

Industrial Assessment Centers and Energy Efficiency in Texas

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First, Thanks to Barbara Thomason of
Greater San Marcos Manufacturing
Association
for
Arranging our meeting today!



Industrial Assessment Center – What Is It?

- Program of US DOE – EERE
 - Advanced Manufacturing Office
- 31 IACs around the country
 - University based
 - Staff led
 - Teams of students
- Industrial Assessments
 - Study of energy, waste, productivity

Industrial Assessment Center – What Is It?

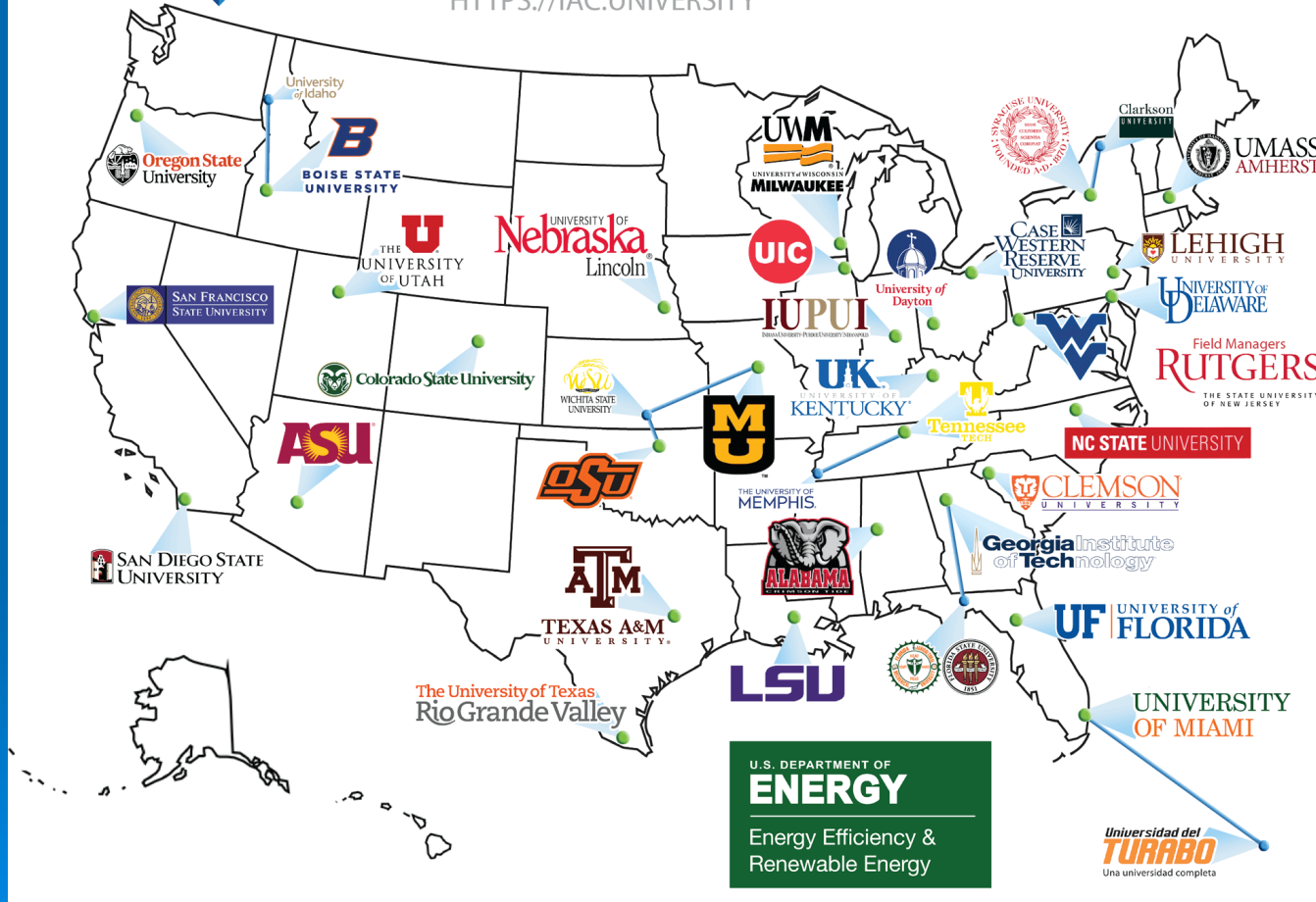
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Locations of IACs



Industrial Assessment Centers 2019-2021

[HTTPS://IAC.UNIVERSITY](https://iac.university)



Purpose of IAC

- Provide **engineering students** with hands-on education and **training in manufacturing plants and waste water treatment plants.**
- **Assist small to medium-sized manufacturers**
 - Energy conservation – all sources
 - Waste reduction
 - Productivity enhancement

Manufacturing plant criteria





- 500 or less employees
- Utility bills that are between \$100,000/year and \$2.5 million/year
- No in-house energy manager at the plant
- Gross annual sales less than \$100 million
- Each plant must meet 3 of the 4 above, and each plant qualifies on its own numbers

WWTP criteria

- 3 – 10 million gallons/day (MGD)



TAMU Industrial Assessment Center

- **807 Assessments**, 25 per year
 - 6,100 recommendations, 3,700 implemented
 - **\$89 million/yr recommended**, **\$46 million/yr implemented**
 - **Manufacturers have spent \$40 million** to implement recommendations
 - Over **250** Students employed
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Average Report Results

- **8 Project recommendations** (4 – 17 range)
- Energy savings 11% (2 – 48% range)
- **\$106,000 savings** (\$2,000 - \$3,500,000/yr)

Some Common Recommendations

- **Motors: Preventative maintenance, EE motors, improved lubricants and belts**
- Compressed air: Repair leaks, reduce pressure, alternate uses
- **Lighting: Upgrades to EE lights, controls**
- Boilers: Efficient combustion, steam traps, leak repair
- **Sales taxes and power factor correction**
- Productivity and waste reduction

**What does it cost the
manufacturer?**

Hold onto your checkbook!

The background of the slide is a solid blue color. In the lower right quadrant, there are several concentric white circles of varying sizes, resembling ripples on water. These ripples are centered around the bottom right corner and extend towards the middle of the slide.



All IAC Reports

- All reports are confidential to the manufacturing plant
- PDF copy sent to Field Manager at Rutgers who provides a critique
- Rutgers IAC database contains info on assessment recommendations as to the dollar and energy savings

To Learn More About IACs

➤ US DOE website:

- <http://www.energy.gov/eere/amo/industrial-assessment-centers-iacs>
- Program Manager at Rutgers University:
- <http://iac.rutgers.edu/>

➤ Texas A&M University IAC

- <http://iac.tamu.edu>
- Call me at 979-862-2176
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Thank You!

