# **Industrial Energy Efficiency Clean Power Plan Talking Points**

By embracing industrial efficiency as a compliance option, the Clean Power Plan will make manufacturers more competitive; create new jobs; make our electric system more reliable; and cut electricity bills for homeowners, businesses, and factories.

### **Industrial Efficiency Helps Make Manufacturers More Competitive**

Industrial efficiency cuts energy costs for the nation's manufacturers. This gives them more
money to increase production and invest in innovation.

#### **Industrial Efficiency Supports New Jobs**

- Industrial efficiency supports jobs in the design, construction, installation and maintenance
  of equipment. Most of these jobs are local, since they consist of installation or maintenance
  of equipment on site.
- If every state used four common energy-efficiency policies to meet the Clean Power Plan targets, we could create more than 600,000 new jobs in 2030.<sup>1</sup>
- If CHP provided 20 percent of U.S. electric capacity (up from 12 percent today), it could support one million new jobs.<sup>2</sup>

# Industrial Efficiency Makes Our Electric System More Reliable

- Industrial efficiency helps make the grid more reliable by reducing the amount of power we need from the grid.
- Because a CHP system can operate independent of the grid, these systems are more likely
  to remain online during extreme weather events that can lead to power outages. We
  witnessed the benefits firsthand during Superstorm Sandy in October 2013. While nearly
  eight-million residents across the Mid Atlantic lost power, hospitals and universities with
  CHP systems kept the lights on throughout the storm.

#### **Industrial Efficiency Cuts Electricity Costs**

- The cheapest energy is the energy you don't have to produce in the first place. It costs two
  to three times more to generate power than it does to save it through energy-efficiency
  measures.<sup>3</sup> Those savings will be passed on to homeowners, businesses, and
  manufacturers.
- Companies that use less energy to produce iron, steel and paper will save money on their electric bills.
- A typical manufacturing company in North America can save between 10-30% of direct energy costs in only three years.<sup>4</sup>
- CHP alone can help manufacturers save as much as 50 percent on energy costs.<sup>5</sup>

## **Industrial Efficiency Cuts Emissions**

- Industrial efficiency allows manufacturers to produce the same products with less fuel. This translates to lower emissions.
- Due to its scale, a single IEE investment can achieve significant emission reductions.

 CHP can produce heat and electricity with roughly one-half the emissions of the separate generation of heat and power.<sup>6</sup>

## Tremendous Potential For Additional Industrial Efficiency Improvements Remains.

- The industrial sector represents 30% of US energy use. Wherever there is high energy use, there are opportunities for savings.
- Manufacturers have already taken significant steps to reduce their energy use and increase
  the productivity of their facilities; however, great potential remains. In fact, studies have
  estimated that there is the potential to cost-effectively save as much as 30 percent of
  industrial energy use.<sup>7</sup>
- CHP systems alone can produce as much electricity as 250 power plants.<sup>8</sup>

<sup>2</sup> DOE, Oak Ridge National Laboratory, 2008, "Combined Heat and Power: Effective Energy Solutions for a Sustainable Future," at 4 (<a href="http://energy.gov/sites/prod/files/2013/11/f4/chp">http://energy.gov/sites/prod/files/2013/11/f4/chp</a> report 12-08.pdf).

<sup>&</sup>lt;sup>1</sup> Hayes, et al., American Council for an Energy-Efficient Economy, 2014, "Change is in the Air: How States Can Harness Energy Efficiency to Strengthen the Economy and Reduce Air Pollution" (considering the potential emissions benefits of an energy-efficiency savings target, building codes, CHP, and appliance standards) (http://aceee.org/research-report/e1401).

<sup>&</sup>lt;sup>3</sup> Billingsley, et al., Lawrence Berkeley National Laboratory, 2014, "The Program Administrator Cost of Saved Energy for Utility Customer-Funded Energy Efficiency Programs" (<a href="http://emp.lbl.gov/publications/program-administrator-cost-saved-energy-utility-customer-funded-energy-efficiency-progr">http://emp.lbl.gov/publications/program-administrator-cost-saved-energy-utility-customer-funded-energy-efficiency-progr">http://energy-efficiency-progr</a>); Molina, Maggie, ACEEE, 2014. "The Best Value for America's Energy Dollar: A National review of the Cost of Utility Energy Efficiency Programs" (<a href="http://aceee.org/research-report/u1402">http://aceee.org/research-report/u1402</a>).

<sup>&</sup>lt;sup>4</sup> Bain & Company. <a href="http://www.bain.com/publications/articles/hidden-treasure-why-energy-efficiency-deserves-a-second-look.aspx">http://www.bain.com/publications/articles/hidden-treasure-why-energy-efficiency-deserves-a-second-look.aspx</a>

<sup>&</sup>lt;sup>5</sup> A typical CHP unit is twice as efficient as the separate generation of heat and power, cutting energy use in half.

<sup>&</sup>lt;sup>6</sup> U.S. EPA, Combined Heat and Power Partnership: Environmental Benefits (http://www.epa.gov/chp/basic/environmental.html) (visited July 10, 2015).

<sup>&</sup>lt;sup>7</sup> US DOE, June 2015, "Report to Congress: Barriers to Industrial Energy Efficiency," at iii (http://www.energy.gov/sites/prod/files/2015/06/f23/EXEC-2014-005846\_6%20Report\_signed\_v2.pdf).

<sup>&</sup>lt;sup>8</sup> US DOE-EPA, Aug. 2012, "CHP: A Clean Energy Solution," at 13 (reporting 130 GW of technical potential) (http://www.epa.gov/chp/documents/clean\_energy\_solution.pdf).