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## SFPE Position Statement 2023-01: Engineering a Sustainable and Fire Resilient Built Environment

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While sustainability is a concept with many dimensions, the focus of the Society of Fire Protection Engineers (SFPE) is fire engineering. From this perspective, the SFPE has developed the following Position Statement on Engineering a Sustainable and Fire Resilient Built Environment:

It is the position of the Society of Fire Protection Engineers (SFPE) that sustainability and fire resilience are important objectives for the built environment and that every built environment project should balance these objectives. More sustainable technologies and measures should be embraced but they should not create unintended and intolerable fire risks. Fire risk mitigation should include the mitigation of environmental and social impacts of fire. Designs for the built environment should be developed and implemented such that they are resilient to the effects of climate change on both the natural and built environment and reduce fire risks to society.

## Underlying this statement is the SFPE recognition that:

- As part of engineering a fire safe world, an objective of fire protection engineers is to facilitate a sustainable and fire resilient built environment for current and future societies.
- Sustainable design is one mechanism to help reduce greenhouse gas emissions in the built
  environment. Approaches and technologies that are more sustainable include but are not
  limited to: reduction in fossil fuel energy sources for buildings; integration of alternative
  energy sources; improved thermal efficiency in buildings; reduced use of non-renewable
  building materials; increased use of recycled and repurposed materials; reduced water
  usage. Care is needed to ensure that sustainable design approaches and technologies do not
  create unintended fire risks: an outcome that can be facilitated by fire protection engineers.
- Research has shown that some materials and technologies that have been developed to
  facilitate sustainability in the built environment have introduced some unintended fire
  hazards and risks. Fire protection engineers can help ensure that such fire hazards and risks
  are considered in the development and application of sustainable materials and
  technologies.
- Research has shown that some fire protection materials, methods and technologies have
  resulted in unintended impacts on the environment. Fire protection engineers can play a
  role in helping to ensure that such potential impacts are considered in the future
  development of fire protection materials and technologies. In addition, fire protection
  engineers have an obligation to consider unintended impacts of fire protection materials,
  methods and technologies on the environment, and the well-being of all people within,
  when developing fire safety solutions for the built environment.
- A more sustainable and fire resilient building is one that is designed, constructed, operated, and decommissioned taking into account both fire safety and sustainability aspects during the full life cycle of a building and all of its components.