SUSTAINABLE HOME BUILDING PROCESS IN SÃO PAULO

GOAL
Develop a sustainable agenda and develop a sustainable design and construction guide for the home building process in São Paulo. Our goal is to obtain environmental gain, not isolated island of excellence.

TRADITIONAL HOUSING IS UNSUSTAINABLE
1. Poor natural lighting
2. 100% impermeable plot
3. Background is paved
4. Front garden is converted to garage
5. Contribution to urban flooding
6. Sidewalk as a garage entrance
7. No trees on the sidewalk
8. Sidewalk is irregular
9. Difficulty to walk on the sidewalks

BARRES / CHALLENGES
- Low demand for sustainable construction
- User do not relate buildings to sustainable development
- Low rate of compliance with technical standards
- Lack of home builders association
- Difficulty to change building code
- Big informal sector
- Material production
- Home builders
- Lack of research on housing technology
- Research focused on high-rise buildings

SUSTAINABLE BUILDING PRODUCTS
Available in the brazilian market
- Cement with up to 70% blast furnace slag
- 6 litre water consumption toilet
- Lumber from wood plantations (eg. Eucalyptus)
- Solar heaters
- Price is competitive

BACKGROUND
Construbusiness in Brazil
- Construbusiness produces 30% of Brazilian GNP
- Home building corresponds to 6% of Brazilian GNP
- 77% of house units are self-managed
- 52.5% of which are self-financed

Home Builders Across Social Strata in Brazil

City of São Paulo in data
- Gross Product
  - US$67.3Trillions (1985) corresponds to 14% of Brazilian GNP
- Area: 1,527,884 km²
- Green Area per inhabitant: 4m²/ha (cf. recommended 12m²/ha)
- Population: 18,151,000 inhabitants
- Construction and demolition waste product: 10m³/year

Desired Results
- Consumers guide, media info
- User guide
- Design guide
- Construction guide
- Sustainable agenda
- Suggestions to city building code