

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 – climate resilience

Interventions on climate resilience

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

Energy – climate resilience

Interventions (level of achievement)	Action level			Observations
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: red; width: 15px; height: 15px; display: inline-block;"></div> <div style="background-color: yellow; width: 15px; height: 15px; display: inline-block;"></div> <div style="background-color: green; width: 15px; height: 15px; display: inline-block;"></div> </div>			
Assessed energy needs, availability and alternative sources of renewable energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Assessed points of greatest heat loss in buildings (such as roofs, especially flat ones) and added or upgraded insulation, and draught proofing*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Periodically checked emergency backup generators, even if rarely used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Renewable energy (such as solar) is sufficient to power equipment like refrigerators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Assessed all heating, ventilation and air conditioning ductwork pipes, ensuring they are in good condition and supported adequately by the facility building structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Assessed that location of energy backup or renewable energy infrastructure can withstand extreme weather events (such as strong winds, hail, floods)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Emergency backup covers at least all critical service areas and equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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

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

Energy – climate resilience

Interventions (<i>level of achievement</i>)	Action level			Observations
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<div><input type="checkbox"/> Low: unavailable, unable</div> <div><input type="checkbox"/> Medium: in progress, incomplete</div> <div><input type="checkbox"/> High: completed, achieved</div>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Plan developed for managing intermittent energy supplies or system failure*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Established maintenance plan to fix easily preventable energy problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mechanisms in place to filter indoor and ambient air pollutants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Combined heat and power systems in place to obtain energy efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Energy systems can cope with most extreme weather events*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Voltage stabilizers are available to protect equipment from electrical damage that may be caused by voltage frequency fluctuations (when using a generator), or voltage surges (such as due to power transmission problems in the grid)	<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 – climate resilience

Interventions (level of achievement)	Action level			Observations
	 Low: unavailable, unable	 Medium: in progress, incomplete	 High: completed, achieved	
Updated building insulation and windows to comply with energy codes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency electricity generators available to provide required electrical power if the municipal grid, or if the internal normal electrical system fails*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Critical back-up power supplies available for building infrastructure (such as electrical power, heating and cooling)*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Solar water heaters available for health care facility's hot water needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Backup energy equipment sufficiently elevated in areas prone to floods and anchored in areas prone to strong winds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adequate backup energy source is available if the main source fails during an extreme weather event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adequate lighting, communications, refrigeration and sterilization equipment are available during climate related disasters or emergencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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