Energy Glossary

RETMAGINA Puerto Rico

Carbon Footprint
The total amount of greenhouse gases that are emitted into the atmosphere each year by a person, family, building, organization, or company. A person's carbon footprint includes greenhouse gas emissions from fuel that an individual burns directly, such as by heating a home or riding in a car. It also includes greenhouse gases that come from producing the goods or services that the individual uses, including emissions from power plants that make electricity, factories that make products, and landfills where trash gets sent.

Disaster
Severe alterations in the normal functioning of a community or a society due to hazardous physical events interacting with vulnerable social conditions, leading to widespread adverse human, material, economic, or environmental effects that require immediate emergency response to satisfy critical human needs and that may require external support for recovery.

Effectiveness
The degree to which something is successful in producing an intended or expected result, success or purpose.

Efficiency
Performing or functioning in the best possible manner with the least waste of time and effort.

Emergency preparedness
Actions taken to plan, organize, equip, train, and exercise with the objective of building and sustaining the capabilities necessary to prevent, protect against, mitigate the effects of, respond to, and recover from those threats that pose the greatest risk.

Exposure
The presence of people, livelihoods, environmental services and resources, infrastructure, or economic, social, or cultural assets in places that could be adversely affected.

Flexibility
Flexibility implies that systems can change, evolve and adapt in response to changing circumstances. This may favor decentralized and modular approaches to infrastructure or ecosystem management. Flexibility can be achieved through the introduction of new knowledge and technologies, as needed. It also means considering and incorporating indigenous or traditional knowledge and practices in new ways.

Flood risk management
Processes for designing, implementing, and evaluating strategies, policies, and measures to improve the understanding of flood risk, foster flood risk reduction and transfer, and promote continuous improvement in flood preparedness, response, and recovery practices. They have the explicit purpose of reducing the likelihood and/or impact of floods in order to prevent the loss of properties, assets, and life caused by floods.

Fossil fuel
A general term for organic materials formed from decayed plants and animals that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the earth's crust over hundreds of millions of years.

Geographic Information System (GIS)
A framework for gathering, managing, and analyzing data and spatial location. It uses maps to organize layers of information into visualizations. Rooted in the science of geography, GIS integrates many types of data.

Governance
Structures and processes designed to ensure accountability, transparency, responsiveness, rule of law, stability, equity and inclusiveness, empowerment, and broad-based participation. Governance also represents the norms, values, and rules of the game through which public affairs are managed in a manner that is transparent, participatory, inclusive, and responsive.

Grant Programs
Programs that provide a sum of money given by a government or other organization for a particular purpose. These programs are discretionary or formula grants and/or cooperative agreements administered by a federal agency.

Inclusive
Emphasizes the need for consultation and commitment of communities, including the most vulnerable groups. An inclusive approach contributes to a sense of shared ownership or a joint vision to build resilience.

Infrastructure
Set of works and services that are considered fundamental and necessary for the establishment and operation of an activity. These include communication systems, aqueducts and sewers, electricity, telephone and health facilities, education, and recreation.

Integrated
Integration and alignment between systems promotes consistency in decision-making and ensures that all investments are mutually supportive to a common outcome. Integration is evident within and between resilient systems and across different scales of their operations. Exchange of information between systems enables them to function collectively and respond rapidly through shorter feedback loops throughout society.

Microgrids
A small-scale power grid with distributed energy resources that can operate as a single controllable entity with respect to the utility transmission and distribution system.

Mitigation (for risk)
The lessening of the potential adverse impacts of physical hazards (including those that are human-induced) through actions that reduce hazard, exposure, and vulnerability. (for Climate Change) A human intervention to reduce the sources or enhance the sinks of greenhouse gases.

Non-governmental Organization (NGO)
An entity with an association that is based on interests of its members, individuals, or institutions. It is not created by a government, but it may work cooperatively with government. Such organizations serve a public purpose, not a private benefit.

Nonprofit Organization
A tax-exempt organization that serves the public interest. In general, the purpose of this type of organization must be charitable, educational, scientific, religious, or literary. It does not declare a profit and utilizes all revenue, available after normal operating expenses, in service to the public interest. This organization is a 501(c)(3) or a 501(c)(4) designate.

Public-Private Partnerships
A cooperative arrangement between two or more public and private entities, typically of a long-term nature. These partnerships between a government agency and private-sector company can be used to finance, build, and operate projects, such as public transportation networks, parks, and convention centers.

Reconstruction
The reconstruction or replacement of permanent residential, commercial, or industrial facilities damaged or destroyed in a major disaster, as well as the construction of public or private infrastructure at large scale, the addition of community improvements, and/or the restoration of a healthy economy.

Recovery
Disaster recovery is the phase of the emergency management cycle that begins with the stabilization of the incident and ends when the community has recovered from the impacts of the disaster.

Redundant
Refers to spare capacity purposely created within systems so that they can accommodate disruption, extreme pressures, or surges in demand. It includes diversity: the presence of multiple ways to achieve a given need or fulfill a particular function. Examples include distributed infrastructure networks and resource reserves. Redundancies should be intentional, cost-effective, and prioritized at a society scale.

Reflective
Accepts the inherent and ever-increasing uncertainty and change in today's world. Reflective systems have mechanisms to continuously evolve and modify standards or norms based on emerging evidence, rather than seeking permanent solutions based on the status quo. As a result, people and institutions examine and systematically learn from their past experiences and leverage this learning to inform future decision-making.

Regulatory frameworks
Frameworks that provide the base on which institutions build and determine the scope and nature of participation in society. It is a complex combination of statutes and legal regulations, judicial rules, and actual practice.

Renewable energy
Energy derived from natural processes (for example, sunlight or wind) that are replenished at a faster rate than they are consumed. Solar, wind, geothermal, hydroelectric, and some forms of biomass are common sources of renewable energy.

Resilience
The capacity of individuals, communities, institutions, businesses and systems to survive, adapt and thrive no matter what stresses or shocks they encounter.

Resourceful
Implies that people and institutions are able to rapidly find different ways to achieve their goals or meet their needs during a shock or when under stress. This may include investing in capacity to anticipate future conditions, set priorities, and respond, for example, by mobilizing and coordinating wider human, financial and physical resources. Resourcefulness is instrumental to a society's ability to restore functionality of critical systems, potentially under severely constrained conditions.

Risk
Potential consequences in which something of value is in danger with an uncertain outcome, recognizing the diversity of values. Often, risk is represented as the probability of occurrence of dangerous events or trends multiplied by the impacts in case such events or trends occur. Risks result from the interaction of vulnerability, exposure, and danger.

Robust
Robust systems include well-conceived, constructed and managed physical assets that can withstand the impacts of hazard events without significant damage or loss of function. Robust design anticipate potential system failures and ensure failure is predictable, safe, and not disproportionate to the cause.

Sea level rise
An increase in global mean sea level as a result of an increase in the volume of water in the world's oceans. The two major causes of global sea level rise are thermal expansion caused by warming of the ocean (since water expands as it warms) and increased melting of land-based ice, such as glaciers and ice sheets.

Shock
Sudden, sharp events that threaten a society, including earthquakes, floods, disease outbreaks, and terrorist attacks.

Smart grid technology
incorporates digital technology and advanced instrumentation into the traditional electrical system. It allows utilities and customers to receive information from and communicate with the grid. A smarter grid makes the electrical system more reliable and efficient by helping utilities reduce electricity losses and detect and fix problems more quickly.

Susceptibility
Society's and ecosystems' predisposition to suffer as a result of intrinsic and contextual conditions that make it plausible for such systems collapse or experience damage due to the influence of a dangerous event.

Sustainable development
Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability has emerged as the guiding principle for long-term global development. Consisting of three pillars, sustainable development seeks to achieve, in a balanced manner, economic development, social development, and environmental protection.

Transmission and distribution systems
The different stages of carrying electricity over poles and wires from generators to a home or a business. The primary distinction between the two is the voltage level at which electricity moves in each stage.

Unmet needs
The needs of communities or families that have not been attended by federal government institutions as a result of a disaster.

Vulnerability
The propensity or predisposition to be adversely affected. Vulnerability comprises a variety of concepts and elements that include sensitivity or susceptibility to harm and lack of responsiveness and adaptation.

Vulnerable populations
Groups and communities at higher risk as a result of barriers they experience to social, economic, political and environmental resources, as well as limitations due to illness or disability.