SECTION BB 1:100

SERVICES

FOYER

WORKSPACE

WORKSPACES

BIO GAS INSTALLATION

COMBINED HEAT AND POWER PLANT

ALGAE TUBE SYSTEM

GREEN HOUSE

CO2

> green waste
> animal manure
> sewage sludge
> wood residue
> electricity + heat

CHP

> fertilizer
> CO2

ALGAE

> water
> nutrients
> sun light

SUNSHADE

ALGAE

> warm grey
> O2

CONTROLLED ENVIRONMENT

ALGAE GROWTH

CONTROLLED HEAT

THERMAL ROOF CREATES MULTI-USE SPACE

HEAT SURPLUS ON YEARLY BASIS - LINKED TO AQUIFER

PASSIVE THERMAL BUFFER

TRANSFORMATION BARNS

PASSIVE HEAT

EXTENSIVE HEAT

STAGE FORUM

BIOGAS

DE KASCENTRALE IMPRESSIES
WORKSPACE
INDOOR CLIMATE
+18 / +22 C

FOYER
IN BETWEEN CLIMATE
+10 / +25 C

SERVICE UNIT
MODERATE CLIMATE
+5 / +25 C

SERVICES
OUTDOOR SHELTERED CLIMATE
-5 / +25 C

GREEN HOUSE
GREEN HOUSE CLIMATE
+10 / +35 C

FLOOR
HEATING
THICK INSULATION
PASSIVE THERMAL BUFFER
VENTILATION
HOT AIR COOLING WITH HEAT EXCHANGERS
> WATER SYSTEM LINKED TO AQUIFER

VENTILATION COLD AIR
ALGAE TUBES AS SUNSHADERS

FOLDING GLASS DOORS CLOSED FOR HEAT RETAINMENT

MINIMUM HEATING VENTILATION COLD AIR
ALGAE TUBES AS SUNSHADERS

FOLDING GLASS DOORS OPEN FOR VENTILATION/ OPEN USAGE

HOT GREY WATER FROM ALGAE TUBES > LINKED TO AQUIFER