



## Energy Savings

**Lobo Development**

PARTNERSHIP+INVESTMENT+COMMUNITY

**LEED Energy Savings**

In response to the UNM Climate Action Plan, new residential facilities are planned according to LEED silver standards of the US Green Building Council (USGBC). This includes multiple improvements to achieve an enhanced living environment - increased energy performance, thermal comfort, reduction of toxicity and waist, and the integration of daylight and views. Improvements that maximize the use of resources while improving the quality of life for residents are prioritized. These include a series of optimized design features:

**Sustainable Sites**

- Planned density for community connectivity
- Access to public/campus transportation

**Water Efficiency**

- Efficient low flow plumbing fixtures for 35% savings of water use

**Irrigation**

- 50% savings for landscape

**Optimized Energy Performance**

- 22% optimal performance over USGBC baseline standard
- Enhanced commissioning

**Materials and Resources**

- Construction waste management - divert 50-75% from disposal
- Use of recycled content
- Use of regional materials

**Indoor Environmental Quality**

- Increased ventilation and outdoor air delivery monitoring
- Construction IAQ Management Plan during construction and before occupancy
- Low-emitting materials, adhesives, sealants, paints, coatings, and carpet
- Indoor chemical and pollutant source control
- Thermal comfort
- Daylight for 75% of spaces
- Views for 90% of spaces

**Design Innovation**

- Green cleaning
- Green roof
- Low heat island effect roof
- Education case study of facility
- Storm water management

Use of electricity results in the highest amounts of green house gas emissions from UNM. A great portion of the electricity usage is for heating, cooling, and lighting facilities. The usage of electricity can be dramatically reduced through new building techniques that take advantage of a number of strategies - building orientation and layout, thermal efficiency, day lighting, ventilation, and efficient fixtures and appliances.

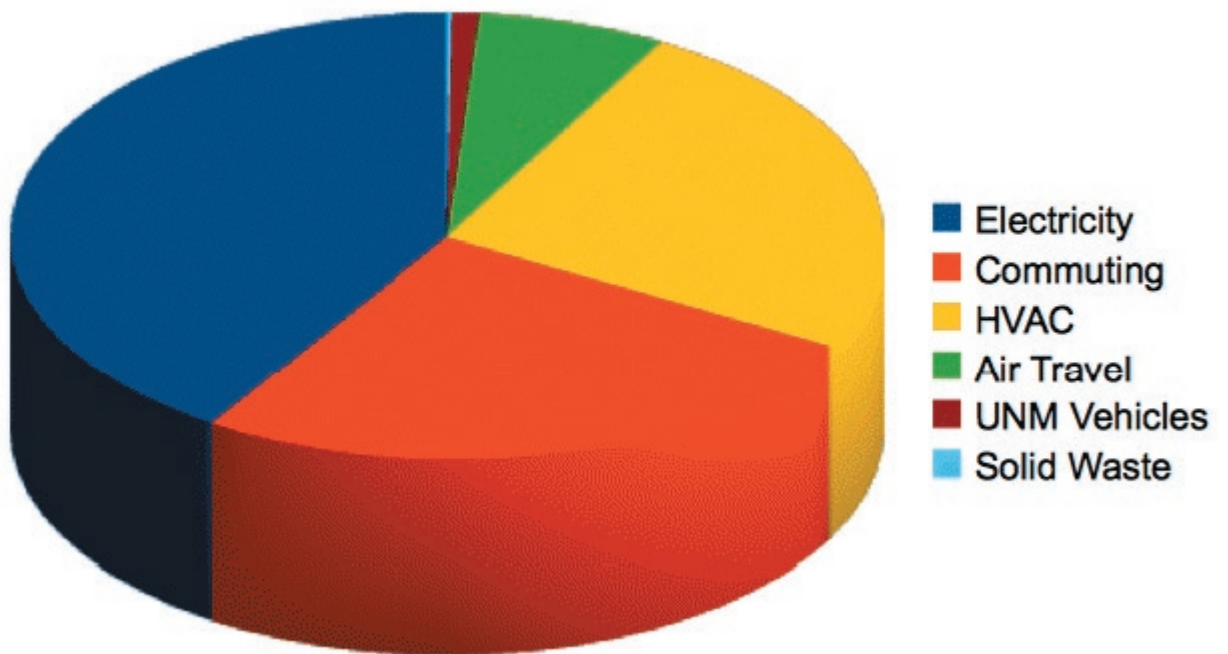
Commuting is the second highest cause of green house gas emissions at UNM. With less than 10% of students living on campus, a significant decrease in emissions could be achieved by having more students living on campus. It is the goal of UNM to double the number of students living on campus to achieve levels of 15- 20% of students.

In Replacing the current residence halls with LEED Silver facilities, the overall potential for energy and resource reduction could amount to a 20% annual savings. This could provide approximately \$200,000 in annual utility savings, while improving environmental and student housing conditions at UNM.

*For more information please visit [sustainability.unm.edu](http://sustainability.unm.edu), and [USGBC.org](http://USGBC.org)*

**Energy Consumption at UNM**

Electricity, HVAC, and commuting are responsible for most of the energy consumption at UNM. Dramatic savings in energy can be achieved with students living on campus in energy efficient housing, thus reducing the need for commuting.

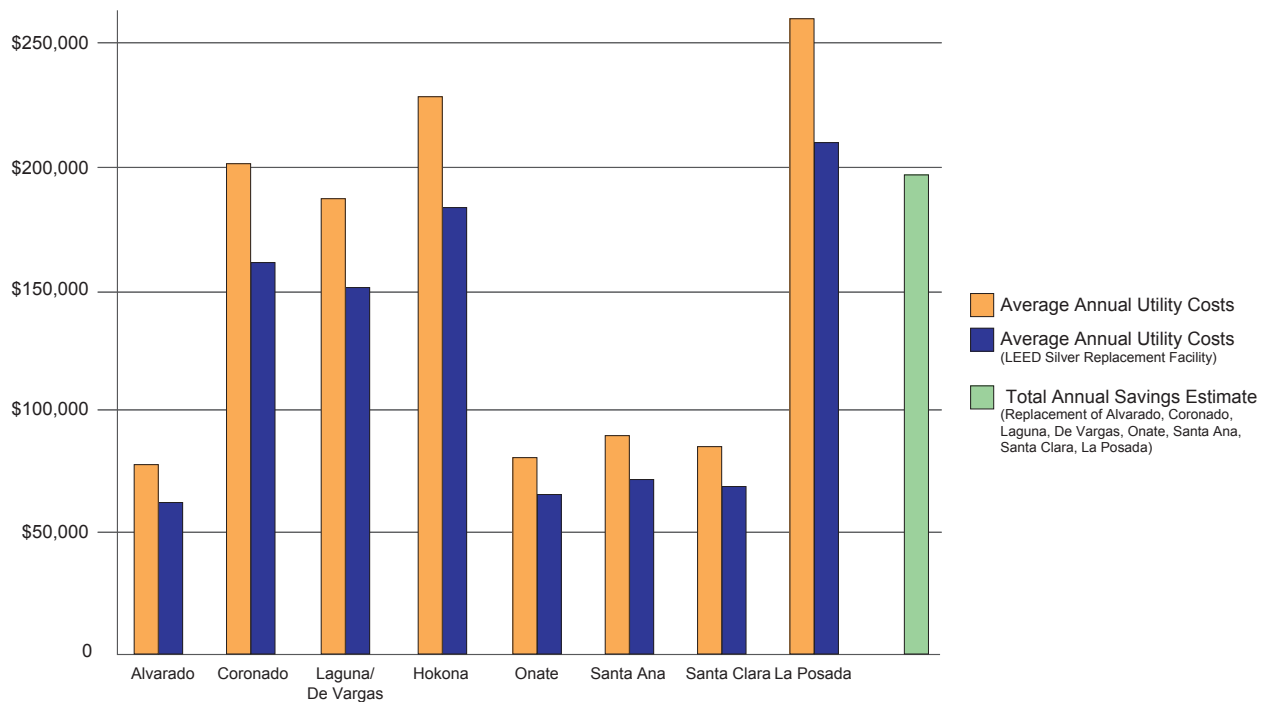


**Energy Savings from Living On Campus**

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**Annual Energy Savings**

Estimated savings from the replacement of current facilities with LEED Silver facilities reveals the potential for significant decrease in energy use. With an estimated 20% annual savings in energy consumption, and approximately \$200,000 in annual utility savings, the long term benefits could be of great financial and environmental value.



**LEED Silver Facilities**

An estimated 20% annual savings was conservatively derived from the average baseline LEED standard building performing at 25-30% greater efficiency than national standards.\*

\*USBC Energy Performance of LEED Buildings, NBI, 2008