U.S. Department of the Interior
Bureau of Indian Education

SUSTAINABILITY AND POLLUTION PREVENTION



OBJECTIVE

To provide awareness of sustainability and pollution prevention initiatives and how to manage these requirements in accordance with DOI and BIE policy.

MEETING TIPS FOR ONLINE TRAINING

- 1). Place yourself on “Mute” to prevent background noise.
- 2). Use the “Chat with all” feature to ask questions.
  - Note: All participants will be able to see your comments or questions.
- 3). Every participant will receive a certificate of completion.

INSTRUCTOR INTRODUCTION

BIE BRANCH OF ENVIRONMENTAL MANAGEMENT (BIE BEM)

WHO WE ARE…

Albuquerque Office

John Clymo, Program Manager, Supervisory Environmental Protection Specialist
Candace DeSantis, Lead Environmental Protection Specialist
Karlisa Benally, Environmental Protection Specialist
Priscilla Avila, Environmental Protection Specialist
Henryetta Price, Environmental Protection Specialist
Rochelle Mariano, Program Support Assistant

Bloomington Office

Russell Brigham, Environmental Protection Specialist

Window Rock Office

Karmen Billey-Badonie, Environmental Protection Specialist

AGENDA

- Background
  - Sustainability
  - Pollution Prevention
- DOI Sustainability Programs and Requirements
- Sustainability Drivers
  - Greenhouse Gases
  - Solid Waste Management (Lifecycle Management)
  - Single Use Plastics
  - Energy and Water Conservation

SUSTAINABILITY BACKGROUND

WHAT IS SUSTAINABILITY?

Sustainability is based on a simple principle:

- Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment.

- To pursue sustainability is to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations.

- Establish baselined metrics to meet DOI Sustainability-Goals.

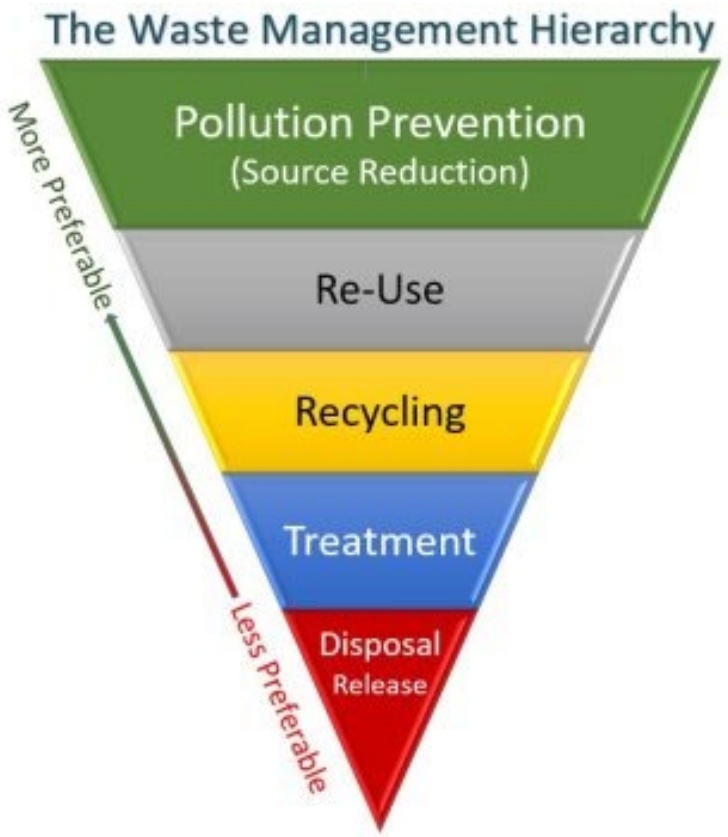
OUR SUSTAINABILITY PURPOSE

To integrate sustainability into all aspects of BIE's mission to provide quality education opportunities for Tribal communities.

To protect America's natural resources and heritage, honor cultures, and Tribal communities, and supply the energy to power America's future.

POLLUTION PREVENTION (P2) BACKGROUND

WHAT IS POLLUTION PREVENTION?



Reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less toxic substances, implementing conservation techniques, and reusing materials rather than putting them into the waste stream.

POLLUTION PREVENTION (P2)

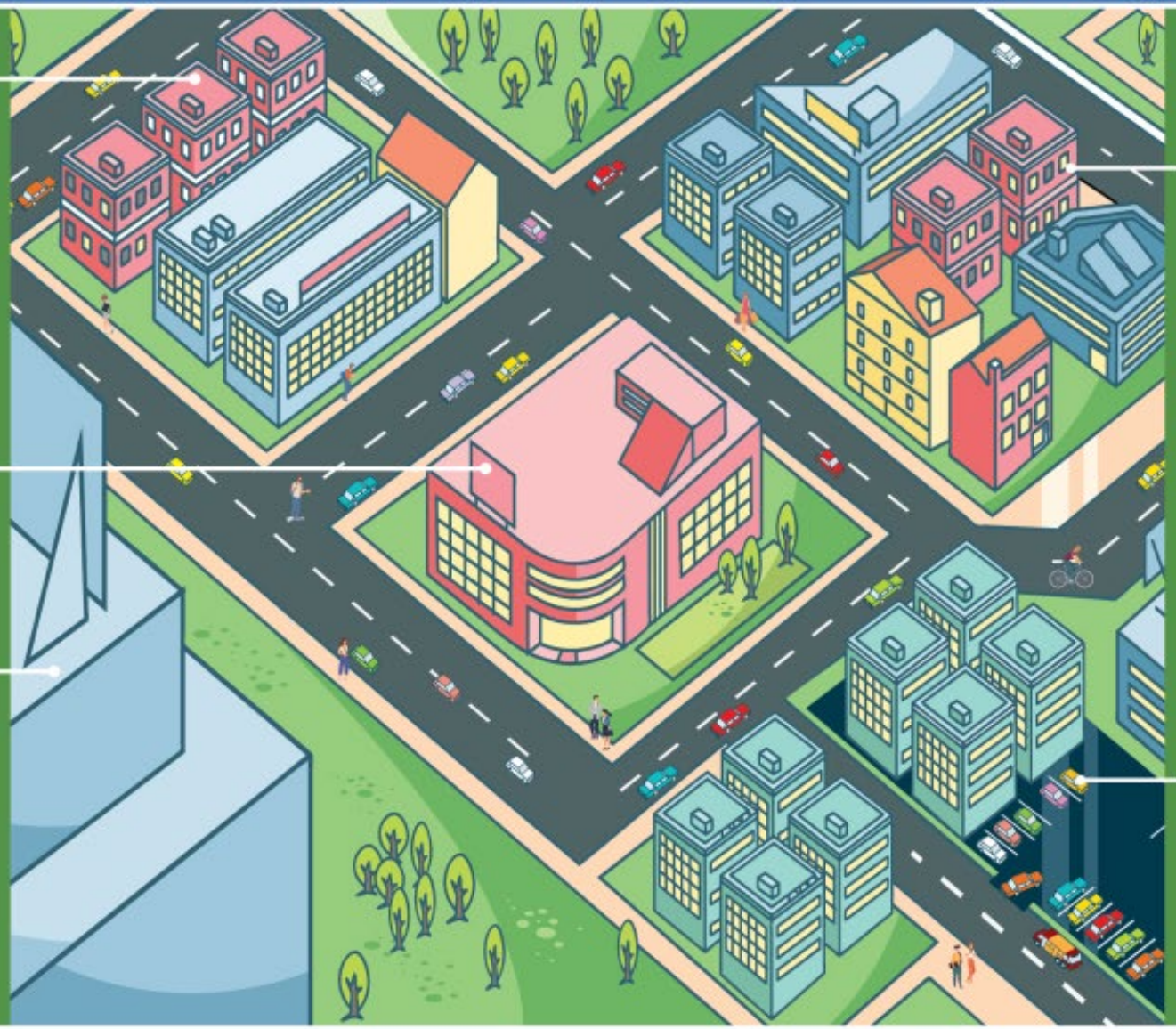
Importance

- Reduces financial costs of waste management and human health.
- Conserves natural resources
- Economic growth for industry and communities

Approaches

- Switch to green cleaners and maintenance chemicals
- Implement water and energy conservation practices
- Reuse materials such as drums and pallets

PREVENT POLLUTION IN YOUR COMMUNITY



HOME

- Use reusable shopping bags at the store
- Install a programmable thermostat

STATE OR TRIBAL PROGRAM OR UNIVERSITY

- Apply for an EPA Pollution Prevention grant

INDUSTRY

- Switch to low-carbon energy supply and materials
- Reduce or eliminate the use of hazardous chemicals

SCHOOL OR BUSINESS

- Reduce or eliminate the use of single use cups, plates and utensils in the cafeteria
- Look for products with the Safer Choice label
- Establish a sustainable purchasing program

COMMUTE

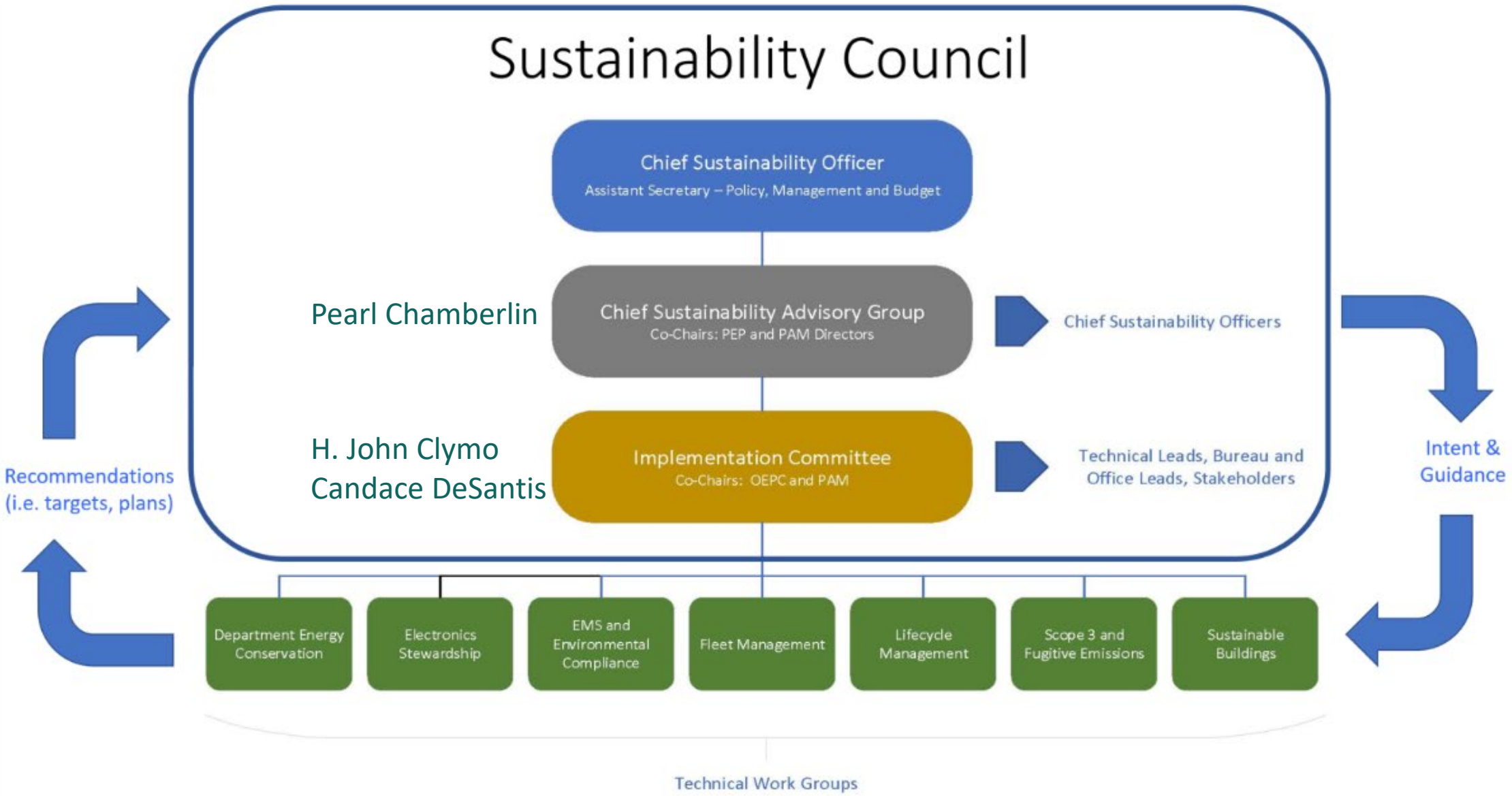
- Carpool, walk, bike or take public transit
- Keep car tires inflated

EPA

www.epa.gov/p2

DOI SUSTAINABILITY PROGRAMS AND REQUIREMENTS

DOI SUSTAINABILITY COUNCIL



DOI TECHNICAL WORKING GROUPS – BEM ASSIGNMENTS

- Department Energy Conservation (Karlisa Benally, IA, BIA)
- Sustainable Buildings (Karlisa Benally)
- EMS and Environmental Compliance (Candace DeSantis)
- Integrated Pest Management (Henryetta Price)
- Lifecycle Management (Henryetta Price)
- Scope 3 and Fugitive GHG Emissions (Karmen Badonie)

- Note: Representatives from other IA, BIE and BIA Programs support the remaining technical working groups not listed on this slide.

SELECT DOI SUSTAINABILITY REQUIREMENTS

Sustainability Organizational Assessment

- Annual self-assessment for Bureaus to indicate progress toward the EO 14057 goals, including greenhouse gas emissions reductions, carbon pollution-free electricity, zero-emission vehicle acquisitions, and net-zero emissions building portfolios.
- Assessments are submitted to the DOI Chief Sustainability Officer.

Annual Solid Waste Management Report

- Annual reporting via DOI Solid Waste Management Database.
- Data from this report are included in the DOI Wide Report which is submitted to the Council on Environmental Quality and Office of Management and Budget.

SO 3407 & BIE Sustainable Procurement Plan

- Reducing the procurement, sale, and distribution of single-use plastic products from current levels with a goal of phasing out single-use plastic products by 2032.
- BIE Sustainable Procurement Cross-Functional Team and Progress Reports.

SELECT DOI SUSTAINABILITY REQUIREMENTS

Annual Energy Management Data Report

- Annual energy and water consumption and greenhouse gas emissions report.
- Data from this report are included in the DOI Wide Report which is submitted to the Department of Energy Federal Energy Management Program.

Energy Star Portfolio Manager

- U.S. Environmental Protection Agency system used to measure and track energy and water consumption and greenhouse gas emissions at federal facilities. The system also benchmarks building performance and provides scores compared to similar facilities.
- Required for Energy Independence and Security Act “covered” facilities.

Metering Plan

- BIE is included in the Indian Affairs Metering Plan to implement utility metering to measure and identify opportunities to reduce energy and water use.

SELECT DOI SUSTAINABILITY REQUIREMENTS

Zero-Emission Vehicle Fleet

- BIE is included in the Indian Affairs Fleet Management Plan to identify vehicle acquisitions and charging port installations.

Carbon Pollution-Free Electricity

- Replacing fossil-fuel-burning equipment with renewable energy sources.

Performance Contracting

- Using energy cost savings to fund facility improvements/operations.

Per- and Polyfluorinated Substances (PFAS)

- Sampling drinking water.
- Restricting procurement of PFAS-containing products.

Annual Environmental Compliance Data Report

- Annual report of non-compliance findings submitted to DOI.

SUSTAINABILITY DRIVERS

SUSTAINABILITY DRIVERS

IMPLEMENTATION OF EXECUTIVE ORDER 14057, CATALYZING CLEAN INDUSTRIES AND JOBS THROUGH FEDERAL SUSTAINABILITY

4.1 – Greenhouse Gas (GHG) Emissions:

Reductions by 2030

- **Energy Efficient Projects**
- **Renewable Energy Projects**
- **Electrification (replacing equipment that uses fossil fuels with technologies that use electricity from clean sources)**

4.2 - Carbon Pollution-Free Electricity (CFE):

100% by 2030

- **Focus is Renewable Energy (Solar, Wind, Hydroelectric, and Geothermal Power)**
  - **Implementing into DFMC's New School Projects**
- **Purchasing Renewable Energy Certificates (RECs)**

SUSTAINABILITY DRIVERS

4.3 - Zero-Emission Vehicle (ZEV) Fleet: 35% reduction per year over the next 3 years

- Bureau ZEV Implementation/Fleet Management Plans
- % of annual purchases

4.3 - Zero-Emission Vehicle Fleet: Electric Vehicle Supply Equipment (EVSE)

- # of ports for ZEVs

4.5 - Waste Management: 50% annual diversion by FY 2025

4.5 - Waste Management: Construction & Demolition Debris - 50% annual diversion by FY 2025

SUSTAINABILITY DRIVERS

4.4.4 - Existing Facilities: Energy Efficiency

- Reduce Energy Use Intensity (EUI) – monitoring of BTU (Heat) consumed per Gross Square Feet (GSF) per FY for Buildings

4.4.5 - Existing Facilities: Water Efficiency

- Reduce Water Use Intensity (WUI) – Annual potable Gallons per GSF per FY

4.4.15 - Sustainable Federal Building Goals and Requirements: New Construction and Modernization Projects

- New Construction Projects over 25,000 GSF, Existing over 10,000 GSF
- FY 23 target is TBD by OMB/CEQ (in development)

SUSTAINABILITY DRIVERS

4.6 - Net-Zero Procurement (Sustainable Acquisitions):

- 5% of contract actions for products and services reviewed for compliance with sustainable acquisition requirements
- At least 95% of contracts must be in compliance
- Reporting Biobased Products - derived from raw materials such as plants and other renewable agricultural, marine, and forestry materials
- Reporting Hydrofluorocarbon Products – commonly used in air conditioning, refrigeration, and insulating foams and propellants

4.6 - Net-Zero Procurement / DOI Secretary's Order 3407 "Department- Wide Approach to Reducing Plastic Pollution":

- Annual reduction in the procurement, sale, and distribution of single-use plastics from FY 2022 levels

Goal of phasing out products by 2032

GREENHOUSE GASES

GREENHOUSE GASES

- Gases that trap heat in the atmosphere
  - Carbon Dioxide (CO_2)
  - Methane
  - Nitrous Oxide (N_2O)
  - Fluorinated Gases
- Primary BIE Sources
  - Burning fossil fuels
  - Wastewater treatment
  - Leaks from refrigerant-containing equipment

GREENHOUSE GASES

- DOI Climate Action Plan, 2021
- 5 Vulnerabilities:

People, Communities, Cultural Resources

Healthy Watersheds and Water Supplies

Biodiversity and Ecosystems

Coastal and Marine Resources

Infrastructure and Facilities

SOLID WASTE MANAGEMENT

Lifecycle Management

SOLID WASTE MANAGEMENT

- Waste Management tracking at facility level through the DOI Solid Waste Management Database



- Waste Diversion
  - Recycle
  - Compost
  - Reuse
- Identifying Areas of Improvement (i.e., SUPs)
- EO 14057, SO 3407 – Develop a process to account for SUPs and create a plan to phase out SUPs by the end of 2032

SINGLE-USE PLASTICS

SUPs

SINGLE-USE PLASTICS (SUPS)

- What are SUPs
  - Items intended to be disposed of immediately after use including, but not limited to, plastic and polystyrene food and beverage containers, bottles, straws, cups, cutlery, and disposable plastic bags.

- Directives
  - Secretarial Order (SO) 3407: Department-Wide Approach to Reducing Plastic Pollution
    - Directs Bureaus to develop a sustainable procurement plan to phase out single-use plastics by the end of 2032.
  - Executive Order (EO) 14057: Catalyzing Clean Energy Industries and Jobs through Federal Sustainability



SUPS

- BIE Sustainable Procurement Plan - June 2023

- Strategy applicable to 19 BIE administrative facilities, bureau operated schools, and 2 post-secondary institutions



SUPS

- SUPs Reduction Goals
  - Implement phase-out strategies for BOS and admin facilities Q1 FY2025
  - Provide phase-out recommendations to TCS in FY2026

- SUPs data collection, metrics, and reporting
  - Establish a system to track and report procurement
  - Evaluate procurement/establish waste stream profiles for each BIE entity to identify largest consumers of SUPs
  - Analysis of alternatives
  - Establish data-driven targets

SUPS

- **Alternatives to SUPs**
  - Compostables
  - Biodegradables
  - 100% recyclable materials

- **SUPs Exemptions**
  - Cross-functional team to determine if exceptions are appliable
    - Short-term
    - Long-term
    - As needed



ENERGY AND WATER CONSERVATION

Net-Zero Emissions

ENERGY CONSERVATION

- **Increasing energy efficiency**
  - **E.g., lighting upgrades, control optimization, insulation, and equipment replacements and upgrades.**

WATER EFFICIENCY

- **Increasing water efficiency**
  - **E.g., installation of high efficiency plumbing fixtures, irrigation controls, advanced cooling tower controls, and equipment replacements of water intensive applications (kitchen, medical, laboratories).**

IN CLOSING…

Sustainability is:

- Part of the educational process for children.
- Part of our cultural responsibility and not just a Federal Program.

QUESTIONS?

CONCLUSION

RESOURCES

- US DOI 2022 Sustainability Plan, doi-2022-sustainability-plan.pdf
- BIE Sustainable Procurement Plan, bie-2023-spp.pdf (doi.gov)
- Federal Sustainability Plan, Federal Sustainability Plan: Catalyzing America's Clean Energy Industries and Jobs | Office of the Federal Chief Sustainability Officer

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Ahéhee
AnaaBasee
HiriweTudahe
Pilamiya
Nya:Weh Aho
Tansi
Thank You