

The city as ecosystem

Martha Thorne, Distinguished professor
IE School of Architecture and Design, Madrid, Spain







**Analogies of our cities...
to try to understand and approach
challenges**





What's different, if anything, in our cities ?????

Rapid urbanization

Climate change

Migration

Technology

Inequality

Some figures:

Buildings use about 1/6 of world's fresh water

17% of all waste in UK comes from construction

45% of energy produced is used to operate buildings

The built environment generates nearly 50% of annual global CO2 emissions

82% of global energy consumption in buildings supplied by fossil fuels in 2015

70% of the share of global energy-related greenhouse gas emissions attributed to cities

What would happen if we
only had electric cars in our
city?





Need for charging stations..... What should they look like? Where to place them? What else can they do?





Less pollution and less noise mean we can open the windows....

If we can open the windows.....what does this mean for façade design, how inhabitants feel about interiors?



An ecosystemic approach:

Criteria:

Solves more than one problem (multi-purpose and adaptable)

Is not based just on cost but also value

Is long term as well as short term

Works at different scales and different levels

Integrates the social, natural, digital, and built environments

A change in mindset among all stakeholders



Madrid Rio

Burgos & Garrido; Porras La
Casta; Rubio & A-Sala; West8

2005 -2015



Madrid Rio





Madrid Rio



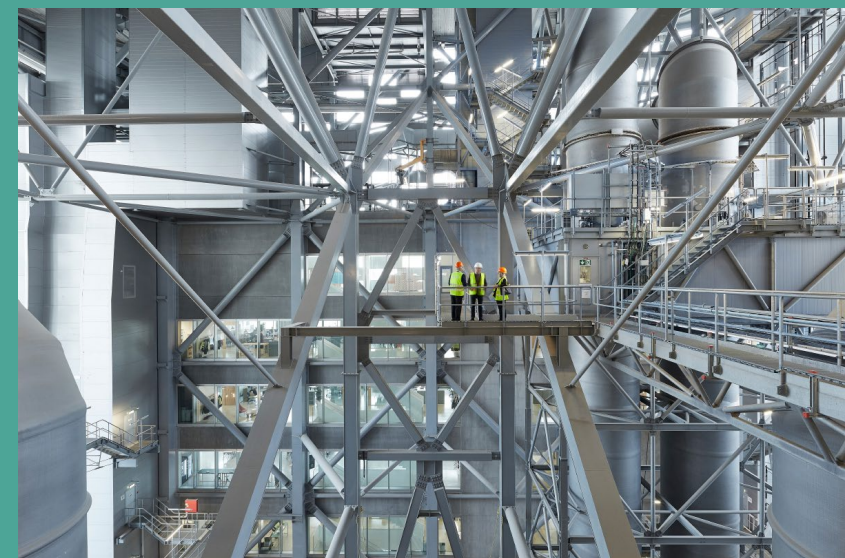
Amager Bakke

Waste to energy plant
Copenhagen

Bjarke Ingels Group (BIG)
2011 - 2020











Thank you

martha.thorne@ie.edu

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