TUCSON UNIFIED SCHOOL DISTRICT **GOVERNING BOARD POLICY**	POLICY TITLE: ~~Energy Conservation~~Climate Action & Sustainability
	POLICY CODE: ECF
	LEAD DEPARTMENT: ~~Engineering, Facilities, and Planning~~Operations

~~MISSION~~

~~To create a healthy and comfortable learning environment in new and existing facilities while controlling energy consumption and diverting the saved utility costs towards educational programs.~~

~~To promote increased awareness among students, staff and members of the community to practice better environmental and economic stewardship.~~

PURPOSE

The Tucson Unified School District is a major consumer of energy, building material, water, food, and other products that contribute to the climate crisis. To help ensure that ~~Tucson Unified School District~~its students, staff, and community today and tomorrow have a safe, healthy environment with resources to live, the District will pursue~~s~~ bold and swift climate action~~energy and natural resources conservation efforts and practices that continue to preserve our natural resources while providing a safe and comfortable learning environment for all staff and students~~.

The District will take direct action to address sustainability (including carbon footprint, water use, and negative environmental impact) through a comprehensive process, while evaluating cost-effectiveness and financial sustainability (including sources of funding, such as grants).

In doing so, the District will cut its emissions in half by 2030, and reach net-zero emissions by 2045.

~~ENERGY AND NATURAL RESOURCES~~

- ~~Energy: Electricity and natural gas~~
- ~~Water: Potable water for both buildings and landscaping, reclaimed water, sewer, and rainwater~~
- ~~Waste: Trash (refuse), recyclable materials, and organic (green) waste~~
- ~~Fuels: Gasoline, diesel fuel, and oil products~~
- ~~Alternative Fuels: Compressed natural gas, bio-diesel, and electricity~~

~~OBJECTIVESThe District shall continue to establish procedures to ensure the conservation of energy and natural resources by personnel at all levels of the school system, which shall include the following practices:~~
~~a) Development and implementation of energy and natural resource conservation policy regulations that outline goals and objectives to meet the mission of Policy ECF.~~
~~b) Implement policy regulation programs and/or plans to help educate staff and students reduce energy, water, and waste.~~
~~c) Demonstration of resource-efficient design and operation of school facilities to help reduce energy, water, and waste.~~
~~d) Study of anticipated energy performance on all facility renovations and new TUSD construction.~~
~~e) Utilization of efficient technologies and the use of renewable resources to help reduce energy, water and waste.~~
~~f) Monitoring the general operation and maintenance of all heating, ventilation, and air-conditioning equipment.~~
~~g) Partnership with related local, state, and national programs to leverage outside funding and support energy, water, and waste conservation.~~

DESIRED OUTCOMES

~~Health and Community Benefits~~
- ~~a) Improve air, thermal, and acoustic environments~~
- ~~b) Enhance occupant comfort and health~~
- ~~c) Minimize strain on local infrastructure~~
- ~~d) Contribute to overall quality of life~~

~~Economic Benefits~~
- ~~a) Reduce operating costs~~
- ~~b) Enhance asset value and profits~~
- ~~c) Improve employee productivity and satisfaction~~
- ~~d) Optimize life-cycle economic performance~~

~~Environmental Benefits~~
- ~~a) Enhance and protect ecosystems and biodiversity~~
- ~~b) Improve air and water quality~~
- ~~c) Reduce solid waste~~
- ~~d) Conserve natural resources~~

I. CLIMATE MITIGATION

I.A GREENHOUSE GAS (GHG) BASELINE REPORT

1. Within 12 months of the passage of this climate action resolution, the District shall conduct a comprehensive greenhouse gas inventory of Scope 1, 2, and 3 emissions from all sources owned or controlled by the district for the most recent fiscal year that reliable data can be obtained, and create a dashboard based on specific goals before to track progress towards sustainability.

2. The inventory shall follow best practices and guidance from respected protocols such as the Greenhouse Gas Protocol Corporate Standard/Local Government Operations Protocol and aligns with the most current emissions verification reporting standards (such as ISO 14064).
3. To track progress over time, the district shall conduct a new comprehensive GHG inventory every 3 years using consistent methodology.

I.B SCOPE 1: Direct Emissions by TUSD

I.B.1 TRANSPORTATION

1. TUSD shall strongly enforce EEC Environmental Quality – Vehicle Idling and EEC-R Environmental Quality – Idle Reduction Policy Regulations, by requiring all TUSD employees who drive TUSD vehicles to undergo review of policies and expectations annually.
2. The TUSD Yellow Fleet and White Fleet shall be fully converted to an electric bus fleet by 2035.

I.B.2 BUILDINGS

I.B.2.i PORTFOLIO LEVEL GOALS

These District's entire portfolio of buildings shall achieve the following goals:

1. Achieve the latest LEED standards.
2. Reduce energy consumption by 50% below the baseline year by 2030.
3. Be all-electric and eliminate on-site fossil gas combustion before 2035.
4. Achieve an average Energy Use Intensity (EUI) of a maximum of 25 kBtu/square foot-year by 2035.
5. Reduce embodied emissions from construction by 50% below the new baseline by 2030, with zero emission construction sites by 2045.
6. Utilize low global warming potential refrigerants and low embodied carbon materials.

I.B.2.ii PROJECT LEVEL GOALS

In addition to portfolio goals, all new construction and major modernization projects will:

1. Achieve a site energy use intensity (EUI) of 17-20 kBtu/square foot/year.
2. 5 total air changes per hour (ACH) for high indoor air quality.
3. Integrate infrastructure for electric vehicle (EV) charging.
4. Consider opportunities for grid harmonization to save costs and contribute TUSD-produced clean energy to the grid.
5. Designate and Communicate Vegetation and Soil Protection Zones (VSPZs).
6. Shall follow Phius building code standards and seek to be Phius approved.

I.B.3 ELECTRIFICATION + ENERGY EFFICIENCY

1. Shall attain whole electrification of all buildings, vehicles, cooking equipment, lawnmowers, leaf blowers, and all other places not explicitly specified; 50% electrification by 2030 and 100% by 2035.
2. Shall pursue replacement of appliances once they have reached the end of the useful life (EUL), and shall not pursue the policy of replacement upon failure (ROF).

I.C SCOPE 2: Indirect Emissions from Purchased Energy

1. Attain 100% clean energy usage by 2035
    a. Explore usage of Power Purchase Agreements (PPA).
    b. Explore supporting community choice aggregation (CCA).
2. Strive for a net-zero energy (NZE) school district by 2045: producing as much clean energy as the school district consumes.

I.D SCOPE 3: Indirect Emissions Outside TUSD's Direct Control

1. Fossil Fuel Divestment / Dissociation
    a. Complete a phased divestment from fossil fuels as soon as possible and direct further investments into socially responsible funds following the definition of an ESG investment policy.
        i. Advocate with Pima County Treasurer's Office to accomplish this.
    b. Dissociate from fossil fuel companies in all operations
2. Food
    a. Divert at least 75% of food waste from landfills through composting by 2030.
    b. Phase out use of single use plastic by 2030.
    c. Increase proportion of breakfast and lunch options that include organic and fresh products, locally sourced, minimally processed, and prepared onsite year-on-year to 2030.
    d. Provide daily plant-based complete meal options for breakfast and lunch at all high school campuses by 2026, and all campuses by 2028.
3. Waste
    a. Increase waste compost and recycling to reduce waste production by TUSD campuses by 50% by 2030.
        i. Implement compost programs: i) in 100% of all high schools by 2028, ii) in 50% of all schools by 2030, iii) in 100% of all schools by 2035.
    b. Explore the implementation of programs to attain zero-waste status by 2045.
4. Procurement (including paper, cleaning supplies, landscaping products and pesticides, food service products, water bottles, facility equipment, etc.).
    a. TUSD will factor environmental sustainability and GHG emissions within procurement operating procedures and purchasing processes to reduce environmental impact.

b. TUSD will factor environmental sustainability GHG emissions in its RFP and procurement when evaluating outside contractors for services purchased by TUSD.

c. TUSD will factor in location of production (prioritizing domestic production) and ethical sourcing in the procurement of equipment, batteries, and other materials.

5. Adopt Dark Sky Lighting Standards and seek to be DarkSky Approved

6. Reduce environmental harm from pesticide and herbicide use

a. Adopt a system of Integrated Pest Management (IPM) as approved by the EPA for businesses.

II. CLIMATE ADAPTATION, RESILIENCE, AND EDUCATION

II.A HEAT RESILIENCY

1. Establish a district-wide Extreme Heat Preparedness Plan that outlines procedures for modifying school schedules, canceling outdoor activities, and implementing cooling measures during excessive heat events.

a. Ensure that at least 95% of school facilities have designated cool rooms or cooling centers available during extreme heat events by the end of the 2026-2027 academic year.

i. Extend hours for summer cooling program centers for students and their immediate family, and staff.

ii. Explore specific TUSD sites as cooling centers for the community during after-hours and weekends.

b. Implement a system to monitor indoor and outdoor temperatures, as well as heat-related illnesses and incidents, across all school campuses.

2. All new school construction and major renovation projects shall incorporate appropriate building and environmental features and technologies to address heat resiliency, including but not limited to:

a. Cool roof technologies, shading structures, etc. These features shall be retrofitted in at least 50% of existing buildings by 2030 and 100% by 2035.

b. Appropriate tree canopy, with a goal of maintaining at least 80% of existing tree canopy cover.

3. Develop a plan to convert TUSD schools into a network of resilience hubs, and explore installing microgrids, as reported in the report by the City of Tucson's Commission on Climate, Energy, and Sustainability.

4. Work with all levels of local government (city, county, state) to help ensure safe transportation for people living within TUSD boundaries during extreme heat events.

II.B WATER

1. Within 12 months of the passage of this policy update, the District shall conduct a comprehensive water use inventory and account for water use from sources including but not limited to: i) precipitation, ii) runoff-reduction and iii) leaks, faulty fixtures, and inefficient equipment.

2. Replace all inefficient plumbing fixtures with WaterSense certified, low-flow alternatives; upgrade to water efficient appliances; install smart irrigation controllers and water-efficient irrigation systems; and install rainwater harvesting systems (with a goal of capturing and reusing 25% of total rainwater runoff for non-potable purposes)
    a. Complete transformation by 50% by 2030, 100% by 2035
3. Regarding landscape water use, the district will follow drought tolerant design guidelines and plant drought-tolerant plants.
    a. Reduce water usage from landscaping by 50% by 2035
    b. Utilize xeriscaping and design the plantings, soils, and other features to be self-sustaining with natural precipitation only. Limit water use to the time of planting only.

III. EDUCATION

TUSD will support students in climate action by:

1. Ensuring age-appropriate, science-based and accurate curriculum throughout grade levels from elementary school to high school.
    a. Support teaching and learning to equip children and youth with the knowledge and skills to build a more sustainable world.
    b. Develop and/or select educational programs and materials at all grade levels, provide teacher professional development, and ensure equitable, standards-aligned instruction across the curriculum that promotes student understanding of the causes and consequences of climate change, opportunities to engage in climate solutions, and pathways to green jobs.
    c. Commitment to our district and community partnerships that support school gardens, sustainability education and food literacy such as TUSD School Garden Network which includes our partnership with UA School Garden Workshop and our Food Literacy program.
    d. Support education and outreach to promote energy, water, and waste reduction.
    e. Ensure all high school campuses have access to sustainability learning, including AP Earth Sciences by 2027, ensure existing CTE programs are geared towards future sustainability (such as automotive repair and culinary) by 2027, and explore potential new CTE programs focused on sustainability by 2030.
2. Engaging students in sustainability projects throughout TUSD.
    a. Start a school garden program in at least 50% of TUSD campuses by 2027.
    b. Explore the feasibility and cost estimates of providing outdoor learning experiences at TUSD's Milagro property for middle and high school students by 2028.
3. Undertake comprehensive action to alleviate the anxiety epidemic striking the younger generation, especially climate anxiety.
    a. Introduce green spaces

b. Increasing awareness and introducing mental health awareness and climate anxiety into health class
c. Offering mental health education, and
d. Conducting staff development to meet these needs if not currently sufficient.

4. Begin the process of introducing climate change into the existing curriculum. This includes collaborating with Pima Community College (PCC) and introducing climate-focused courses, as well as integrating climate across other courses (ex- climate change data in math classes).

IV. FUNDING

TUSD shall affirmatively commit to funding climate action measures as a part of the capital budgeting process, every year. As part of its annual report, TUSD will report on grants and other funding opportunities pursued in achieving sustainability goals.

TUSD will also explore the creation of a carbon offset market via the district's imminent emissions reductions to fund these efforts.

V. EQUITY

The District recognizes that climate change affects different communities disproportionately, with marginalized and under-resourced communities often bearing the brunt of its impacts. The District shall integrate equity into the execution of these climate action efforts and prioritize the voices and needs of historically marginalized communities.

VI. IMPLEMENTATION STRATEGIES

The implementation of this policy is the joint responsibility of the Governing Board, administrators, teachers, students, and support personnel, and its success is based on cooperation at all levels. The site administrators, directors, managers, and supervisors will be accountable for energy management within their area of responsibility ~~with conservation programs reviewed and updated on a yearly basis~~.

The District shall identify and name a specific staff position to be a "climate champion," with a modified job description to codify this role. This staff member shall ensure climate action gets considered and implemented in all efforts of the District.

~~Judicious use of the various energy systems of each campus will be monitored to ensure that an efficient energy posture is maintained on an ongoing basis. Every student and employee will be expected to contribute to energy efficiency in the District. Every person will be expected to be an "energy saver" as well as an "energy consumer."~~

1. District staff shall create a comprehensive climate action plan and set out a roadmap to achieve the goals set out in this plan.

a. This plan shall be informed by community input and public engagement.
b. Use climate projections instead of historic data for weather and precipitation modeling to inform planning, landscape, infrastructure, and community development processes and policy.

2. Enable all District employees, students, board members, local government officials, members of community organizations as well as members of the community to be able to input and influence the implementation of this plan.
3. During the implementation of this plan, carbon credits/offsets should be used as a tool of last resort to achieve emissions reductions. Any carbon credits used should be verifiable and high quality.
4. The TUSD Governing Board shall consider climate — in terms of emissions and future climate impacts — in all future issues considered by the Board.
5. The District shall consider the social cost of carbon emissions as part of all cost-benefit analyses, currently $190 per ton of CO2-equivalent emissions. Higher values may be adopted, but lower values may not be.

VII. REVIEW AND REPORTING

This policy will be reviewed on an on-going basis. Within one year of passage of these policy updates, Administration will create a District Sustainability website page to describe progress towards climate action and sustainability, and will provide an annual report to the Governing Board and general public on the status of the implementation of this plan. This report shall include status on specific goals, including progress towards each of the goals outlined in this policy, including but not limited to:

1. EUI (kBtu/square foot/year) on new construction and retrofit projects.
2. Total percent reduction of energy as compared to baseline year across the district portfolio.
3. Total annual emissions and % reduction as compared to baseline year across the district portfolio.
4. Percent of energy supplied by renewables across the district portfolio.
5. Number of mechanical systems (such as HVAC) converted from natural gas to electric at the end of their useful life.

The Administrative Regulation for this policy shall define implementation details.

Adopted: December 17, 1991
Revision: September 3, 1996
November 12, 2002
June 24, 2004
June 10, 2008

Review:
Cross Ref: 3751 Efficient Paper Utilization
Replaces TUSD Policy # 3750