

# Expert offers tips for conserving energy during extreme heat waves

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Extreme heat waves and record temperatures are straining energy infrastructure nationwide, which is contributing to a global energy crisis, says Virginia Tech expert Saifur Rahman.

"Heat waves are causing heavy usage of [air conditioning](#) this summer, which places heavier demand on existing generation assets and [transmission lines](#) in areas across the country that could result in blackouts," explains Rahman.

Rahman says the problem in Europe is further exacerbated by shortages of oil, gas, and coal used for fuel in generation plants.

"While [small steps](#) can be taken now to conserve energy, it will take years to build new generation and transmission capacities," says Rahman. "There are no simple solutions to meet this growing demand."

Rahman says the only way to address this problem is to focus on the load side, and this means we must act now to conserve energy. He offers the following tips for consumers to conserve energy at home.

- Air conditioning and lighting are two major loads in commercial buildings. Raise the temperature setting on thermostats—without causing discomfort—which can drop the air conditioning load by 10–15%.
- Lighting intensity can be reduced in businesses based on space usage patterns during the day causing another 15–20% drop in electricity usage for lighting.
- For residential buildings, the major daytime summer load is from air conditioning. Setting the thermostat to 80 degrees or higher when no one is home, can significantly reduce power demand thus relieving stress on the power grid.

Provided by Virginia Tech

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