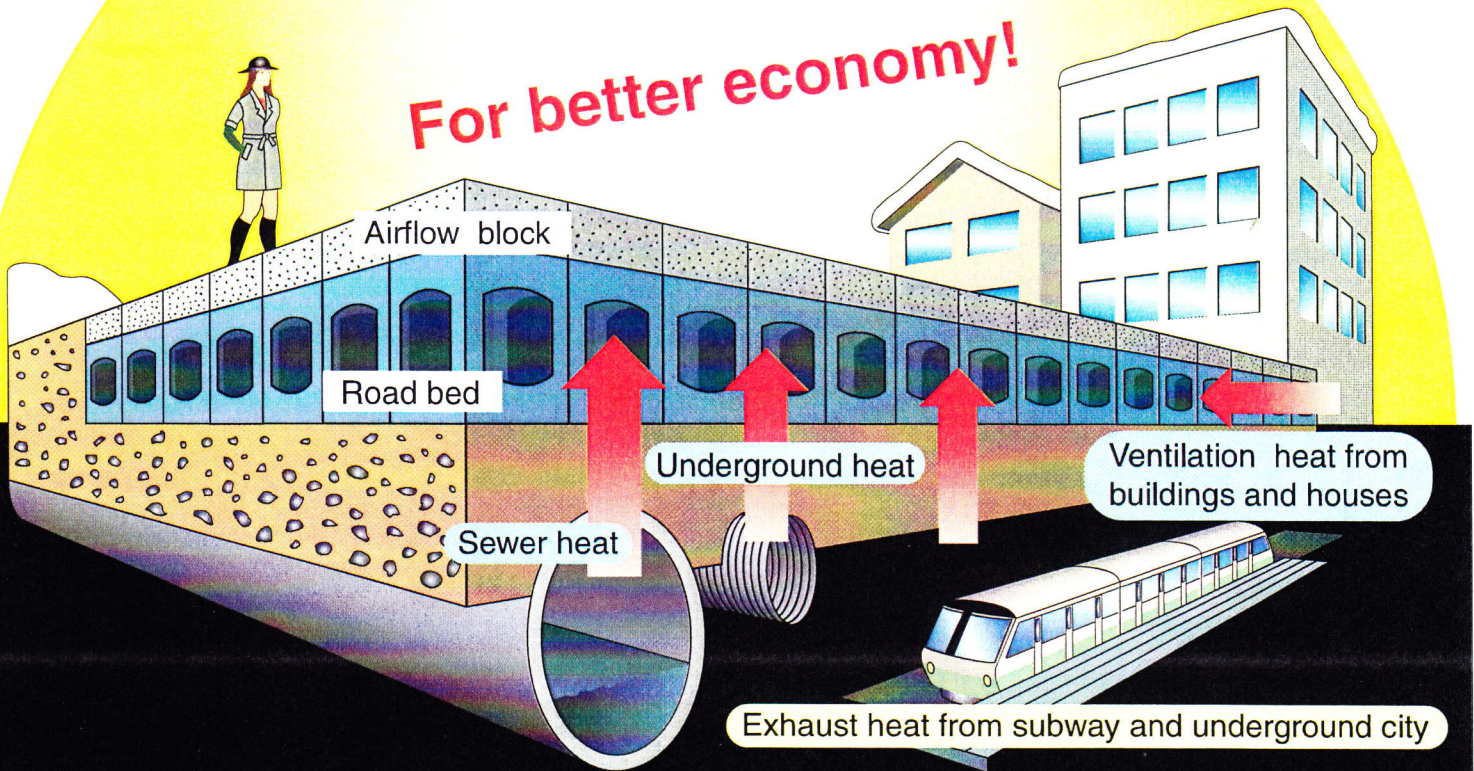


# Snow melting system with unused heat air

For better economy!



This snow melting system utilizes unused heat from sewers, ventilation heat from buildings and houses, exhaust heat from the subway and underground city, and underground heat. The system transfers the heat to a hollow space in a roadbed and then to the ground through airflow blocks to melt snow. Melted snow is discharged through the airflow blocks to the underground or drainage facilities.

## Global environment and energy problem

- As a measure against global warming, the system suppresses the emission of CO<sub>2</sub> and other greenhouse gases.
- Anxiety about stable supply of fossil fuel.

## Issues of living in cold areas

- Increase of energy consumption, for example by heaters, and of economic burdens
- Interference with lifeline by snow coverage, and removal and disposal of snow
- Safety and barrier free access of snow roads for the aging society

## Characteristics of this system

- No additional CO<sub>2</sub> generation required by use of unused heat.
- No additional energy consumption of fossil fuel.
- Energy consumption comes only from air blowers, which realizes low running cost, about 80-90% lower than conventional road heating systems. (based on an estimation)
- The simple structure realizes workability and easy maintenance.
- The roadbed can support the weight of heavy vehicles (of T-14).

Let's protect the global environment...water,soil,sky,air

HoKusui Civil Engineering Co.,Ltd.

Supported by:

SeKisui Chemical Hokkaido Co.,Ltd.  
Aizawa Concrete

# Protection of global environment and life in a northern climate

Hokusui Civil Engineering, a company in Hokkaido, has been working on the development of a “snow melting system using unused heat air” based on our technology and experience in our main business of consulting service on sewerage, in order to simultaneously realize two contradicting themes, comfortable lives in a northern climate and environment protection.

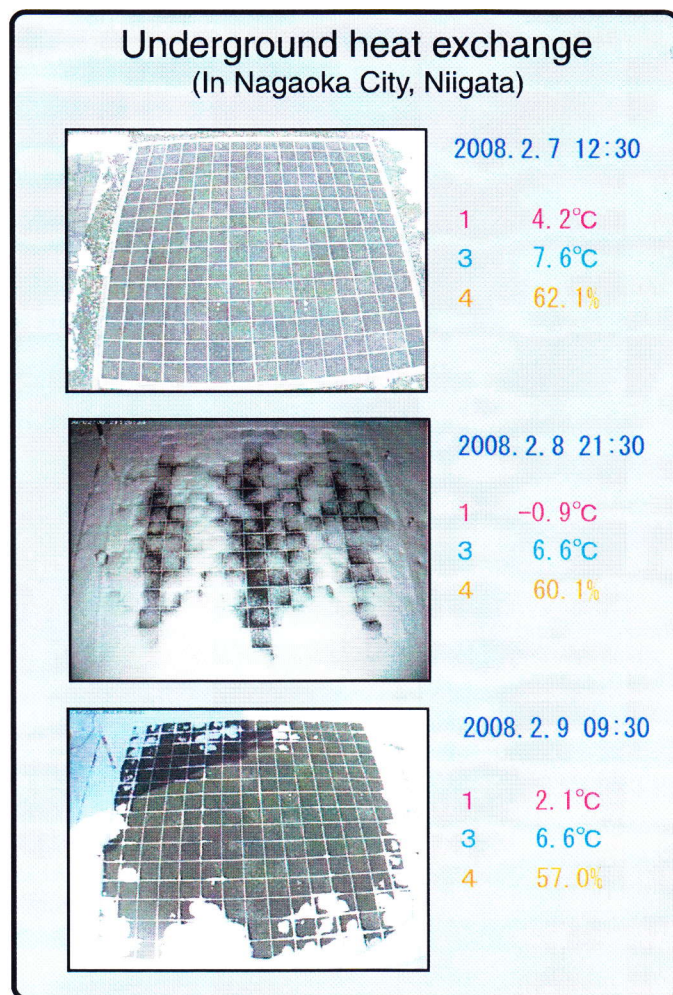
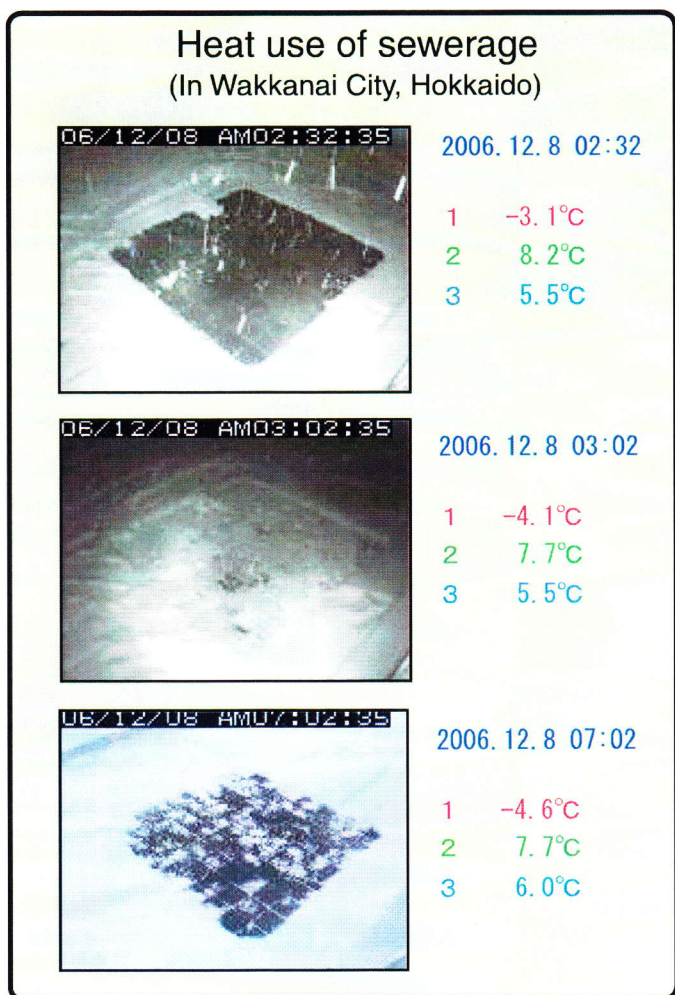


## Deodorizing bed of soil deodorization facilities, a trigger for the development of the system

In the sewage plant we designed in a snow covered cold area, we focused on the phenomenon where snow did not accumulate on the deodorizing bed at the soil deodorization facilities winter time.

Photo / Soil deodorizing bed at sewage plant

**From presumption to conclusive evidence. Strong confirmation by repeated demonstration experiments.**



1 External temperature    2 Temperature of collected heat    3 Airflow temperature    4 Airflow humidity

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