

# ADJUSTING CLIMATE CONTROLS IN CONSERVATION

## How efficient layouts can reduce energy impacts

Reducing energy consumption is key to reducing both costs and environmental impacts associated with controlling environments. As shown in the diagram below, the most efficient way to achieving this is by reducing the areas that need controlling, for example by limiting the areas under active control to cabinets or indoor environments.

Additionally, storage areas offer a significant opportunity for energy conservation. Instead of conditioning entire storerooms, using microclimate controls in individual storage containers can maintain the necessary conditions for preservation with far less energy consumption.

#### **Shelter Enclosure** Outside Gallery Display Exposure to all the elements Some protection from sun and Mostly enclosed spaces Full enclosed, controlled and Closely controlled internal rainfall, but free movement of offering some protection from conditioned internal spaces. environments for displaying with fluctuations representing the wind but no conditioning. the extremes of the weather. air. sensitive objects. i.e. Gardens i.e. Covered entrances /external i.e. Enclosed entrances / marquees i.e. Galleries i.e. Display Cabinets **Object Conservation** Consider what objects require tightly controlled environments and minimise the area required to have low temperature and humidity ranges

**Visitor Journey**Consider the transition from outside to inside, and how this can provide a comfortable transition for people, whilst also achieving an efficient environment.

### Where can I start?

The first practical step when aiming to reduce the environmental impact of climate controls in galleries and archives is carrying out a space use analysis. This could involve for example assessing visitor throughways, determining which areas receive less foot traffic, or considering where radiators could be strategically removed or turned down without compromising artifact preservation.

The GoGreen project is now developing tools that facilitate more sustainable environmental control decisions in the conservation sector [1]. By using these tools, institutions can implement preventive conservation techniques that significantly reduce their carbon footprint while ensuring the protection of their collections.

## References

 Go Green Project. Available at: https://gogreenconservation.e (Accessed 28 June 2024).