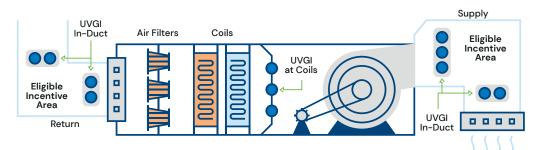


Ultraviolet germicidal irradiation (UVGI)

TVA EnergyRight® is here to provide Valley businesses with the tools and resources they need to operate so both employees and customers stay healthy and safe. The emergence of COVID-19 means an increased need for innovative technologies to help combat the spread of disease. Ultraviolet germicidal irradiation (UVGI) is a proven method for safely killing bacteria and viruses. From hospitals to hair salons, EnergyRight is committed to helping keep your business protected and productive.

How UVGI works

In-duct UVGI uses UV-C light, known for its germicidal effects, to kill airborne pathogens as air flows through a ducted HVAC system. In-Duct UVGI lamps are a supplemental control measure to deliver a dose of UV-C to disinfect, inactivate and reduce airborne concentration of microorganisms. A UVGI professional will install UV-C lamps inside the ductwork of your business's HVAC system. The design will vary based on several factors, including desired first-pass effectiveness as well as your HVAC's flow rate and duct size. EnergyRight is only offering incentives for in-duct UVGI equipment.



Pre-approval as well as other guidelines are required for the project to be eligible for incentives.

UVGI systems designed only for coil defouling are not eligible at this time.

As a power provider, TVA uses anticipated energy consumption to help determine qualifying projects. The required criteria for anticipated energy consumption is eight watts per ton. This value does not guarantee a particular level of first-pass effectiveness, it is simply our minimum energy consumption expectation. System selection must also consider: location, air flow, humidity, safety and maintenance.

Many new technologies and best practices are being employed to fight COVID-19. While TVA supports utilizing any proven methodology to fight the spread of this disease, our incentive offering is limited to in-duct UVGI and specifically does not include:

- Surface Irradiation (including mobile UVGI units, chemical treatments, etc.)
- Needlepoint Bipolar Ionization
- Bipolar Ionization
- Photohydroionization (PHI)
- Photocatalytic Oxidation (PCO)



Please scan with a smartphone camera for a longer list of excluded technologies

Design considerations

- Avoid mounting lamps near any duct openings, joints, seams, etc.
 UVGI system cannot be installed in flex duct.
- Plan for ongoing lamp maintenance and replacements.
- To prevent damage, ensure no plastic parts (filters, drain pans, flex ducts, etc.) or wire insulation are exposed to UV-C light.



How to apply for an EnergyRight incentive

- Visit EnergyRight.com to find a Preferred Partners Network (PPN) contractor or request a proposal from multiple PPN members.
- 2. Define your scope of work.
- Sign the application provided by your PPN contractor.

Incentive program application requirements

- Incentives are capped at 70% of the materials cost, up to \$100,000 per site application.
- All project submissions must use an approved PPN member.
- Completion of pre- and postinstallation inspections may be required.
- Projects require pre-approval before customers remove, purchase or install any equipment.
- All incentives are subject to approval by TVA and your local power company, and contingent upon available funding.

UVGI safety and recommendations

- Avoid eye exposure with any UV system.
- Ensure lamp chambers have electrical disconnect devices (must be able to be locked or tagged out).
- Hire a licensed contractor to design and install the UVGI system, using proper industry design standards.
- Ensure installation and maintenance are completed only by trained professionals and consider ongoing maintenance contracts with certified UVGI professionals.



- Place warning labels outside each panel or door and ensure they're clearly visible to anyone accessing the system.
- Follow ASHRAE & CDC regulatory standards, safety guidelines and best practices supporting design, safety, operation and maintenance of air cleaning devices.



Please scan with a smartphone camera for more information on standards, guidelines and best practices.