



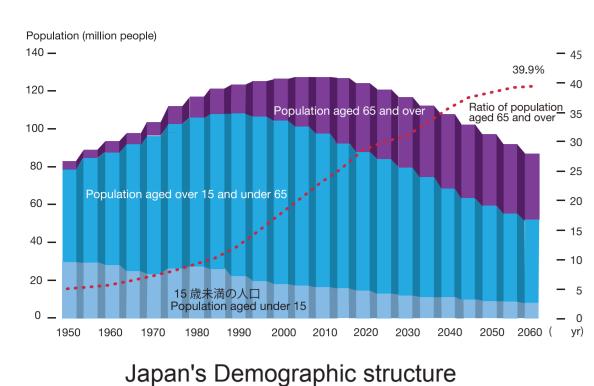
### Shrinkage ins inevitable

However, even as hopes for the stability and prosperity of the world soared, a profound crisis has been quietly coming to a head. A combination of factors including environmental problems, changes in the population structure and the dead end at which the present economic system finds itself makes long-term shrinkage inevitable. The Industrial Revolution had an enormous impact on the world and paved the way for the modern city; the effect of shrinkage will be no less profound.

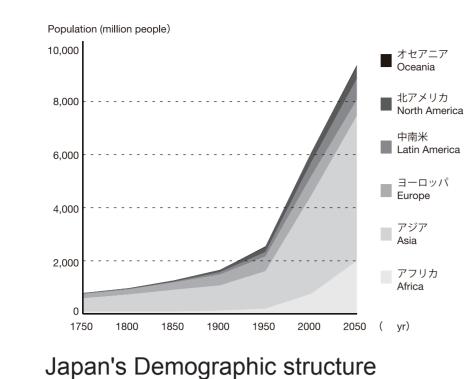
In the past people had a shared, optimistic belief in growth and development, but as will be explained in detail in the following pages, it is at last becoming clear to everyone that shrinkage, as far as the environment, resources, population and consumption are concerned, is becoming unavoidable, at least in the developed countries of the world. This pessimistic view was borne out by the Fukushima nuclear power plant disaster.

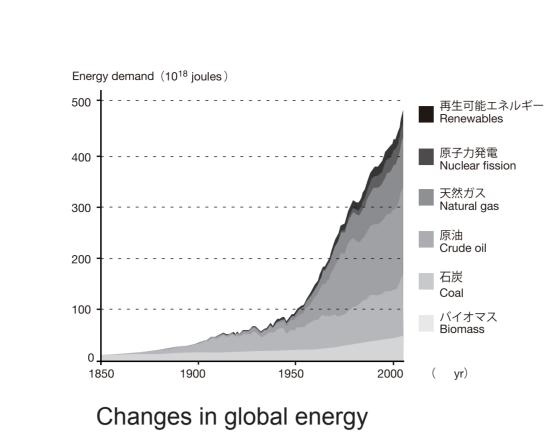
Three types of "exploitation" enabled the fruits of technological innovation to change people's lives. First, there was the exploitation of mineral resources and the global environment; second, there was the exploitation of other regions (and peoples); and finally, there was the aforementioned exploitation of future generations.

By no means will shrinkage be temporary or short-term. We need to understand that we are at a turning point of civilization.

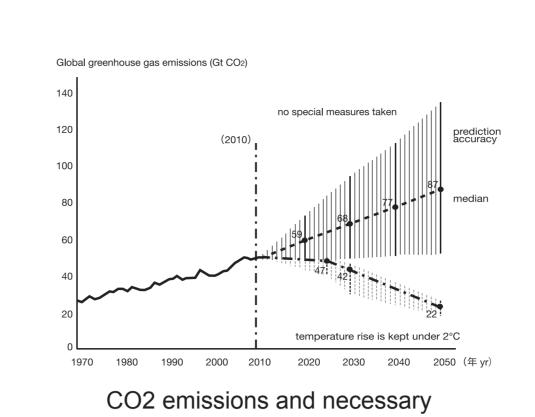


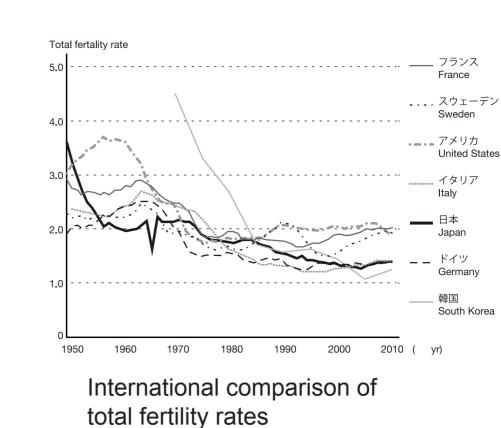
(estimation in 2012)

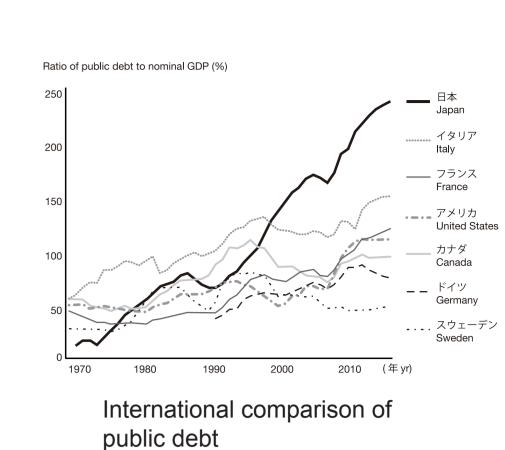




consumption





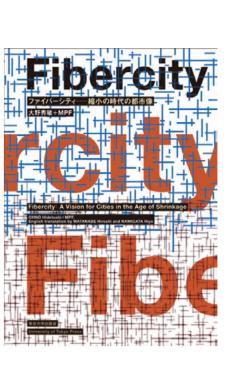


# Fibercity and its flow strategy

(estimation in 2012)

# OHNO, Hidetoshi

Architect, Dr. of Architecture
Emeritus Professor of the University of Tokyo



OHNO Hidetoshi+MPF, Fibercity: A vision for Cities in the Age of Shrikage, University of Tokyo Press, Tokyo, 2016

# What is Fibercity?

The age of growth lasted for centuries, and we became accustomed to it. Unfortunately, as a consequence we have neither specific images for the shrinkage of cities nor a method for weathering that process and managing a steady-state society. We must formulate workable urban strategies for making shrinking cities rewarding places and a theory underpinning those strategies. "Fibercity" is an outline of such a planning theory and a set of practical urban strategies.

Fibercity is compelled to offer prescriptions for the treatment of the tens of thousands of preexisting cities in the world that are intended to summon their hidden strengths, change their constitutions and enable them to build up the power and vitality needed to endure shrinkage.

Fibercity is a planning theory dealing with existing cities that attempts to control simultaneously place and flow inside cities through the manipulation of relatively small linear elements (fibers), and as such might be likened to internal medicine.

#### Both Flow and Place

That is, flow has a far greater presence in our everyday lives today than it ever did in the past. The gap between those people who have the skills to use flow and those people who do not, and between those cities that receive the benefits of flow and those cities that do not is growing and reaching a critical level precisely for that reason. People and cities that are distant from flow will be left behind.

It then becomes obvious that modern city planning has been based on the idea of separating urban activities into the occupation of place and flow and, moreover, on putting priority on place. Is such a separation appropriate?

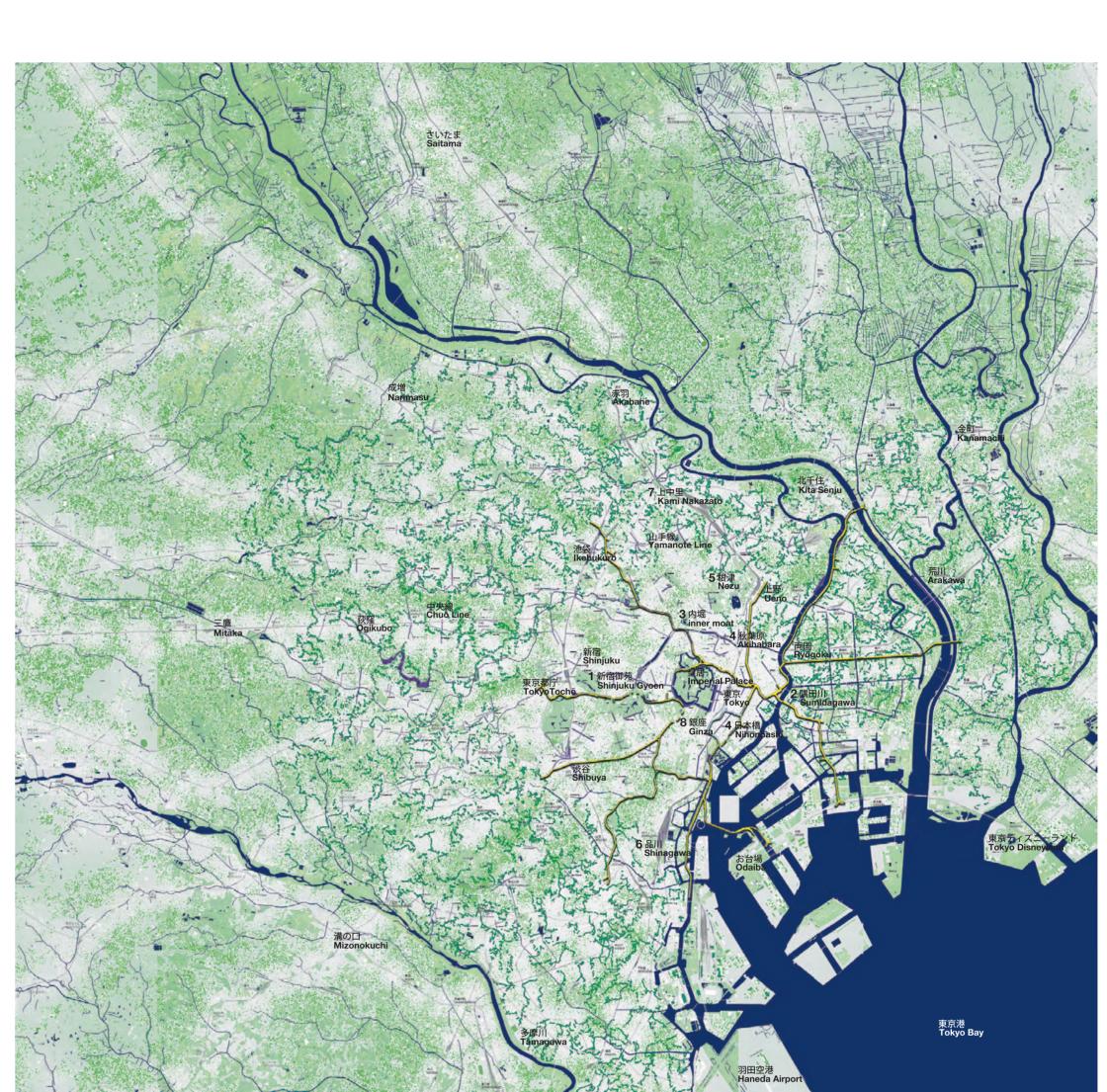
### Why short lines?

Why do the lines have to be short? It is to preserve flexibility in the reorganization of the city. If we were to first draw the image of the city we intended to realize and then assiduously attempt to make that image real, we would not be able to adapt to the rapid changes that the contemporary city constantly undergoes.

The second reason for making the lines short is to keep interventions to a scale that enables the public to control them.

The third reason for keeping the lines short is to compete against Big Flow. Big Flow is an expression of territorial ambition. In the contemporary city where Big Flow excels, the unit of intervention must be made small to enable the public to comprehend and control it and to adapt to changes in time, and the intervention must be autonomous to a certain extent so as to give rise to small local flows.

The fourth reason is that in reorganizing urban spaces, Fibercity will focus on recycling and repairing existing structures. There is a need to preserve, repair and continue to use as much as possible existing things, both natural and man-made, instead of constantly constructing new things as we have previously.





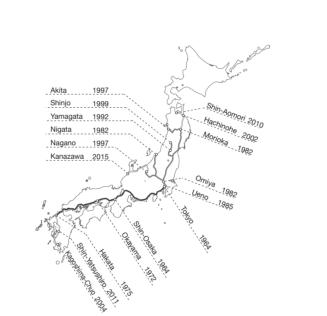
### Big Transportation and small transpotation

Small transportation as opposed to Big Transportation is transportation that is "near, slow and on a small scale." It might be compared to capillaries, without which nutrients would not reach the cells that make up tissue. A city would not function with Big Transportation alone.

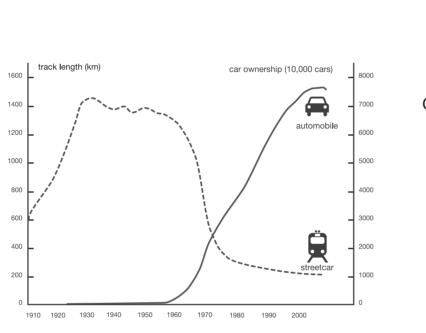
Big Transportation is powerful and appealing but must be combined with Small Transportation to meet people's needs effectively. In reality, however, Big Transportation has developed by wiping out Small Transportation.



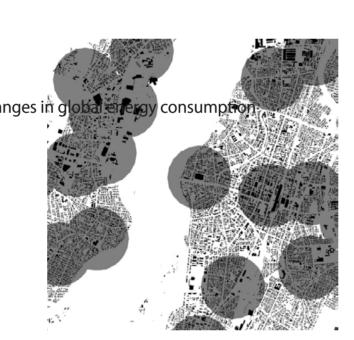
Expansion of the railway network in Japan



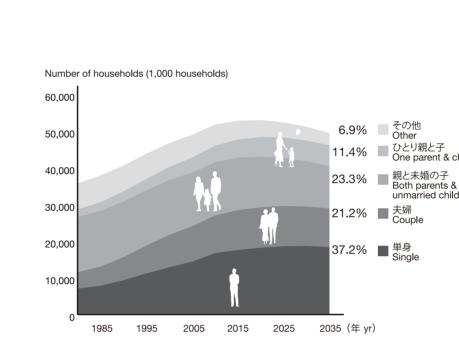
Expansion and spread of Bullet-train network



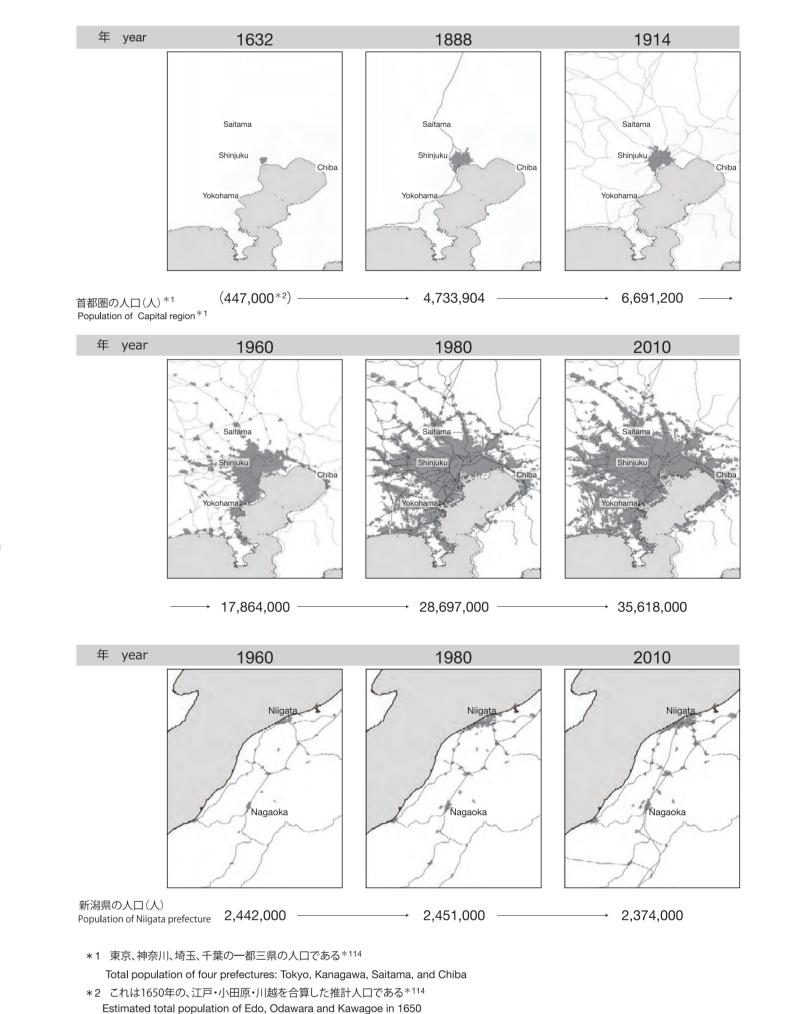
Decline of the streetcar and rise of the automobile



Map of food desert (Nagaoka City, 2015)

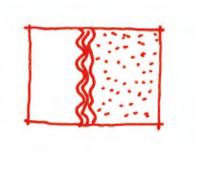


Changes in houshold composition in Japan



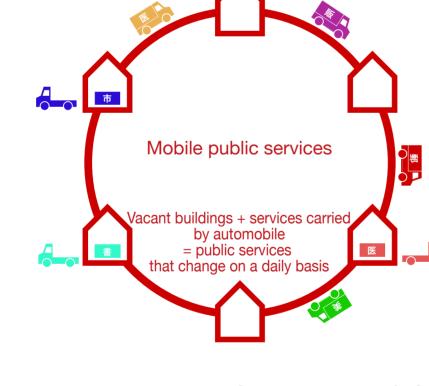
Changes in the populations of Tokyo and Nagaoka City

# Projects of flows



SHORE

**RIVER** 



Mobile retail shop

Mobile city hall

Mobile clinic

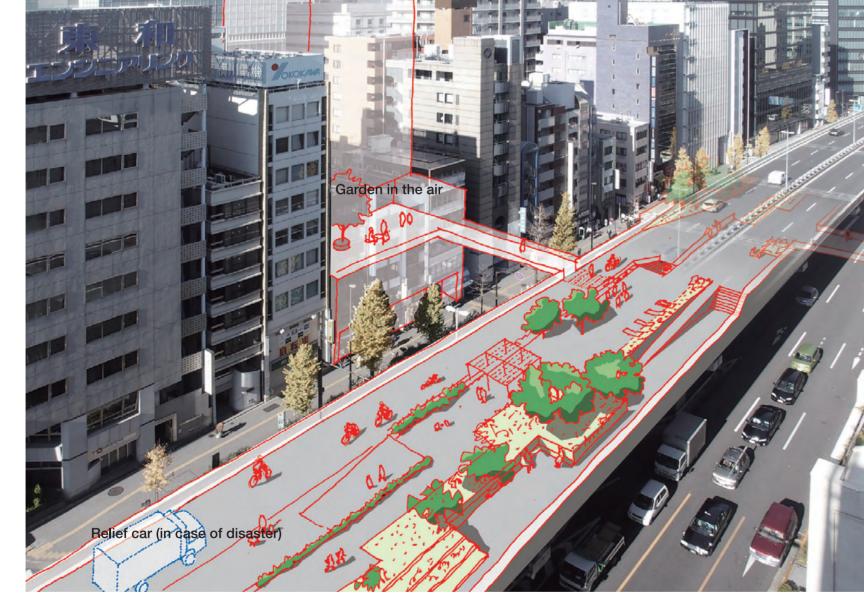
Mobile artificial dialysis treatment facility

Mobile beauty salon

Mobile post office

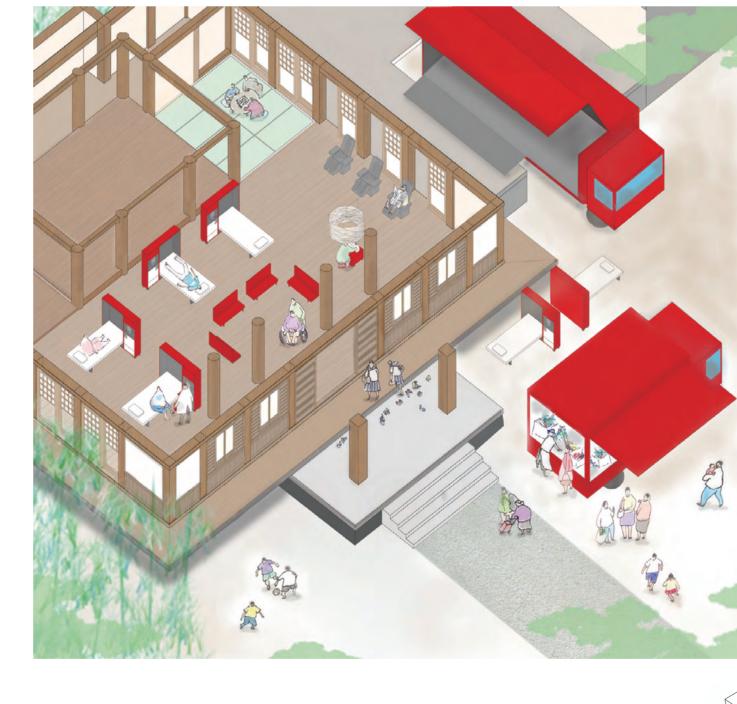
Mobile library

Circulating / Orange Rounds

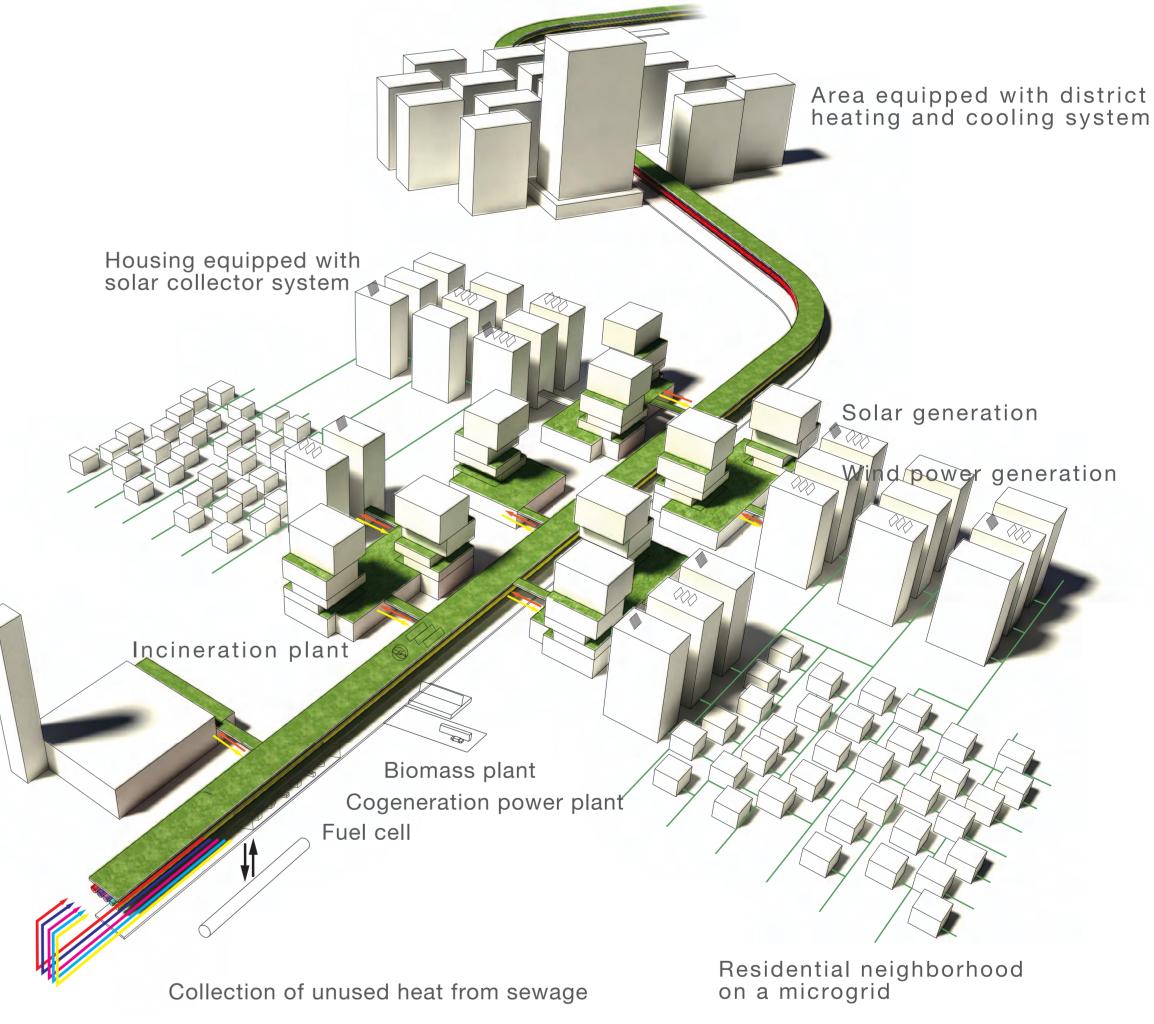


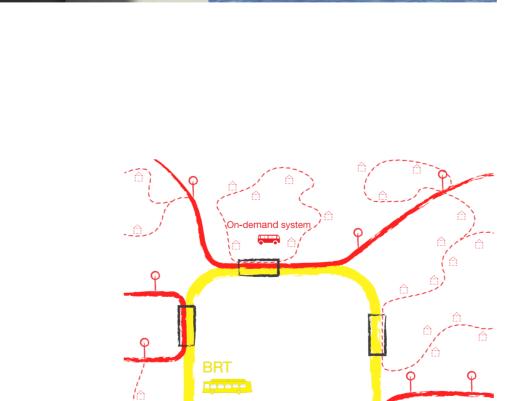
Replacing / Green Web

Stringing Together / Green Partitions

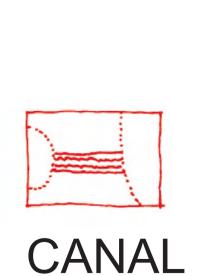


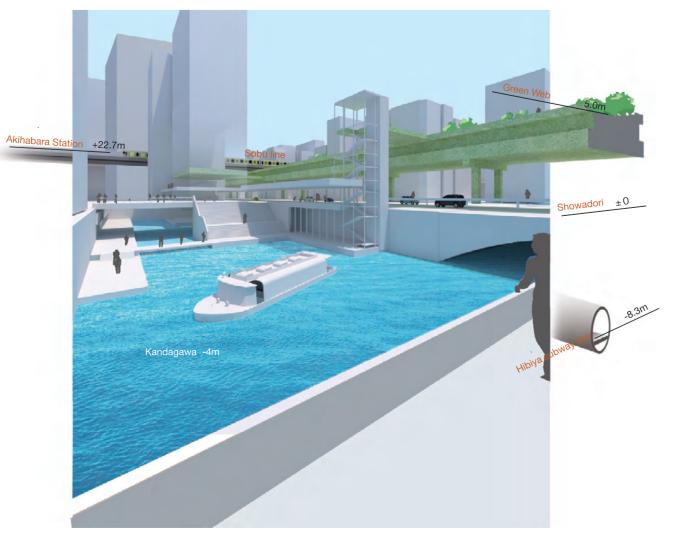






Combining/ Orange Web





Connecting / Blueneclace





Replacing / Green Web





