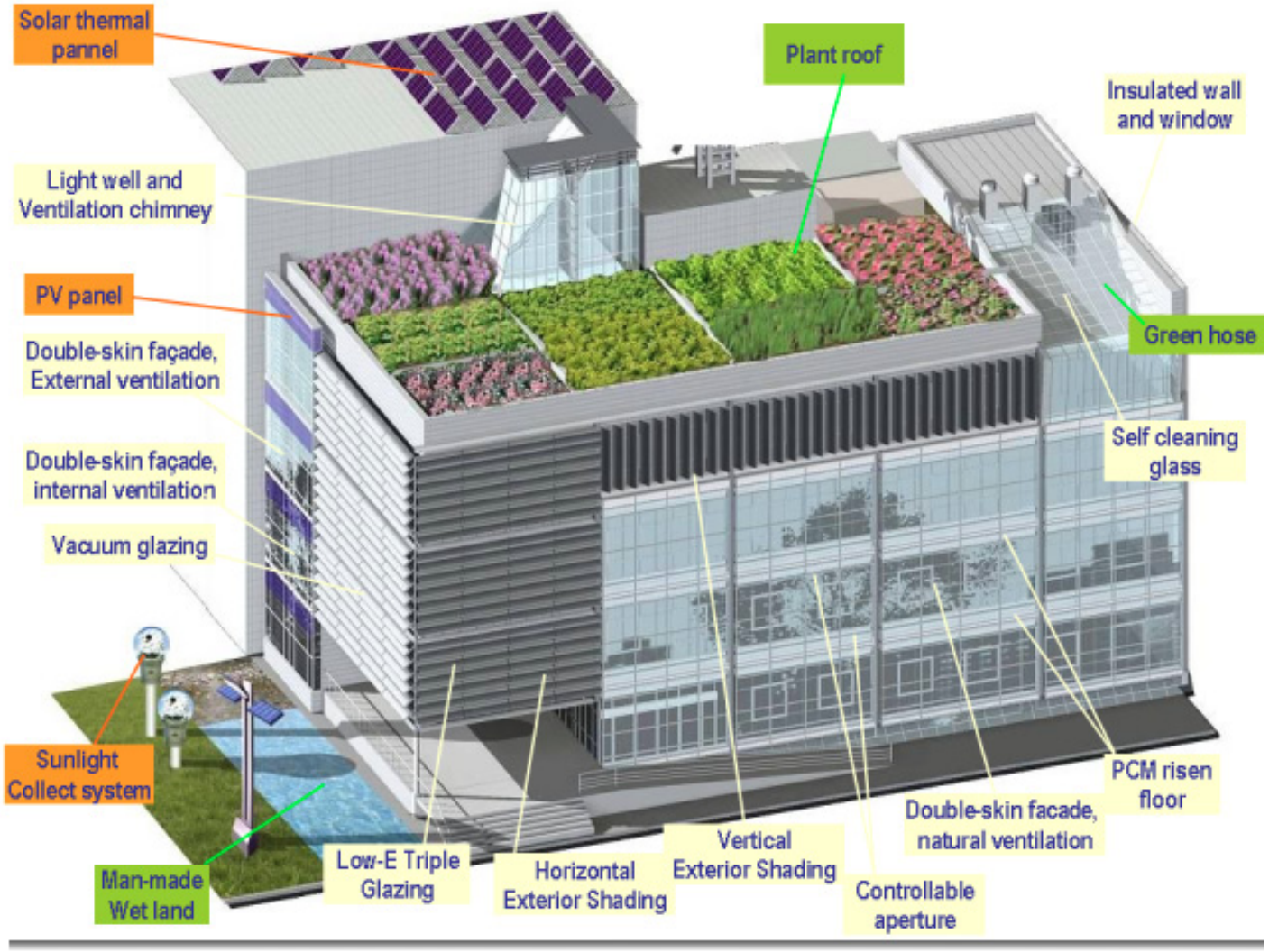


Figure 4
Top View of Wing Walls Airflow Pattern

Passive Energy and Building Integrated Energy



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Passive Energy and Building Integrated Energy

- China Case Study