## CO2 and Greenhouse Gas Emissions Reduction Plan by Hakuba 47

## Goal:

We implement a plan to reduce CO<sub>2</sub> and Greenhouse Gas emissions, generated by Hakuba 47, by 10% over the next 5 years. This plan is to comply with the regulations of country of Japan, Nagano prefecture, and the city of Hakuba.

## Specific actions we have been taking since 2015:

- Avoid issuing disposable lift tickets and issue reusable keycards instead to reduce paper waste.
- Use electric air-conditioning units in order to reduce the demand for fossil fuels.
- Strictly manage the use of grooming machines.
- Operate grooming machines and snowplows with clean diesel engines to reduce emissions of nitrogen oxide gas, particulates, and other air pollutants.
- Turn down the heat while we are away during the day or turn off the heater when not in use, and keep temperatures moderate at all times (except for the patrol office where the sick and wounded are resting).
- Set up electric vehicle charging stations.
- Thin the forest around our park to preserve the forest.
- Replace regular light bulbs with energy-saving ones such as LED and use just 1 light bulb instead of 2.
- Buy energy-efficient products including toilet rolls.
- Operate our electric facility and equipment including chairlifts using supervisory control power system.
- Extend the usage period of engine oil 6 times longer by replacing reduction gear with high-performance engine as well as filtering the oil. By doing so, we can lower the operating temperature and reduce power consumptions (as to the deterioration of the oil, we inspect it through component analysis).
- Use energy-saving devices and appliances everywhere in our park.

December 1, 2019 Hakuba 47 CEO Ota, Tatsuhiko