

# AP Tech Potential LEED Credits - Solid Chemistry for Water Treatment

## LEED v4 EB: O&M

| Category                          | Possible Points | Credit                                      | LEED Intent   | AP Tech Impact   |
|-----------------------------------|-----------------|---|---|--|
| WATER EFFICIENCY (WE)             | 2-4             | COOLING TOWER WATER USE                     | To conserve water used for cooling tower makeup while controlling microbes, corrosion, and scale in the condenser water system.                                     | AP Tech products are SOLID chemical treatments for cooling tower water management. Chemistry controls corrosion, scale & bio-fouling to maximize efficiency.   |
| ENERGY AND ATMOSPHERE (AE)        | Prerequisite    | ENERGY EFFICIENCY BEST MANAGEMENT PRACTICES | To promote continuity of information to ensure that energy-efficient operating strategies are maintained and provide a foundation for training and system analysis. | AP Tech SOLID chemistry products help optimize efficiency in HVAC systems using boilers, cooling towers and closed loops.  |
| MATERIALS AND RESOURCES (MR)      | Prerequisite    | FACILITY MAINTENANCE AND RENOVATION POLICY  | To reduce the environmental harms associated with the materials purchased, installed, and disposed of during maintenance and renovation of buildings.               | AP Tech SOLID chemistry reduces facility maintenance waste, because there are no hazardous 55 gallon drums to dispose of and no rinsing required before recycling plastic bottles (vs. traditional liquid treatment which requires both.)  |
| MATERIALS AND RESOURCES (MR)      | 2               | SOLID WASTE MANAGEMENT—ONGOING              | To reduce the waste that is generated by building occupants and hauled to and disposed of in landfills and incinerators.  | AP Tech product packaging is recyclable, resulting in less landfill waste.   |
| INDOOR ENVIRONMENTAL QUALITY (EQ) | 2               | INDOOR AIR QUALITY MANAGEMENT PROGRAM       | To maintain the well-being of occupants by preventing and correcting indoor air quality problems.   | AP Tech SOLID chemistry non-biocide products make it easier to achieve this credit because their solid form treatment emits no harmful vapors, and they do not need to be stored in partitioned or hard ceiling areas, or required dedicated exhaust ventilation.  |
| INNOVATION (IN)                   | 1-5             | INNOVATION                                  | To encourage projects to achieve exceptional or innovative performance.   | AP Tech SOLID chemistry water treatment chemicals may qualify for an Innovation Credit because they offer significant environmental benefits compared to conventional liquid water treatment. <b>1.</b> Since no water is shipped as part of the product, each 44 lb. case of AP Tech product saves 2.6 gallons of diesel fuel, compared to an equivalent liquid chemical treatment shipped in a 500 lb., 55-gallon drum. Significant annual savings for the building can be calculated and expressed as gallons saved, or vehicles removed from the roads, or tons of carbon footprint reduction. <b>2.</b> AP Tech products use less sodium hydroxide, a caustic chemical, in their production, compared to liquid water treatment chemicals. <b>3.</b> Since AP Tech chemicals are in solid form, there is no risk of chemical spills, posing a slip and fall risk for occupants or the risk of an environmental spill. <b>4.</b> AP Tech products save water and eliminate chemicals entering the waste water stream because there is no EPA requirement to triple-wash empty containers, as there is with 55-gallon drums. <b>5.</b> Empty AP Tech containers are recyclable. |

Info taken from LEED v4 EB: O&M: <https://www.usgbc.org/resources/leed-v4-building-operations-and-maintenance-current-version>