



CITY OF CARMEL-BY-THE-SEA

California Adaptation Planning Guide Update APG 2.0

Climate Committee Meeting

December 17, 2020



Update Highlights

- Info on Statewide efforts
- Focus on Equity
- **MANY** new resources
- Guidance based on resources provided (e.g. RCP 4.5 vs. RCP 8.5)





Update Highlights

- Example strategies by sector (e.g. energy, forests, land use, etc.)

TABLE D-1. EXAMPLES OF LOCAL CLIMATE ADAPTATION STRATEGIES BY SECTOR

CLIMATE HAZARDS	ADAPTATION STRATEGY	FACTORS TO CONSIDER	CATEGORY	SECTOR OVERLAP	RESPONSIBLE AGENCIES	FUNDING	EXAMPLES & SOURCES
Extreme Heat	<p>Strategy EN-3: Minimize stress on the electrical grid. During very high heat events, electrical equipment can operate less effectively and be more prone to failure. At the same time, power demand often rises during extreme heat due to the increased use of air conditioners and other cooling equipment. The combination of these factors places stress on the electrical grid and increases the risk of a power loss, even though there may be little or no physical damage. Communities can work to decrease their electricity use during extreme heat events, reducing the stress placed on the electrical grid. These actions may involve educational efforts and changes to behavior, upgrades to equipment and infrastructure, or some combination of the two. As a side benefit, these efforts also decrease electrical bills and reduce greenhouse gas emissions associated with energy use.</p> <p>Microgrids manage distributed energy resources through control technologies within or independent of a central grid. Islanding refers to the ability of microgrids to continue operating when the surrounding grid experiences an outage. Combined with storage, islanding via microgrids helps to reduce stress on the electrical grid and to maintain critical operations and services during outages due to climate-related hazards.</p>	<p>There are several strategies at a community's disposal to reduce energy use during extreme heat events. Demand response programs alert energy users at times when grid stress is likely to be high and provide financial incentives to users who sufficiently reduce their use. Weatherization programs help insulate buildings against very high or very low temperatures, decreasing the need for cooling (or space heating). Energy efficiency programs can replace inefficient air conditioners with more efficient models, allowing for the same level of cooling while using less energy. On-site renewable energy and storage systems allow buildings to power their air conditioning systems with electricity generated or stored on the property, rather than pulling from the grid. Numerous funding sources are available to help communities implement these programs, or communities can partner directly with local utilities. Communities should make sure that this effort (as with all other adaptation planning efforts) is conducted equitably, as different populations face different levels of vulnerability to extreme heat events and have varying levels of adaptive capacity to these events.</p>	<p>Programmatic Plans, Regulations, and Policy Development, Capital Improvement & Infrastructure Projects</p>	<p>Emergency Management, Land Use and Community Development, Public Health</p>	<p>Utility providers, Cities and Counties</p>		



APG 2.0 + Adaptation Clearinghouse

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