

WHO GUIDANCE FOR CLIMATE-RESILIENT AND ENVIRONMENTALLY SUSTAINABLE HEALTH CARE FACILITIES

Interventions listed below can be rated as follows:

	Indicates either low performance, or unavailable activity, or unable to complete.
	Indicates either medium performance, or activity in progress, or incomplete.
	Indicates either high performance, or completed activity, or achieved and tested.

The complete **WHO guidance for climate resilient and environmentally sustainable health care facilities**, along with other intervention tables, are available in English, French and Spanish on the WHO website at who.int/publications/i/item/9789240012226.

Energy interventions – environmental sustainability

Interventions on environmental sustainability




Monitoring and assessment: Information regarding energy services should consider climate resilience and environmental sustainability for promoting action.

Energy – environmental sustainability

Interventions (level of achievement)	Action level			Observations
	<div style="display: flex; align-items: center; gap: 10px;"> <div style="background-color: red; width: 20px; height: 15px; display: inline-block;"></div> <div style="background-color: yellow; width: 20px; height: 15px; display: inline-block;"></div> <div style="background-color: green; width: 20px; height: 15px; display: inline-block;"></div> </div>			
Assessed health care facility's energy use and practices (such as percentage of grid-electricity, percentage of fuel oil and liquid gas used) *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Improved training and capacity of health workforce on energy access and performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Assessed the health care facility to determine how and where energy use can be reduced, or increased in energy poor areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Use of air conditioning monitored, and use reduced depending on temperature conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	




Risk management: Strengthened capacity of health care facilities to manage energy related risks to workers, patients and serving communities, by including assessments of climate resilience and environmental sustainability in responding to hazards and identifying and reducing exposures and vulnerabilities.

Energy – environmental sustainability

Interventions (level of achievement)	Action level			Observations
	 Low: unavailable, unable	 Medium: in progress, incomplete	 High: completed, achieved	
Prioritized energy sources and saving measures which are least costly to introduce and/or those which would bring the biggest saving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Installed energy-efficient lighting (such as light emitting diode (LED))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Natural light used wherever possible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Opening windows (with installed mosquito nets where required) and making use of natural air flow and light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Added occupancy sensor switches for lighting in frequently unoccupied spaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Replaced older air conditioners, refrigerators and other appliances and medical equipment with energy efficient models	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Improved energy efficiency of the health care facility vehicles fleet, and encouraging staff, patients and visitors to walk or use carpools, public transport, or bicycles whenever possible*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Health care facility fossil fuel consumption reduced by use of renewable energy sources, including solar (photovoltaic) power, wind power, hydro power and biofuels*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Diesel-powered generator converted to use biofuels when feasible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Energy efficient ceiling fans installed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Plugged leaks in air conditioning devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Freezers and refrigerators defrosted regularly when required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Buildings and windows throughout the health care facility equipped with thermal insulation*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Health and safety regulation: Regulations on energy use and access are implemented taking into consideration climate variability and change, and environmental sustainability.

Energy – environmental sustainability

Interventions (level of achievement)	Action level			Observations
	 Low: unavailable, unable	 Medium: in progress, incomplete	 High: completed, achieved	
Established education and awareness campaigns to reduce energy use with the participation of all staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Developed system of good practices of energy use conservation with incentives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Developed a culture of energy saving by turning off office lights, computers and other equipment, and unplugging electronic devices when not in use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Established strategies to lower energy use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Designed features that maximize natural ventilation such as high ceilings, large windows and skylights (without compromising the structural integrity of the building)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Developed an energy management plan to measure energy consumption*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Optimized the use of on-site renewable energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Renewable energy powers energy efficient lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Implemented a sustainable energy-saving programme in each department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Installed on-site solar photovoltaic system with battery storage either as a primary or backup electricity source	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Provided proper maintenance and repair for off-grid solar photovoltaic power systems*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Installed bicycle storage facilities to support its use by staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Negotiated discounts for public transport for staff*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

* Actions that need the support of local or national governments, or of other sectors