

Future-Proofing Glossary

Glossary of Key Terms

Carbon Footprint: The total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions. Reducing a home's energy consumption and using renewable energy sources can lower its carbon footprint.

CFLs (Compact Fluorescent Lamps): A type of fluorescent lamp that uses less energy and lasts longer than traditional incandescent bulbs.

DERMs (Demand Energy Response Programs): Utility programs that incentivize customers to reduce or shift their energy usage during peak demand periods.
Electrification (Whole Home): The process of replacing appliances and systems that use fossil fuels (like natural gas or oil furnaces) with electric alternatives, often powered by renewable energy sources.

EV (Electric Vehicle): A vehicle that is powered fully or partially by electricity.

EV Charger: A device used to charge an electric vehicle's battery. Level 2 chargers charge at a faster rate than standard Level 1 chargers.

Future-Proofing: The process of designing or upgrading a home to be adaptable to changing needs, technological advancements, rising costs, and environmental challenges.

Geothermal Systems: An eco-friendly and efficient heating and cooling solution that uses the Earth's natural underground temperature to regulate indoor temperatures.

Grid (Power Grid): The interconnected network of power lines, substations, and transformers that deliver electricity from power plants to consumers.
Grid Edge: The area or point where the traditional power grid infrastructure connects to the consumer's home or building.

Heat Pump: An electrical device that transfers heat from one place to another, used for both heating and cooling a home. Heat pump hot water heaters are also mentioned.

ITC (Investment Tax Credit): A federal tax credit for renewable energy projects, including solar installations.

LED Lighting: Light Emitting Diode lighting, which is highly energy-efficient and has a long lifespan compared to traditional bulbs.

Load Shedding: The process of intentionally reducing electrical load on a circuit or system, often automatically during power outages or high demand, to prevent overload.

Modular Furniture: Furniture that can be rearranged or combined in different ways to suit various needs and maximize space utilization.

Net Metering: A billing system that allows solar panel owners to receive credit on their electricity bills for the excess electricity they generate and send back to the grid.

Renewable Energy: Energy derived from natural sources that are replenished at a higher rate than they are consumed, such as solar, wind, and geothermal energy.

Service Panel (Electrical Panel): The main electrical box in a home that distributes electricity to different circuits. Upgrading the service panel can accommodate increased electrical demand from new technologies.

Smart Home System: A system of connected devices and appliances in a home that can be controlled remotely, often via a smartphone app, to automate tasks and optimize energy usage.

SPAN Smart Electrical Panel: A smart electrical panel that provides homeowners with detailed energy usage data, control over individual circuits, and features for managing distributed energy resources like solar and batteries.

Sustainable Energy: Energy that meets the needs of the present without compromising the ability of future generations to meet their own needs, often referring to renewable energy sources.

Virtual Power Plant (VPP): A network of distributed energy resources (like solar panels, batteries, and smart appliances) that are aggregated and controlled centrally to provide grid services.