

## Grid of the future



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For over a century, the mission of the power industry has been to build and operate a reliable, affordable, and efficient grid. In the past few decades, developed regions have focused on increasing operational efficiency, while emerging economies have focused on attracting capital to grow their grids. Changing markets, new technologies, and an emerging social focus on emissions have moved the industry in a new direction. The emergence of modern power electronics, widespread software development, and low-cost communications technologies creates opportunities. The cost-effective extraction of oil and gas in North America is expected to shift our generation mix away from coal and toward natural gas-fired generation. Wind and solar power have proliferated, creating new challenges and opportunities. Advancements in energy storage technologies have revolutionized the consumer electronics industry and paved the way for hybrid and electric vehicles (EVs). In parallel, the resiliency of the aging electric power infrastructure has been questioned in light of the increased frequency and severity of natural disasters, making a stronger case for a major investment to build a stronger, more resilient and sustainable grid.

