Logo de l'entreprise à insérer

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Section Sciences et Ingénierie de l'environnement
Design Project 2015 (semestre de printemps)

Proposition n°29

Hillcity - future city
living and working under the same roof

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Descriptif du projet

To guarantee sun light, quiet (no traffic), clean and safe living surroundings for every citizen was the main idea or reason to develope the idea of future living.

"Hill City" is a city, built on an artificial (e.g. concrete) hill, where live about 50.000 inhabitants. The hill itself is about 150-200 meters high and some 3,5 kilometres long. By building a hill, we save a lot of land and bring people together in safe surroundings. And by placing cars, garages, storages stocks etc. inside the hill we can offer convenient, quiet and bright living surroundings for all the citizens on the hill.

"Hill City" is a city where all the families can co-finance the housing and living. The housing can be re-selected according to the desired position. Modern building constructions will open new ways of living. The entire central ecology system is controlled and monitored.

“Hill City” in brief:

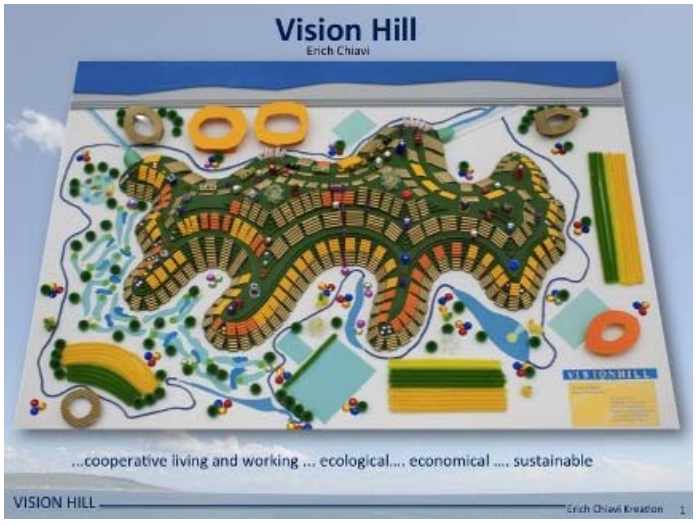
It offers all: working stations, schools, convenient flats, gardens, shops, outdoor facilities, industrial areas for production, concert halls etc.

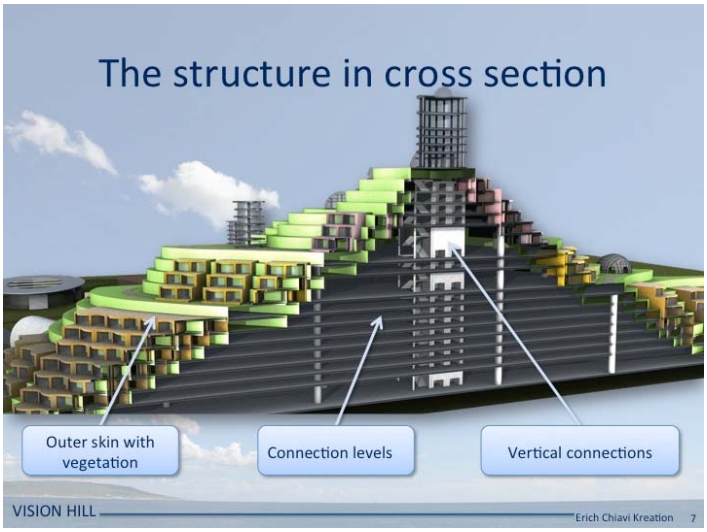
Its benefits are among other things: social factors, sustainability, waste management, newest energy solutions, newest technical solutions, environmentally friendly, and short distances between homes and working stations/schools.

“Hill City” brings people together – again! It helps in preventing the social exclusion.

”Hill City” could be a practical solution for good living all over the world: in crowded areas with the lack of space and land, in nature disaster areas, where people have lost their homes etc.

Future living in "Hill City" created by Erich Chiavi





Objectif

The main objective for the students in this “Design 2015 project” is to produce strength calculations of building from different materials and for different sizes and constructions of the “Hill City”.

Descriptif tâches

The students present calculations from strengths and costs from different materials for different sizes of constructions, for example “Hill Cities” with 5000/10.000/20.000 inhabitants and study the differences between them.
In addition to the above mentioned, students could also study and create an ideal infrastructure and form for the “Hill City”.

Divers

The creating process of the the “Hill City” project needs many faculties, such like civil engineering, structural engineering, electric engineering, logistic expertice, information technolgy. Also special expertice like aerodynamic, meteorology, biology and garden architecture, architecture, sociology, recycling expertice and sustainability experts.

Design project 2014

EPFL master course design project 2014 under supervision of Christian Ludwig and Erich Chiaivi: Jenny Steding Selander and Qianqian Wang

1 Environmental Science and Engineering Section, École Polytechnique Fédérale de Lausanne
2 Chemical Engineering Section, École Polytechnique Fédérale de Lausanne
3 Farb raum und gestaltungsphysiologie design