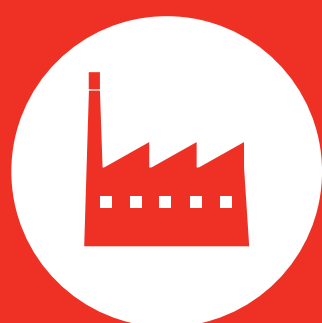


# NEXT GENERATION POWER ELECTRONICS MANUFACTURING INNOVATION INSTITUTE

**1 of 45** Planned  
Regional  
Manufacturing  
Research Hubs

## INSTITUTE PARTNERS



**18** Companies



**7** Universities & Laboratories

## FUNDING

**\$70** Million

U.S. Dept.  
of Energy

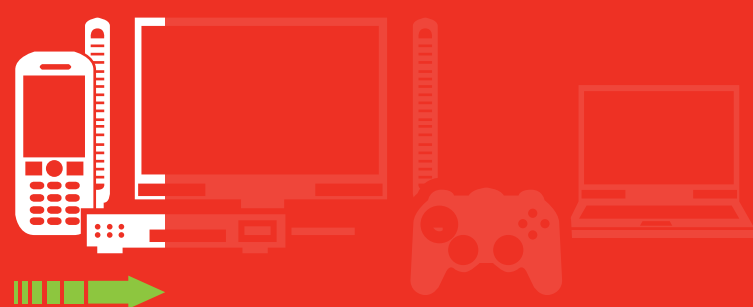


**\$70** Million

Matched  
Funds

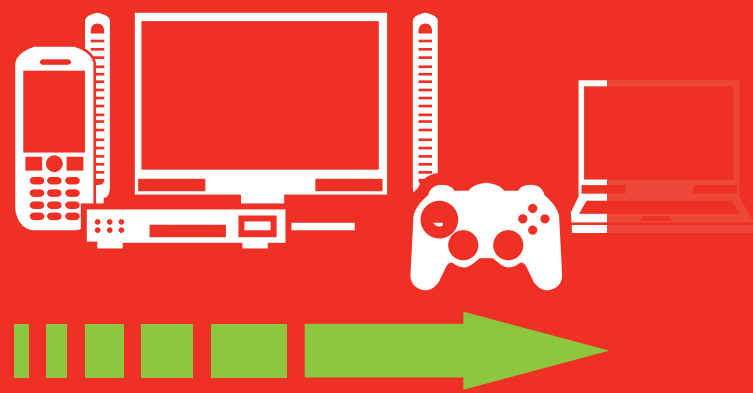
## POWER ELECTRONICS

**30%**



30% of all power generation  
utilizes power electronics

**80%**



By **2030**, approximately 80%  
of all power generation  
is projected to utilize  
power electronics

## WIDE BANDGAP SEMICONDUCTOR TECHNOLOGY



**20%**



Reduce energy consumption  
of typical laptop power adaptor  
by 20%



**80%**



Reduce size of typical  
laptop power adaptor by 80%



**90%**

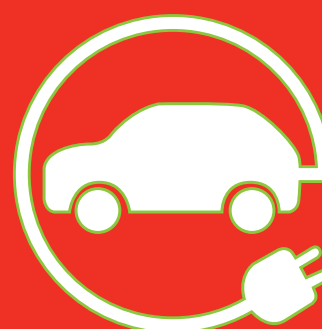


Reduce power conversion of typical  
laptop power adaptors by 90%



**8,000 LBS TO 100 LBS**

Reduce substation sizes from 8,000 lbs to 100 lbs



**60%**



Reduce PEV cooling system sizes by 60%