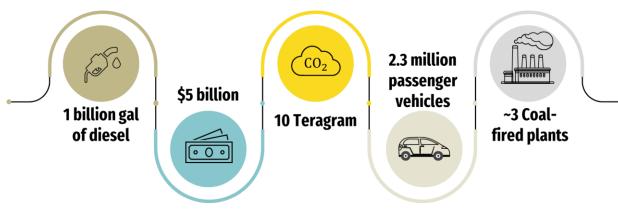


Harnessing Solar Power to Reduce Truck Emissions

Problem

- Nearly a quarter of the transportation related emissions stemmed from medium and heavy-duty trucks
- In addition to driving, idling process alone consumes more than one billion gallons of diesel annually for driver comfort loads



Proposed Solution

- Electric-powered Auxiliary Power Units (APUs) in combination with solar power on truck trailers can significantly reduce fuel consumption and emissions
- Innovative power electronics with flexible solar panels enables seamless integration of solar on medium and heavy-duty vehicles

Our Approach

- High-frequency operation: enables compact design
- Module-level control: maximizes power output
- Converter architecture: maintains high and flat efficiency for solar

