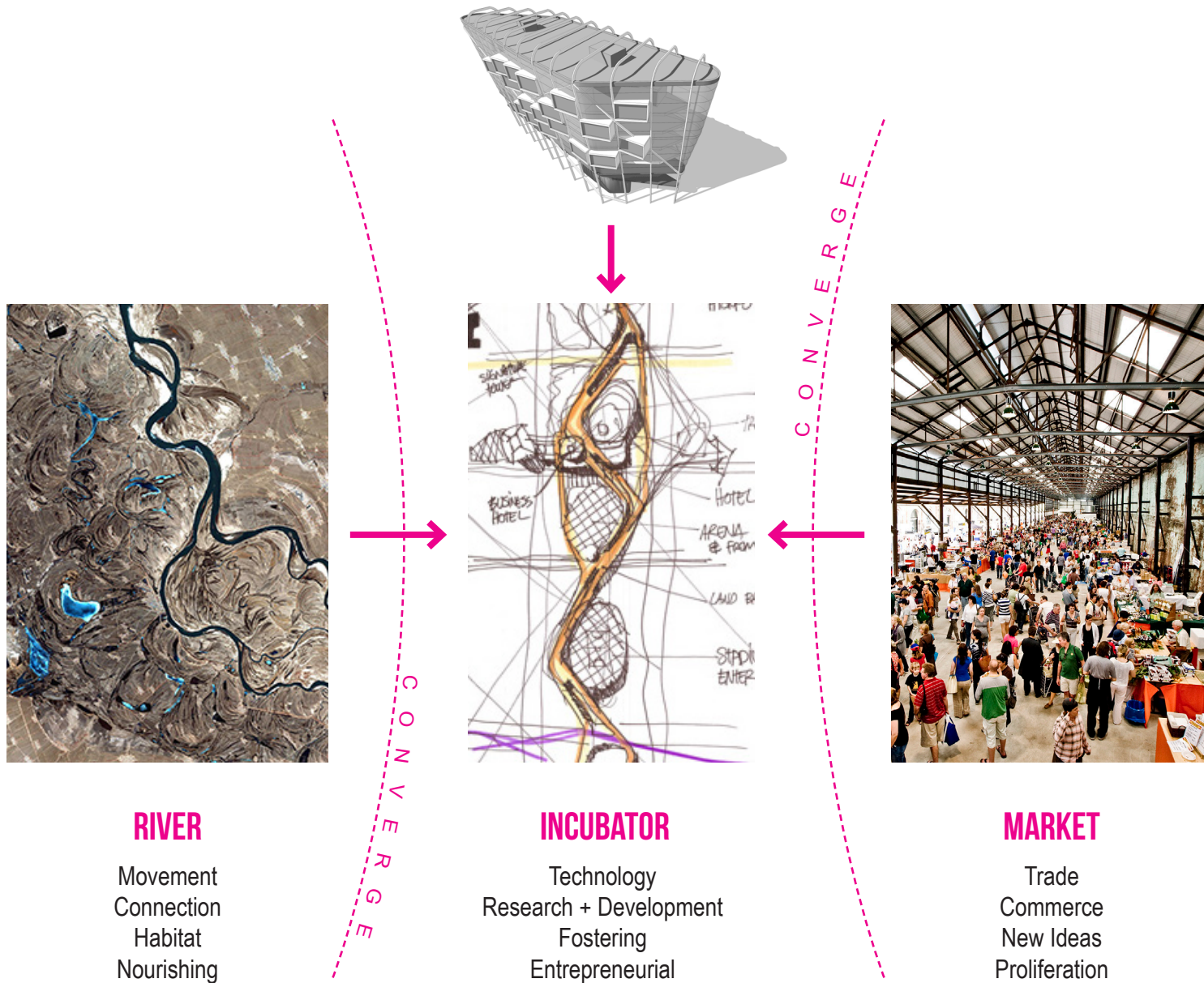




HIGH-TECH INDUSTRIAL DEVELOPMENT ZONE TSINGHUA FINANCE AND SCI-TECH PARK
Unbuilt Project_Commissioned - Changchun, China

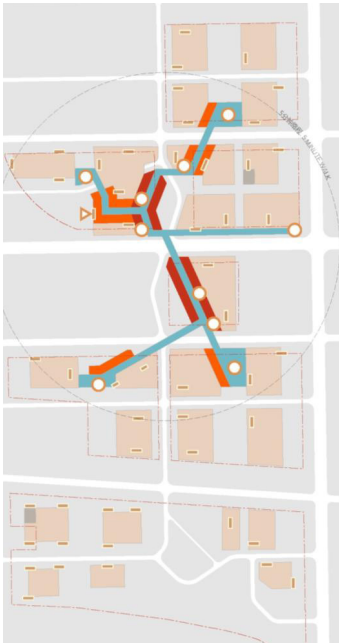
Around the globe there is a shift occurring in the spatial organization of innovation. Innovative companies and talented workers are choosing cities and urbanism over the outdated model of isolated suburban campuses. This new model — the Innovation District — is an ecosystem, a network of individuals and organizations working together as a system. These districts cluster educational institutions and innovative firms; linking them with start-up companies, business incubators, mixed-use housing, office, retail and 21st century urban amenities. This new innovation district, fueled by the 'river', will be a financial ecosystem creating a diverse, resilient cycle of environment and enterprise, culture and commerce. By leveraging the strong educational contingent in Changchun, the Tsinghua Financial District will become one of the first cutting-edge Innovation Districts in China.

A market is a river of movement and connection for new ideas & technologies to be introduced, valued and proliferated. Its engine is the Incubator



WINTER GARDEN

The River is a confluence of pedestrian activity in a below-grade commercial plaza – the Winter Garden symbolizes the eternal spring of Changchun and will be full of sunlight, energy and warmth during the cold months. Architectural portals and layered landscapes will connect the market to financial district and link the river to the street above creating a symbiotic, spatial relationship.



Underground Space

INCUBATOR ZONE

Incorporating business incubators into the core of the financial district, directly above the river/market, offers a variety of resources and services in unique organizational structure. The outcome is a cyclical long-term relationship between start-ups and the network of relationships that helped nourish them.





Incubator Zone



Master Plan

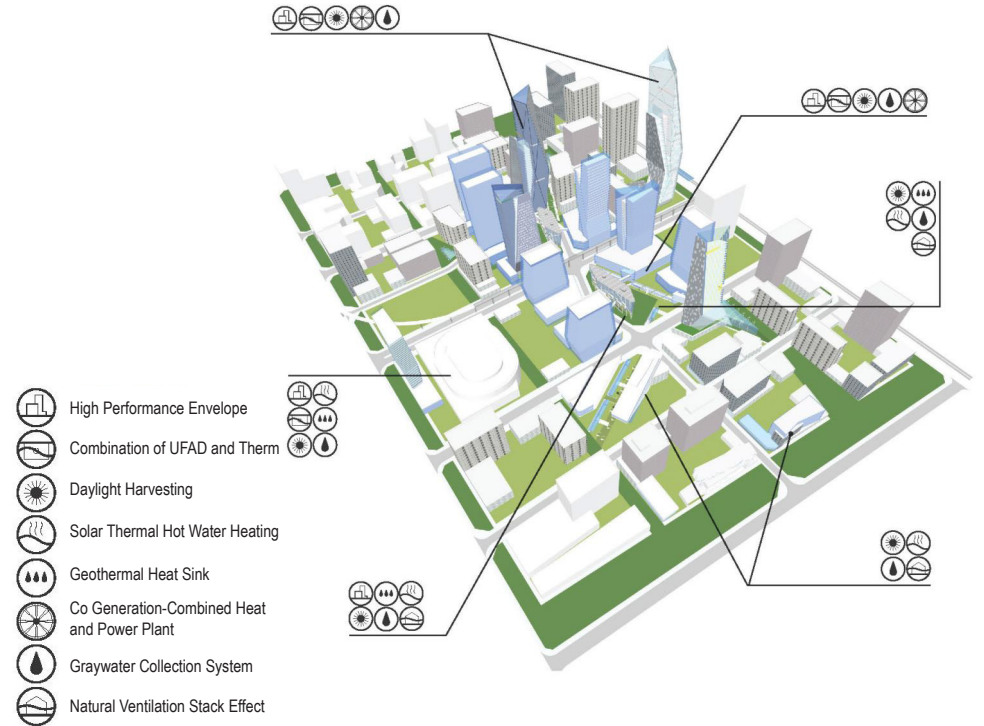










Confluence District

SUSTAINABLE URBAN MIXED USE

The walkable urbanism necessary for an innovation district supports the bold sustainability initiatives of Chungchun. In addition the proposed design intends to minimize the project's impact on the local environment through architectural and site-based solutions. The building's systems will take advantage of cutting-edge

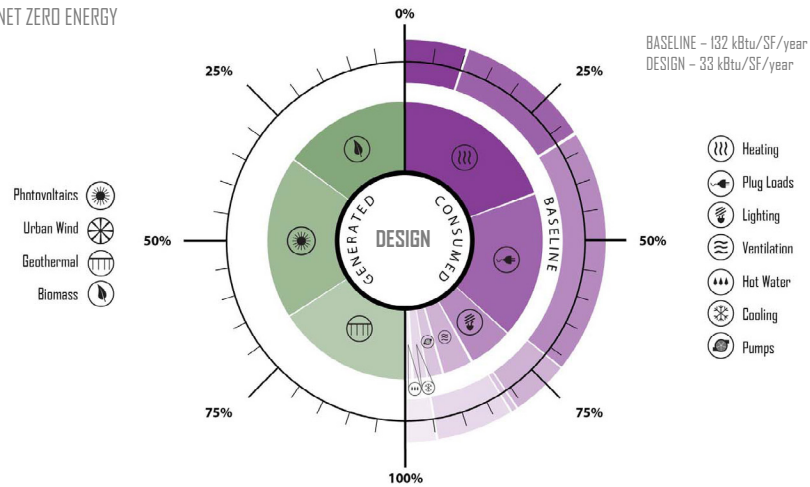
sustainability measures and the forms are choreographed to allow sunlight into the central spaces. By creating a diverse, vibrant urbanism at the core of site, the design aggregates larger open spaces near the creek for natural systems and wildlife.



-  High Performance Envelope
-  Combination of UFAD and Therm
-  Daylight Harvesting
-  Solar Thermal Hot Water Heating
-  Geothermal Heat Sink
-  Co Generation-Combined Heat and Power Plant
-  Graywater Collection System
-  Natural Ventilation Stack Effect

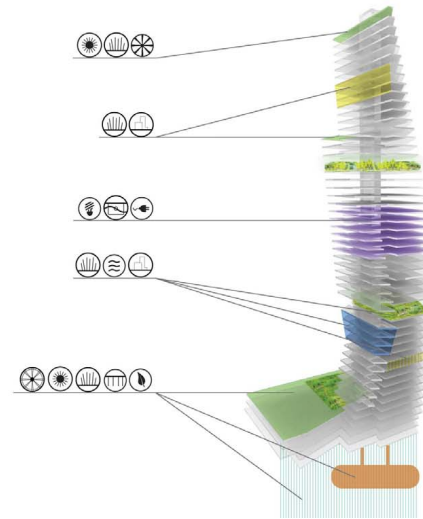
HOLISTIC APPROACH

NET ZERO ENERGY



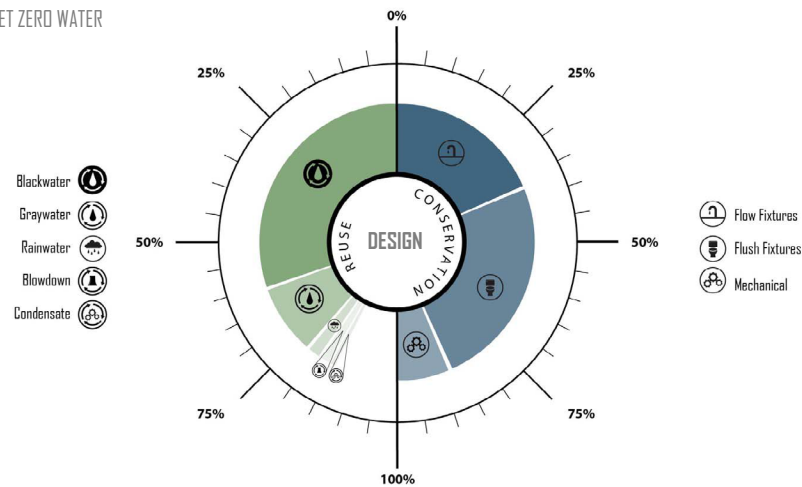
ENERGY STRATEGIES

Changchun Conceptual Master Plan



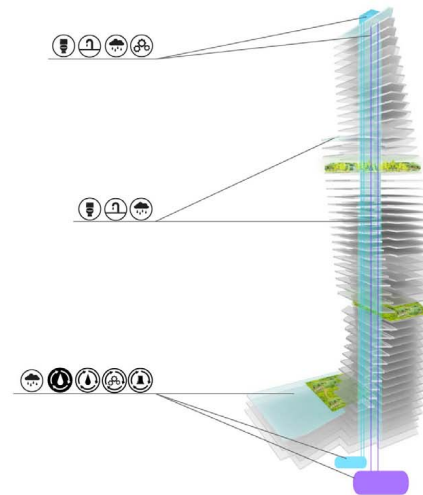
- High Performance Envelope
 - Efficient Lighting
 - Thermal Heating/Cooling
 - Smart Ventilation
 - CoGen
 - Occupant Behavior
 - Green Roof
- Biomass
 - Photovoltaics
 - Urban Wind
 - Geothermal

NET ZERO WATER



WATER STRATEGIES

Changchun Conceptual Master Plan



- Flow Fixtures
 - Flush Fixtures
 - Mechanical
- Blackwater
 - Graywater
 - Rainwater
 - Blowdown
 - Condensate