

# Thinking Together—Regional Communities and the YKK Group



The YKK Group has hosted stakeholder dialogues annually since 2010 to provide a forum for the exchange of opinions. At the seventh dialogue (held April 21, 2016), we welcomed Professor Noriyasu Kunori to act as facilitator following on from the previous year. Participants from various stakeholder groups attended—representing business partners, consumers, local communities, environmental groups, and students. During the morning, they visited Passive Town in Kurobe, Toyama Prefecture, currently under construction on the site of old YKK company housing. In the afternoon, participants were able to exchange opinions with YKK Group employees in workshop-format discussions.



Participants with the cherry blossom trees they planted at YKK Center Park

## Participants

- Naturalist: Kikuyo Matsuki (Vice Chairperson, Kurobe Gorge Naturalist Society)
- Consumer representative: Rika Inagaki (Promoter of global warming prevention efforts in Toyama)
- Local government representative: Michiko Takamoto (Assistant Manager in charge of Environmental Affairs, Living Environment Section, Citizen Affairs Department, Kurobe City)
- Nature conservation group representative: Atsushi Sano (Manager of Interaction & Cooperation Promotion Department, Toyama Environment Foundation)
- Local resident: Hisao Daijogo (Chairman, Muratsubaki Promotion Society)
- Business partner: Akira Hirano (President & CEO, Hirano Komuten K.K.)
- Student: Naoto Oishi (Second year student, Environmental Engineering, Graduate School of Engineering, Toyama Prefectural University)
- International student: Song Xiaojing (First year student, Environmental Engineering, Graduate School of Engineering, Toyama Prefectural University)

## 01 | Tour of the Passive Town

The Passive Town, currently under construction for the YKK Group, is a residential development that uses natural energy. We plan to build approximately 250 homes in this mixed-use rental residential complex by 2025. On this occasion, the group toured Block No. 1, which has been completed, where they experienced first-hand the lifestyle that the YKK Group hopes to offer in the future.



View of the Passive Town Block No. 1. The panels visible near the top of the outer walls collect solar heat for water heating.

### What Is the Passive Town?

#### Concept

- A low-energy town and homes suitable for a 21st-century sustainable society
- Comfortable living that is also environmentally friendly, actively incorporating the use of groundwater and natural energy
- An attractive landscape that takes advantage of Kurobe's climate and natural environment
- An open town that co-exists with nearby communities and encourages communication
- A town that helps residents to realize their desired work-life balance

## Experiencing a Lifestyle That Uses Natural Energy



Tampopo Child Center, established within the Passive Town. Built to provide a comfortable work environment for employees.



The Passive Town's Commercial Wing. The construction allows the passage of the wind of the region (*ai-no-kaze*) through the entire town.



The interior of a model room. All rooms are south-facing and spacious, capturing sunlight during winter to provide greater warmth.



The veranda of a model room. Awnings that effectively control wind and light are fitted as a measure against the strong summer sunlight.



Underground parking garage. Water storage facilities are installed beneath, allowing heat from groundwater to be used in air-conditioning.

While touring the Passive Town, the participants were able to experience for themselves the year-round comfortable living it offers. They expressed surprise at the extent to which natural energy could be harnessed, and praised the design ingenuity

which made effective use of wind and sunlight. In addition, there is a biomass boiler, fueled by wood chips from unneeded lumber from thinning within the prefecture, which aims to achieve greater fuel self-sufficiency for the region.

## 02 | Low-Carbon City-Planning

In the afternoon, the participants separated into three groups and exchanged opinions with YKK Group employees in workshop-format discussions on the topic of "Low-carbon city-planning in Kurobe for 2050."

### Expansion of the Concept of Passive Architecture and Creation of a Cooperative Sharing Society

We hope to transform all of Kurobe into a passive town by 2050. We also thought that the town should share what it can with nearby communities wherever possible in order to achieve a low-carbon society, and that it needs to create systems that leverage the natural resources of the region. An example is the use of natural energy through the addition of car-sharing to the transport system, using electric vehicles powered through small-scale hydroelectric generation from rivers in Kurobe. Other possibilities include reusing driftwood in dams and lumber from thinning as resources.



We hope to combine the region's resources and the knowledge of residents through the cooperation of the YKK Group to realize this society in Kurobe in the future.

### A Lifestyle That Takes Advantage of Kurobe's Unique Qualities

We realized that we must adjust our lifestyles in order to achieve a low-carbon society in Kurobe in the future. Options include riding bicycles instead of using cars, and a circulating shared transport network which anybody can access anywhere. It would also be interesting to create an experimental area where people can experience homes and towns which do not use electricity and gas needlessly, but which instead leverage Kurobe's abundant natural blessings, such as the sea, mountains, and rivers. The ideal is that Kurobe residents can have healthy and active lives without over-dependence



upon energy. It may be difficult under current circumstances; however, we hope that the YKK Group will achieve this through the advancement of the Passive Town.

### Roadmap for a Zero-Emission Community

Our group imagined how Kurobe should look like in 2050, and thought of a roadmap to achieve this. In 2050, we envisage the transformation of all areas in Kurobe into passive towns and the realization of emission-free communities. Kurobe will be a low-carbon city with a completely recycling-based society, where kitchen waste will be used to generate power which can fuel electric cars. To this end, by 2020, we need to further expand car sharing and the Passive Town itself.

Low-carbon society could begin in Kurobe. We hope that the YKK Group will continue with the expansion of passive towns.



## Holding Stakeholder Dialogues

This was the seventh of our stakeholder dialogues, which have been held since 2010. It is not easy to incorporate the opinions of stakeholders into corporate management. I greatly admire the continuation of dialogue and the company's sincere attitude. In this year, against the backdrop of the Paris Agreement, an international measure against global warming, the three groups cooperated in talks aimed at the realization of a low-carbon city in Kurobe, where Kurobe Manufacturing Center is based. Many ambitious opinions were raised regarding creation of a cooperative, sharing relationship between business and community for a low-carbon lifestyle unique to Kurobe. On the basis of these opinions, I hope that the YKK Group will take action starting with those which it can implement.



### Noriyasu Kunori, Ph.D.

- Professor (Engineering), Faculty of Arts and Sciences, Sagami Women's University
- Lecturer (Environmental Management), Graduate School of Engineering, Toyama Prefectural University
- Toyama City Policy Advisor