

ZERO CARBON

LIFE SPAN OF BUILDING: 100 YEARS

ONSITE GEN - BLUE GEN - USE GAS
 1.5 KW @ \$30K - 40K
 - BIPV

DEFINITION: ZC

COMMERCIALLY AVAILABLE PRODUCTS

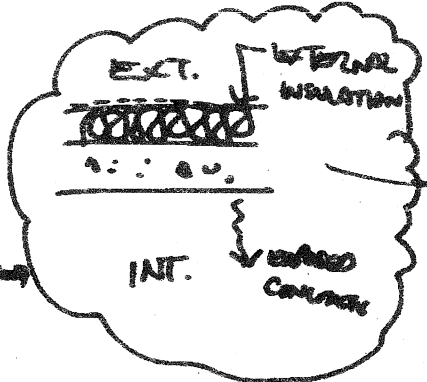
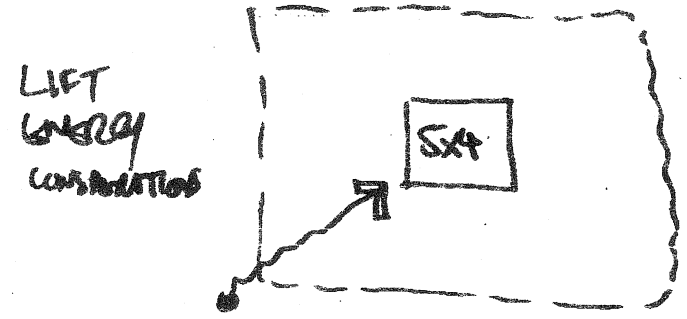
1. OPERATION
2. EMBODIED ENERGY (MATERIALITY)
3. ASSOCIATED TRAVEL - ELECTRIC VEHICLES



- PASSIV HAUS

→ TARGET:
 NO AC!
 Humidity is
 KEY FOR
 COMFORT

CTZ



BUILDING FABRIC TARGETS:

- WALL: R6
- ROOF: R7
- GROUND: R4

- GLASS U VALUE 2.0
- TIMBER/TIMBERGLAZED
- Block
- g = 0.4

FIRST COST = 8 * TARGET

INFILTRATION: 0.3 ACH (AVERAGE)

CONSUME CARBON	OFFSET / BALANCE
BUILDING ENERGY	- GREENPOWER - ON SITE via Sun
MATERIALS	- BLUE GEN? - BIOMASS - PLANT THINGS - ALGAE
LIFE	

- NORTH FACADE REQ:
- BIPV - MAX SURFACED
 - SHADDED FROM SUMMER
 - OVERLOOKING

+ = 0

ZERO WASTE

CONSTRUCTION

- PREFAB IS GOOD!
- DESIGN FOR WASTE MINIMISATION
- DON'T ASK FOR PACKAGING!
- RECYCLE WASTE MATERIAL
- INTEGRATED PLAN WITH LOCAL COUNCIL
- FINE WOOD?
- WASTE MANAGEMENT PLAN
- EDUCATE STAFF

OPERATION

- SEGREGATE WASTE STREAM
- COMPOST
- BURN?
- WATER
- SEWAGE - BLACK WATER > GREY WATER
- LINK WITH LOCAL COUNCIL
- BEHAVIOUR CHANGE

SUSTAINABLE : TRANSPORT

- SOOTER
- CYCLE STORE FOR FRIENDS
- E.V
- CHARGE POD / POINT ON PREMISES

SUSTAINABLE FOOD

- LOCAL MARKETS < 1KM
- HERBS / TOMATOES / VEGETABLES ON ROOF etc
- ANIMAL FOOD FOR BASIC LIVING 2 PEOPLE
- BEES / CHICKEN

SUSTAINABLE WATER

- AUTO IRRIGATION FOR TREES
- RAIN CAPTURE - ROOF GUTTERS; NEIGHBOURS.
- SHARED WATER TANK
- WASTE WATER
- WORM FARM - SEWAGE / COMPOST
- DRY COMPOST TOILETS?

SUSTAINABLE MATERIALS

- LOW EMBODIED MATERIALS
- TIMBER MOLE (FSC)
- NO PLASTIC
- LESS METAL
- LESS CEMENT
- LESS GLASS
- ZERO ALUMINIUM HOUSE

LAND USE

- IMPROVING LAND
- HERITAGE / HISTORY - ARCHITECTURAL RESPONSE
- IMPROVE BIODIVERSITY, CONSERVE
-

CULTURE + HERITAGE

- LANEWAY ARCHITECTURE
- RESPONSE TO URBAN DENSITY ISSUE IN MELBOURNE
- EXHIBITION
- FACILITATE SUSTAINABILITY KNOWLEDGE

EQUITY + LOCAL ECONOMY

- LOCAL WORK-FORCE EMPLOYMENT
- OPEN HOUSE
- MELBOURNE
- COMMUNITY LEVEL EDUCATION RE SUSTAINABILITY
- SOCIAL EQUITY

HAPPINESS + WELLBEING

- SPA
- COMFORTABLE
- BUILT ENVIRONMENT
- IEQ EXCELLENT