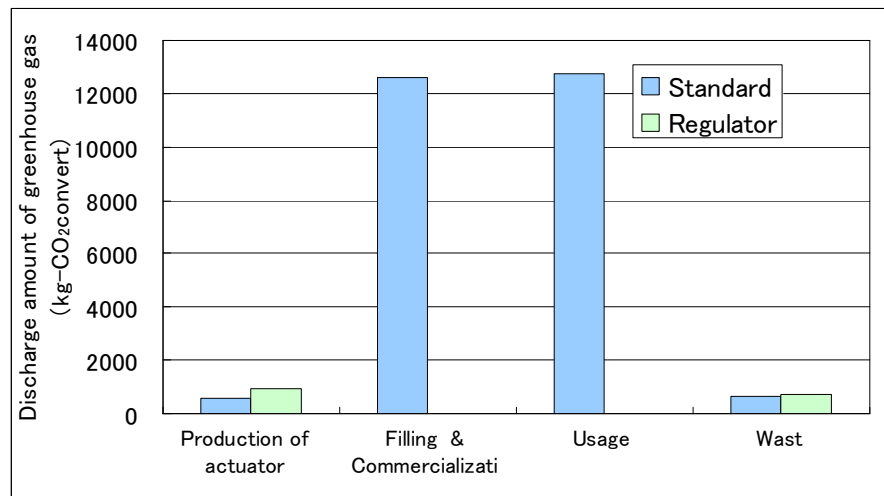


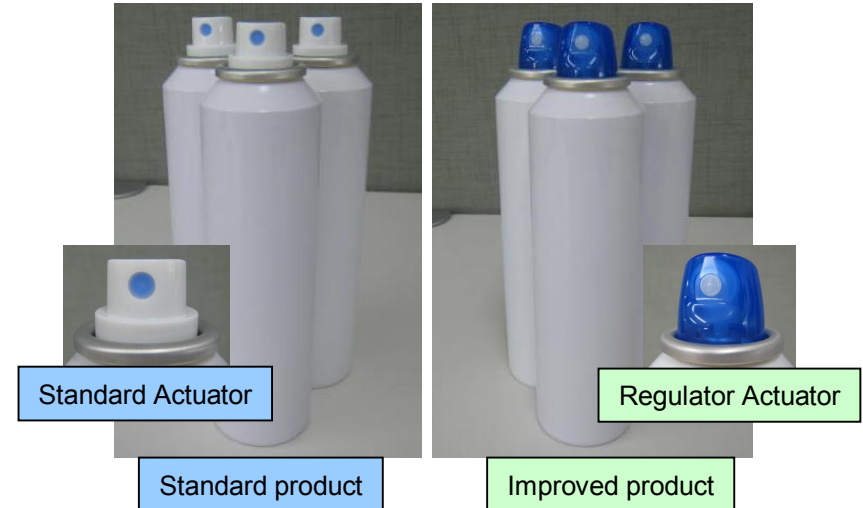
LCA of Aerosol Product:

We have done a analysis of environmental burdens for deodorant spray life cycle and found a major factor to improve the effects to the environment.



○ Standard product
Actuator : Regular Actuator
FORMULA
• Propellant : LPG
• Diluents : ethanol
• Ingredient : Fragrant, others

○ Improved product
Actuator : Regulator Actuator
FORMULA
• Propellant : N2
• Diluents : Water
• Ingredient : Fragrant, others



■ Analysis result

We found out that commonly used formulation LPG-Ethanol aerosols happens to effect the environment majorly at Filling process & usage rather than Production of the actuator. The improved product found to be 94% less effective on the environment than the standard product.

■ Future actions

We would like to encourage developments of environmental friendly formulations to offer more environmental friendly aerosol products out to the world.