

# THE NET-ZERO SUN BREEZER WINDOW



## Concept Drawing With Energy Efficient Residential Window

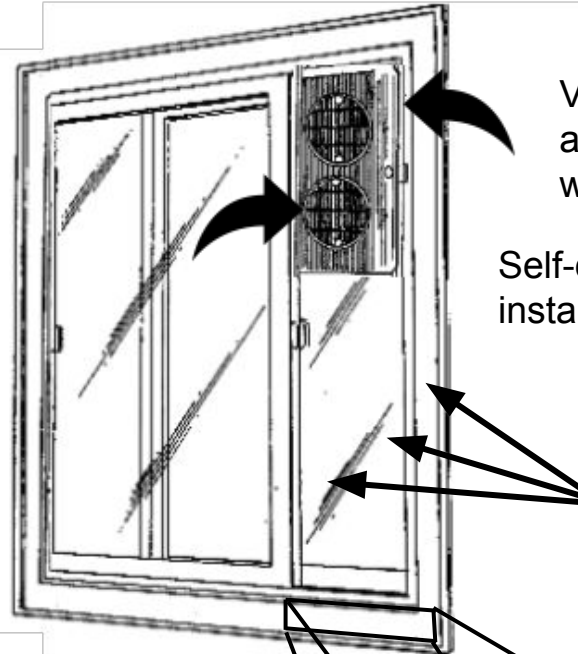
### Problem:

- Buildings account for 40% of energy use and GHG emissions in U.S.
- HVAC accounts for 35% of building energy
- Sick Building Syndrome from poor indoor air quality is a government-recognized public health issue
- Solar windows generate low power and are complicated to install

### Solution:

A solar energy generating window that powers an integrated fan to improve indoor air quality.

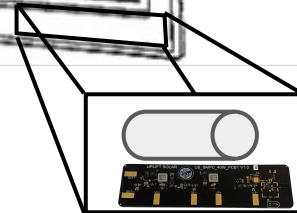
- Net zero energy
- Offsets electricity consumption for mechanical ventilation
- Reduces energy consumption needed for outdoor air heating and cooling



Ventilation/exhaust fan creates air exchange without opening window

Self-contained unit simply installed like ordinary window

Solar cell facing, embedded solar cells, and solar glass for energy generation



Integrated battery and power electronics for power mgmt., charging, and sensor/IoT communications