Action plan for global warming countermeasure and energy saving 2024

Item	Action plan
(1) Reduction greenhouse gas emissions(CO2)	◇ **The target value of grennhouse gas emissions(CO2) of FY 2024 is : At most 254,783(t)** ○ We set the target value of the reduction "−2,739(t)" in every fiscal year from 2018. (CO2 emission of FY 2005 "273,960(t)" is used as the baseline, 2,739(t)/FY is 1% of this amount) ○ KEK will try to make efforts below to achieve the goal.
(2) Pay consideration when to construct or when maintain the buildings	**1. Saving water** ・ Install apparatus at the end of water supply system to save water. (e.g.)a sensing flushing valves, automatic faucet. **2. Conserve the environment of KEK campus.** ・ Pruned branches/Leaves, fallen leaves etc are reused as much as possible to reduce the waste. **3. Others** KEK will check if the contractors doing below ・ Use energy-efficient machines as possible. ・ Treat construction waste properly. **4. Visualize our action** ・ Make the report to announce our concrete action.
(3) Pay consideration when to purchase the goods when to use them	**1. Consider purchasing low pollution car.** **2. Pay attention when using cars.** ・ Carry out car maintenance regularly. (e.g.)check the tire pressure. ・ Eco-drive ・ Use business communication bus. **3. Use energy-saving office equipment.** ・ OA machine((e.g.)computers, copy machines) or appliances((e.g.)refrigerators) need lots of energy. We will replace them to energy-saving types. ・ Save standby power **4. Reduce paper consumption** ・ By simplifying the conference materials ・ By double-sided printing ・ By reusing envelopes **5. Use recycled paper** ・ copy paper, toilet paper **6. Use recycled products** ・ Stationary ・ Working wear made of recycled fiber **7. Purchase the air conditioners or refrigerators that HFC(hydrofluorocarbon) is usud as refrigerant.** ・ HFC is one type of the Freon gas. It doesn't destroy ozone layer as chlorine is not included in their molecule. ・ As HFC is greenhouse gas, we will try not to discharge the gas in the atmosphere based on the low : Act on Rational Use and Appropriate Management of Fluorocarbons (Act No. 64 of 2001)

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(3) Pay consideration when to purchase the goods when to use them	**8. Use the products with low greenhouse gas emissions** **9. Replace the vending machines to eco-friendly type** Old type of vending machine may be consuming lots of energy. ・ After investigating the actual condition, we will try to replace eco-friendly ones as possible. **10. Others** ・ Select simple packaging ・ Try to repair products as possible
(4) Pay consideration to greenhouse emission	**1. Suppression of energy consumption** ・ Turn off the lighting whare there are no people. ・ Turn off the lights during the lunch break. ・ Set the temperature of the air conditioner properly. Encourage cool biz warm biz. ・ Clean the air conditioner filter. (In summer and winter, try cleaning the filter before using the air conditioner.) ・ Close the cover when not using heating toilet seat. ・ Turn off the air conditioner in the room not in use. ・ Do not open or close doors or windows more than necessary when using air conditioners. Use blinds to reduce thermal load. ・ Turn off the computer when not in use. **2. Reduce waste** ・ Shredder should only be used for documents containing personal information created by the organization. ・ Collect the toner cartridge of the printer and proceed with reuse. ・ Appropriate disposal is required when OA equipment and cars are disposed of. **3. Strategic approach to measures against global warming** ・ It shows a model to be a reference for energy conservation. And introduce it on the website. ・ Clean the outdoor unit of the air conditioner. ・ Check plant management and water supply facilities. ・ Efficient operation of equiment. ・ Discussion with the researcher on the utility operation during the quiescence period in KEKB・PF and plan for economical operation.
(5) Consideration for work-life balance Training for staff	**1. Provide staff training and information on global warming and energy conservation.** ・ Make staff activery participate in training of other agencies concerning environment consciousness. ・ Provide staff with information on environmental considerations by website. **2. Transmission of information** ・ Publish and announce the operation plan on the website. ・ Publish the amount of electricity and water usage on various conferences and on the website. ・ Notify the amount of electricity generated by sunlight. ・ Publish KEK's CO2 emissions in fiscal 2023.

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(5) Consideration for work-life balance Training for staff	**3. Education on energy conservation** ・ Distribute posters and seals that enlighten energy conservation to various places. **4. Promote energy conservation measures** ・ Verify at the end of the fiscal year plan and prepare the next year action plan.
(6) Others	**1. Promote energy conservation of laboratory equipment and effective use of resources** ・ By full-scale operation of SKEKB accelerator, greenhouse gas emissions will increase from the previous year. Suppress this increase by considering the operation plan. ・ Reduce CO2 emissions by effectively utilizing the energy of experiment equipment. At the same time strive to raise research results. ・ Advance energy conservation of laboratory equipment. ・ Reuse experimental equipment and laboratory materials as much as possible. ・ Advance superconductivity for accelerator devices such as electromagnets.