Electrification and Electronification Goes Wide

Renewable energy is an obvious driver for electrification, and the associated electronification, of the energy grid. In Oct 2016, the International Energy Agency said in the previous year, renewable sources represented more than half of the new power capacity added around the world. However this phenomenal growth in renewable energy is only one of the factors driving the electrification and electronification of energy generation, transmission, distribution, and consumption. Similarly, electrification alone is not the sole driver of electronification, not even of the energy grid. As sensors and intelligence spread into a wide array of applications, from the energy grid to factories to cars to washing machines, so do power electronics applications increase. Wide bandgap power semiconductors provide an impressive boost in performance, efficiency, and power density. This talk will examine how the growth in electrification and electronification is driving and be driven by wide bandgap semiconductors.