Savings from INDUSTRIAL ASSESSMENT CENTERS

- $70 million/year energy bill savings
- $44,000/year savings from implemented measures per plant
- 800 million kWh/year electricity savings (≈ electricity use of over 60,000 homes)
- 3 million MMBtu/year natural gas savings (≈ natural gas use of 70,000 homes)
- 0.5 MMT CO₂/year emissions reduction (≈ emissions of over 100,000 cars)

Industrial Assessment Centers (IACs) provide energy assessments to small and medium-sized manufacturers while training students to conduct the assessments. There are now 28 IACs located at universities in 25 states. IACs have provided over 18,000 assessments since 1976.

How do they help?
IACs help small and medium-sized industrial plants save money, addressing the barriers they face as small businesses that often lack dedicated energy managers. IACs make these businesses more competitive and help them create jobs. At the same time, the program trains the next generation of energy engineers, preparing students for jobs as energy efficiency professionals. IAC alumni find energy efficiency jobs faster than their peers and earn more.

How much do they cost?
The Department of Energy’s IAC program spends about $9 million each year to fund most of the training and assessments. Companies invest $25–30 million each year in the efficiency improvements they choose to make.

What is at stake?
If funding for the IACs is cut, some or all of the following benefits we estimate for future assessments would be lost:

<table>
<thead>
<tr>
<th>2018–30</th>
<th>2018–40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of plants helped</td>
<td>6,000</td>
</tr>
<tr>
<td>Savings (net present value)</td>
<td>$280 million</td>
</tr>
</tbody>
</table>

Is the program cost effective?
This small federal program yields much larger energy benefits and effective job training. The implemented measures pay back in less than a year on average, with energy and other savings each exceeding the investment over time.
The Boral Bricks factory in Muskogee, OK, employs 40 people who make more than 100 million bricks each year, from clay mine to kiln. A team from the Industrial Assessment Center at Oklahoma State University examined the plant and made recommendations including variable frequency drives on air compressors and on the carts used to move the bricks, capacitor banks to improve the power factor, reducing air pressure and fixing compressed air leaks, a better HVAC system (and cleaning the condensers), and better lighting. The plant invested $79,000 in efficiency improvements, which were expected to yield $63,000 in savings each year. For the plant, “lower plant costs mean lower prices for the consumer.”