

2024-2025 Dickinson ISD Energy Management Conservation Manual

PROUD TRADITIONS, EXCITING FUTURES

DICKINSON
INDEPENDENT SCHOOL DISTRICT

Dickinson ISD Energy Conservation Program 2024-2025



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DISD Energy Management Team

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**Director of Energy Management
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Jeff has been in Education for 30 years all in Dickinson ISD. He has held multiple positions within the district (head athletic trainer, teacher, and assistant principal) and started the energy management program in 2011. Aaron has been in education for 19 years with 12 years being in Dickinson ISD. Before joining the Energy Management Department, he was one of the agriculture science teachers at Dickinson HS for 9 years.

The DISD Energy Management program began in June 2011. The Dickinson ISD Board of Trustees implemented a focused effort to reduce our electricity, natural gas, and water usage thus saving valuable educational dollars. It is through the hard work of all stakeholders in our district including teachers, administrators, custodial, maintenance and operations, food and nutrition, transportation staff, and students that we have been and continue to be successful in reducing our utility usage, improving our environment, and saving money.

We strive to provide the best educational environment for our students while being as energy efficient as possible. Dickinson ISD is a proud member and participant in both the Texas Energy Managers Association and the EPA Energy Star Program. Through the continued team effort and energy-conscious culture we have developed here at Dickinson ISD, we expect to be a leader in Energy Conservation/Management for many years to come.

Energy Information

What is Energy?

Energy refers to the ability or capacity to do work or cause changes in a physical system. Most people think of energy as the “fuel” or “power” that allows things to happen or work to be done. It can be converted from one form to another, but it is never created or destroyed. Instead, it is transferred or transformed from one object or system to another. When you switch on a light bulb, electrical energy is converted into light energy. Energy is a fundamental concept in physics and encompasses various forms that exist in our everyday lives, including kinetic energy, thermal energy, nuclear energy, potential energy, chemical energy, electrical energy, mechanical energy, heat energy, light energy, gravitational energy, radiant energy, and even sound energy.

What is Energy Management?

Energy management refers to the process of planning, controlling, and optimizing the use of energy resources to achieve greater efficiency, reduce costs, and minimize environmental impact, usually using energy management software. It involves monitoring energy consumption, identifying opportunities for energy conservation, implementing strategies to use energy more efficiently, and evaluating the results to continually improve energy performance.

What is Energy Conservation?

Energy conservation is the effort to reduce wasteful energy consumption by using fewer energy services. This can be done by using energy more effectively (using less energy for continuous service) or changing one's behavior to use less service (for example, by driving less). Energy conservation can be achieved through efficient energy use, which has some advantages, including a reduction in greenhouse gas emissions and a smaller carbon footprint, as well as cost, water, and energy savings.

What is Energy Efficiency?

Energy efficiency means using less energy to perform the same task or produce the same result. It can also mean using only as much energy as is needed without wasting any. Energy efficiency can be applied to many things, including homes, buildings, appliances, lighting, and schools.

Dickinson ISD Abbreviated Energy Conservation Guidelines

Every person is expected to be an “energy saver” as well as an “energy consumer.”

The teacher/staff member is responsible for implementing the guidelines during the time that he/she is present in the classroom/office.

The custodian is responsible for control of common areas, halls, restrooms, cafeteria, etc.

The principal/site administrator is responsible for the total energy usage of his/her site.

The Director of Energy Management maintains accurate utility records of each site performs routine audits of all facilities and communicates the audit results to the appropriate personnel.

- Utilize natural lighting where appropriate. Teachers should make certain that the lights are turned off when leaving their unoccupied classrooms.
- All outside lighting should be turned off during daylight hours.
- Gym, cafeteria, and auditorium lights should be turned off unless occupied.
- All lights should be turned off when students and teachers leave the school. Custodians will turn on lights only in the areas in which they are working.
- All heating, ventilation, and air conditioning equipment should be set to the unoccupied setting during unoccupied hours. Classroom windows and doors should remain closed when HVAC equipment is operating. All vents should remain clear of obstructions.
- Thermostats for heating should be set between 68°-70° F. Thermostats for cooling should be set no lower than 72° F with 74F being the district standard.
- All office machines (copiers, laminators, scanners, printers, etc.) should be turned off every night and during unoccupied times. Copiers that also serve as fax machines should remain on.
- All computers should be programmed for energy-saving modes. All classroom and lab computers, monitors, printers, scanners, and speakers should be off every night and when not in use. Network and server equipment is excluded.
- All Pod/Break room/office refrigerators should be emptied, cleaned, and shut down (unplugged with doors propped open) for winter, spring, and summer breaks.
- Portable building thermostats should be set no lower than 72F (cooling) or no higher than 70F (Heating) and should never be left set on “HOLD”.

By following these simple guidelines to the best of our ability Dickinson ISD can do its part to conserve energy and put money back into our budget where it is needed most!

Dickinson ISD Energy Management

**Every Dollar saved on
Energy is a Dollar saved
for Education.**



Energy Program Savings: September 2011 – Current

- Savings to date: **\$11,580,989**
- Cost: **29.5% reduction**
- Usage: **33.1% reduction**

Dickinson ISD District Use and Cost per Sqft Comparison

Below are the costs and uses for all campuses in Dickinson ISD. Dickinson JR High is not included in this list as data is still being collected, it will be included in next year's report.

The district goal is to be at \$1.00 Sqft or less and use under 30 KBTU per Sqft. Dickinson ISD has consistently been able to maintain its cost and use per Sqft over the years at around \$1.00 per Sqft and 30 KBTU per Sqft. As a district, we are striving to get the cost under \$1.00 Sqft and the use under 30 KBTU per Sqft. All employees can help with this by doing their part following all the Dickinson ISD Energy Conservation Guidelines and Procedures.

| Campus | Floor Area (Sqft) | Cost/Sqft | Use/Sqft (KBTU) |
|-----------------------|-------------------|---------------|-----------------|
| DHS 9th Grade Center | 75,309 | \$0.86 | 19.4 |
| Bay Colony ES | 101,235 | \$1.09 | 24 |
| Lobit | 219,000 | \$0.81 | 24.8 |
| San Leon ES | 102,700 | \$0.85 | 25.5 |
| Silbernagel ES | 96,770 | \$1.06 | 27 |
| KE Little ES | 92,595 | \$0.82 | 27.6 |
| Calder Road | 103,073 | \$1.16 | 29.8 |
| Kranz JH | 248,000 | \$0.93 | 31 |
| McAdams JH | 230,000 | \$0.97 | 32.2 |
| Dunbar MS | 112,860 | \$0.92 | 32.5 |
| Dickinson High School | 512,252 | \$1.02 | 32.8 |
| Hughes Road ES | 94,260 | \$1.31 | 35.1 |
| Barber MS | 110,401 | \$1.07 | 35.7 |
| DCC/DALC | 29,740 | \$1.26 | 42.6 |
| District Avg. | | \$1.03 | 30.9 |

If you have any questions about this chart, please reach out to Jeff Pulkinen or Aaron Whitener.

As a district, we can maintain or even surpass our goals.

**What are we asking you to do?
Lets work together!**

Follow all shutdown checklists:

**Daily, Thanksgiving, Christmas, Spring
Break, Summer and Emergency Shutdowns**

**Help reinforce the Energy
Conservation Culture in Dickinson ISD**



At the end of each day, we ask that you follow the daily energy shutdown list (provided on the next page) this is very important each day but especially on Fridays and long weekends. We will have special shutdown instructions for holiday breaks that will be sent out closer to the break. Your campus or building will be walked for each break by the energy management team to make sure all procedures have been followed.

Following all the shutdown procedures helps Dickinson ISD to conserve energy and save money. Please do your part each day and on each shutdown.



END-OF-DAY SHUTDOWN CHECKLIST

Classroom/Office

___ Close your window blinds (turn adjustment rod counterclockwise)

___ Turn your projector OFF

___ Turn your document camera OFF

___ Turn your "Teacher Computer" OFF (select shutdown/power off)

___ Turn your "Student" computers OFF (select shutdown/power off)

___ Turn your monitor button(s) off (the light on the button should be off)

___ Turn computer speakers OFF (If equipped with an off feature)

___ Turn all printers, scanners, and other unnecessary equipment OFF

___ Portable buildings – Push "run program" for programmable thermostats.

Regular thermostats - Set the thermostat to 83(cooling) or 55(heating)

___ Turn OFF all TV's

___ Turn all lights OFF

___ Shut your door

___ Computer labs – Shut down ALL computers and monitors at the end of the day.

Energy Audits

The Energy Management Team will conduct regular energy audits in all buildings to make sure all employees are following the Dickinson ISD Energy Conservation Procedures. During the audits, a Red or Green note will be left for you that will provide feedback on how your classroom or office performed. A report of the audit will be sent to the building administrator for their records.

A sample of the red and green notes is provided below.



Great Job!

Thank you for having everything turned off when this room/office was not occupied. Your help is greatly appreciated!!!

Fill this form out and return it to the Energy Department through interoffice mail. You will be entered into our Energy Program award drawing.

Name: _____

Campus: _____

Jeff Pulkinen – Director of Energy Management
Aaron Whitener – Asst. Director of Energy Management
Phone: Ext. 6044 or Ext. 6106
Facility Services



OOPS!

When we stopped by your room/office, we discovered that you accidentally left on your:

- ___ Lights
- ___ Teacher Computer/Tablet
- ___ Student Computer
- ___ Projectors
- ___ Document Camera
- ___ Unauthorized Personal Appliance
- ___ Other

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Facility Services

Green notes can be returned to the Energy Management Team through interoffice mail and will be entered in for a drawing. Please do your part and follow the daily energy shutdown procedures.

Dickinson ISD's Prohibited/Unauthorized Items

Dickinson ISD does not allow personal items listed below in classrooms or offices.

| | |
|--|---|
| Coffee Pots/Keurigs | Space Heaters |
| Microwaves | Air Purifiers |
| Hot Plates | Mini Refrigerators |
| Lamps | Fans |
| Toasters | Lava Lamps |
| Personal Printers/Tech. Devices | String Lights (Battery Powered Only) |
| Plug-in scent devices (Scentsy, Glade Plug-in, Essential Oil Diffusers) | |
| Aerosol Sprays (ex. Lysol) | Personal Furniture & Rugs |
| Pest Control Products | Chemicals |

If you believe that you need one of these items, you will need to fill out the Appliance Approval form and your building administrator will have to approve it before the Energy Management Team will complete the final approval.

Some items that might be allowed are mini refrigerators for medical reasons, small fans, lamps (with LED Bulbs) for classrooms without windows, and air purifiers.

Dickinson ISD does not allow personal furniture or rugs in classrooms and offices. Please do not bring these items into your classroom or office.

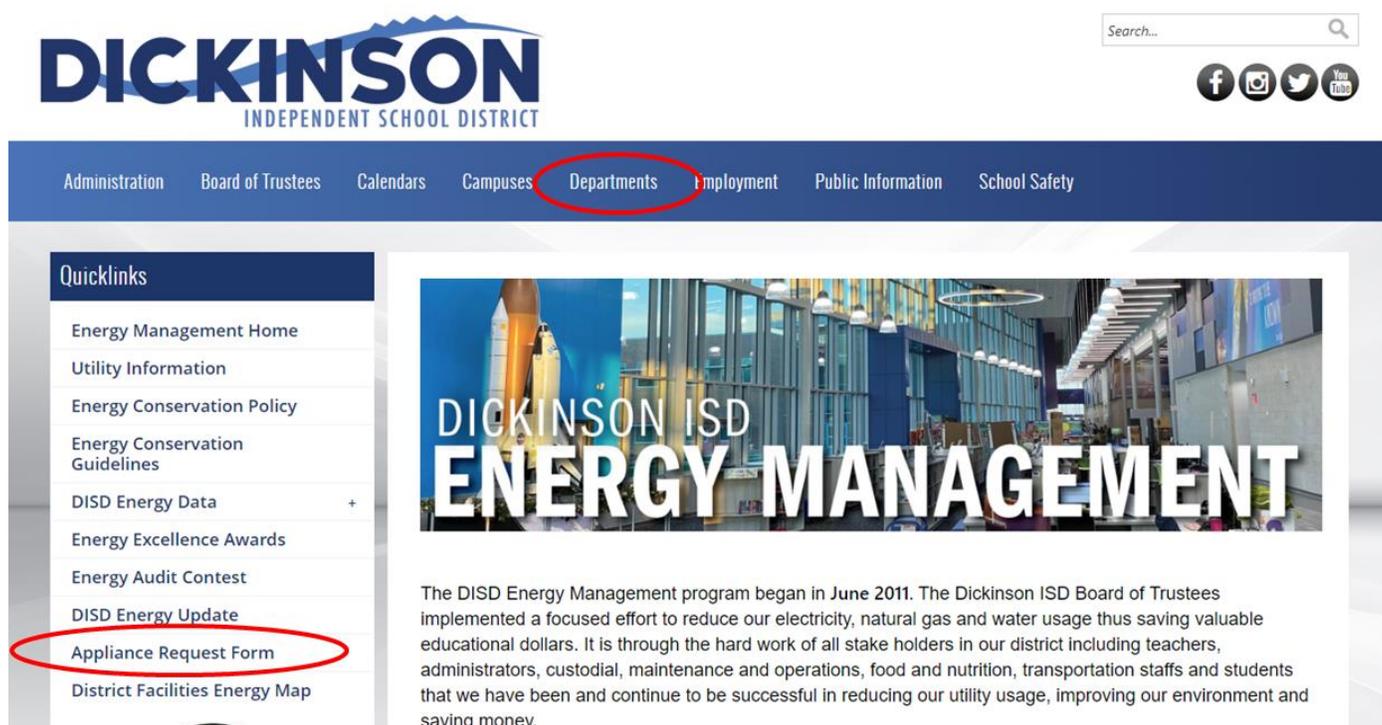
Aerosol Sprays, chemicals, and pest control products are not allowed by state law.

The Energy Management Team will be walking all the buildings in the district to make sure all areas comply with district procedures. If unauthorized items are found, you will be required to take them home.

Appliance/Device Request Procedures

To request a personal appliance/device to have in your room/office for this school year you will need to fill out the DISD Appliance/Device Request Form. This form is a Google form that you will fill out and submit to the Energy Management Department.

To access the form, go to the DISD website at <https://www.dickinsonisd.org/page/homepage>. Once you are at the DISD website go to the Departments tab and choose Energy Management. When you are on the Energy Management webpage go to the Appliance Request Form tab which will direct you to the Google form. Below is a screenshot to show you where you need to go to get to the form.



Once you have completed and have submitted the form it will go to the Energy Management Department for approval. The Energy Management Department will email you back with approval for your appliance/device or if more information is needed from you or your building administrator.

This form needs to be completed for everyone who will have a personal appliance/device brought into the building and will need to be done each school year. The Energy Management Department will be walking buildings to check and make sure items have been approved.

If you have any questions, please contact your building administrator or the Energy Management Department.

DISD Energy Excellence Awards
2023-2024 Winners

Elementary School of the Year
Hughes Road Elementary

Middle School of the Year
Barber Middle School

Secondary School of the Year
Kranz Junior High



Congratulations to the campus winners and thank
you to everyone for doing your part in helping
Dickinson ISD and the Energy Management Team
in conserving energy and saving money.

Dickinson ISD

Energy Conservation Program

2024-2025



If you have any questions or concerns, please contact the
Energy Management Team.

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