



**ARMY MEDICINE**  
Serving To Heal...Honored To Serve

# US Army Medical Command Sustainability Program

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## Supporting Army Net Zero

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19 January 2012

UNCLASSIFIED



# BRIEFING OUTLINE

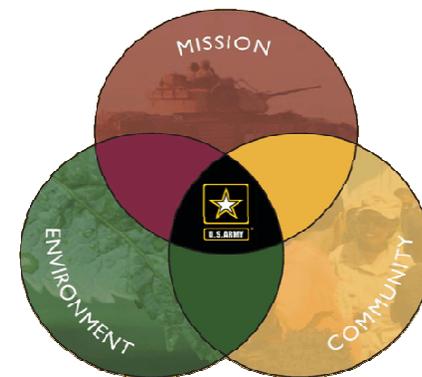
**PURPOSE:** To provide information on how the MEDCOM Sustainability Program supports Army Net Zero goals.

1. Federal, DoD, & Army Sustainability
2. Healthcare Footprint
3. MEDCOM Sustainability Program Goals
4. MEDCOM Support of Army Net Zero
5. MEDCOM Sustainability Success Stories



# Federal, DoD, & Army Sustainability

- **Executive Order (EO) 13514:** Federal Leadership in Environmental, Energy, and Economic Performance
- **EO 13423:** Strengthening Federal Environmental, Energy, and Transportation Management
- **DoD Strategic Sustainability Performance Plan**
- **Army Sustainability Campaign Plan**





# Healthcare Footprint

## In the United States:

- 17% of the U.S. economy is devoted to healthcare (\$2.5 trillion in 2009)
  - Projected to reach \$4.5 trillion by 2019
- 4% of national square footage - consumes 11% of national energy
- 4<sup>th</sup> largest energy user by building type
- Typically, largest user of water in a community
- Generates >5 million tons of solid waste per year
- 750K tons of regulated medical waste (RMW) per year

Sources: Health Affairs Journal  
Practice Greenhealth



# MEDCOM Sustainability Program Goals

- Develop and implement Sustainability Strategic Plan to:
  - Sustain mission readiness
  - Improve care for Warfighters and their families
  - Improve quality of life for patients and healthcare staff
  - Strengthen community relationships
  - Manage ecological stewardship
  - Reduce total costs of operation and ownership



***MEDCOM Sustainability Program goals align with Army net zero goals***





# MEDCOM Sustainability Program Goals

- Attain a sustainable healthcare program through:
  - Cost effective, environmentally-conscientious and sustainable changes
  - Collaborative partnerships with host installation and local community
  - Supplies and equipment purchases that provide return on the investment thru cost-savings and both tangible and intangible sustainable results



*MEDCOM Sustainability Program goals align with Army net zero goals*



# Army Medicine Strategy Map

May 2010

## Mission

- Promote, Sustain and Enhance Soldier Health
- Train, Develop and Equip a Medical Force that Supports Full Spectrum Operations
- Deliver Leading Edge Health Services to Our Warriors and Military Family to Optimize Outcomes

## Vision

America's Premier Medical Team Saving Lives, Fostering Healthy and Resilient People, and Inspiring Trust  
Army Medicine...Army Strong!

## Strategic Themes & Results

### Maximize Value in Health Services

Effectively and efficiently provide the right care at the right time to promote a healthy population and ready force.

### Provide Global Operational Forces

Agile and adaptive medical teams ready to execute relevant, responsive Health Services in a global operational environment through a combination of...

### Build the Team

A compelling place to serve and a preferred partner in...

### Balance Innovation with Standardization

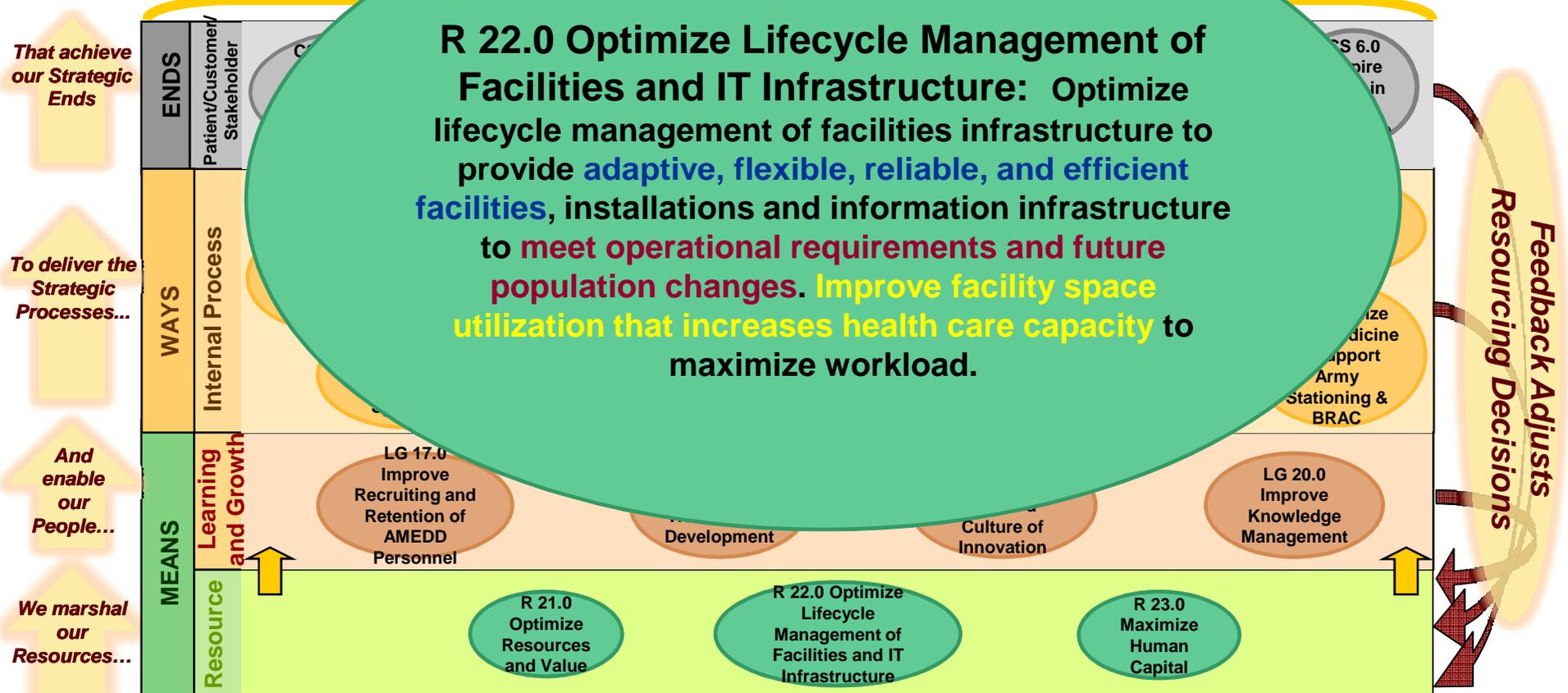
A culture of innovation which provides standardized solutions to support best practices and optimal outcomes.

### Optimize Communication and Knowledge Management

Leverage Communication to impart knowledge and build meaningful, positive relationships.

SUSTAIN

TRANSFORM



**R 22.0 Optimize Lifecycle Management of Facilities and IT Infrastructure: Optimize lifecycle management of facilities infrastructure to provide adaptive, flexible, reliable, and efficient facilities, installations and information infrastructure to meet operational requirements and future population changes. Improve facility space utilization that increases health care capacity to maximize workload.**

# MEDCOM Sustainability Strategy Map

July 2011



**MEDCOM GREEN**  
IMPROVE THE PRESENT, RESPECT THE FUTURE

## Mission

To accomplish our mission through due consideration of health, value, environment, and communities while enhancing the ability of future generations to accomplish their missions.

## Vision

Sustainable healthcare for today and tomorrow.  
Improve the present; respect the future.

### Strategic Themes & Results

#### Enhance Health

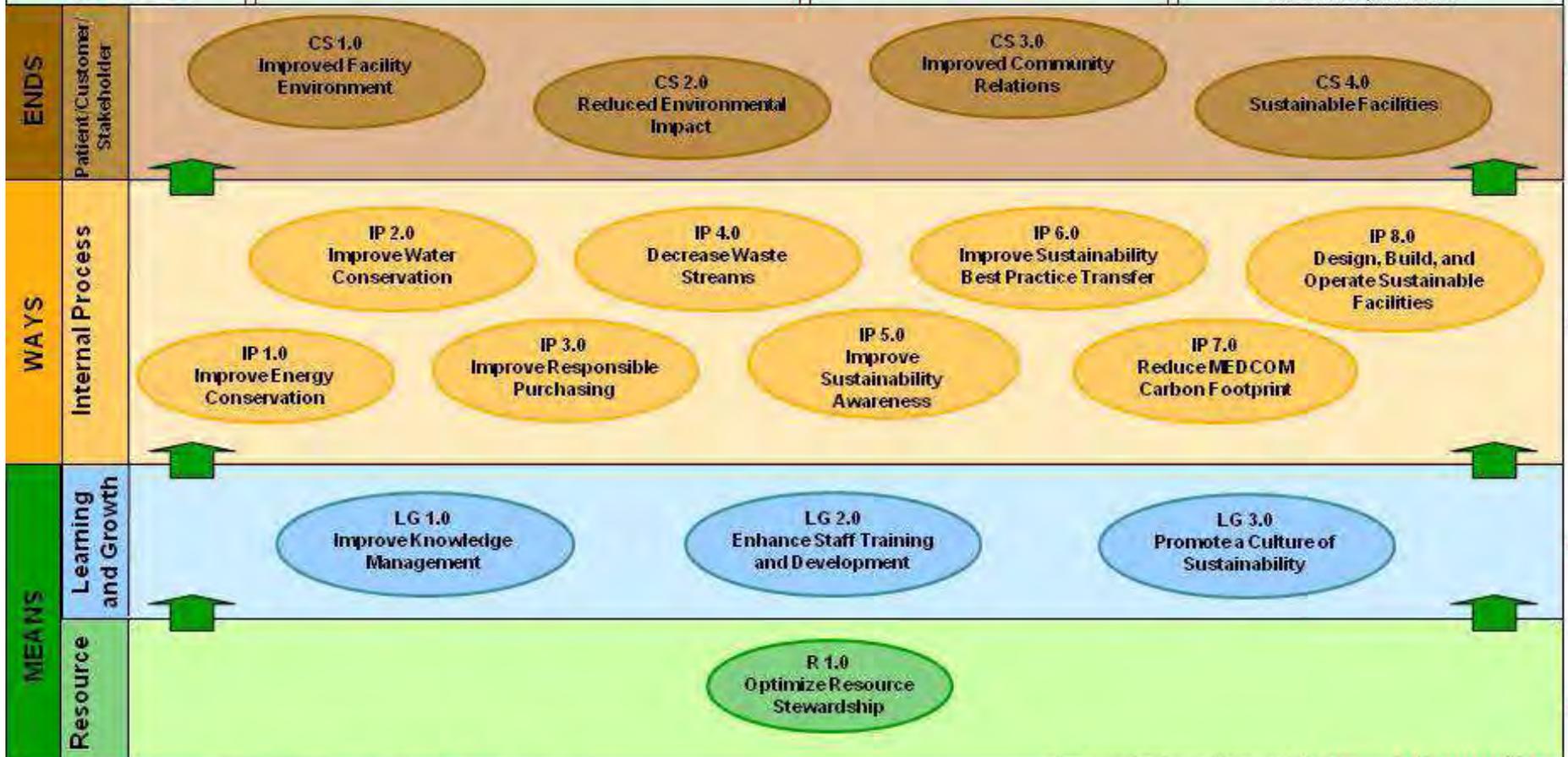
Leverage sustainability to improve patient care environment and to provide a healthy workplace for MEDCOM personnel.

#### Enhance the Environment

Reduce environmental impact of operating MEDCOM facilities.

#### Enhance our Communities

Improve on-post and off-post communities through implementation of MEDCOM sustainability initiatives.



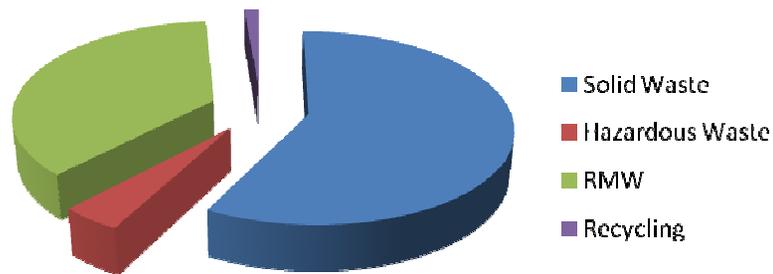
This is a dynamic, living document since April 2009

For more information go to: <https://ke2.army.mil/bsc>  
CAC login provided: [www.cs.amedd.army.mil/BSC\\_login.aspx](http://www.cs.amedd.army.mil/BSC_login.aspx)

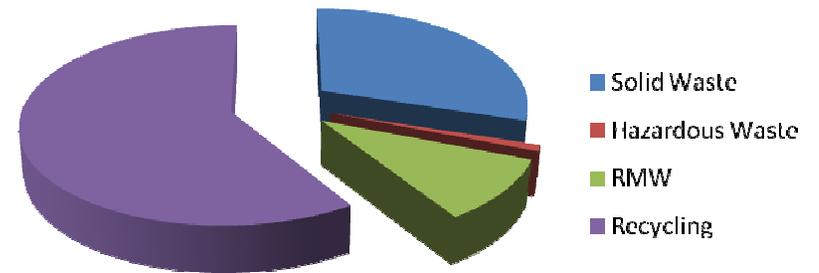


# Data Drives Direction

## Typical Hospital Waste Stream

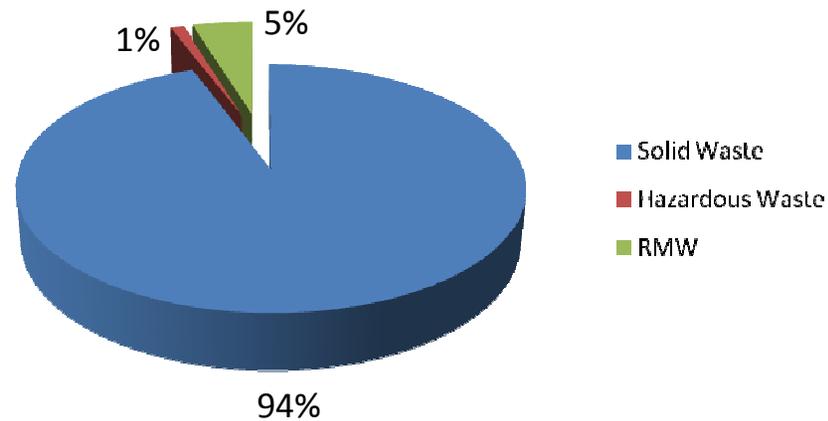


## Optimal Hospital Waste Stream



Data source: Practice Greenhealth

## Average MTF Waste Stream



Data source: MEDCOM Sustainability Survey



# MTFs on Net Zero Pilot Installations

- MTF sustainability action plan aligns with MEDCOM sustainability strategy map and installation net zero goals for energy, water, and/or waste
- MTFs located on net zero pilot installations targeted for sustainability workshops in 2011 – 2012
- Installation sustainability POCs participate in MTF sustainability workshops to build collaborative relationships
- MTF recycling contributes to installation recycling program and generates revenue for the installation MWR program

***A partnership between the MTF and the installation is crucial to achieving Army Net Zero goals***



# How MTFs Support Net Zero Waste

- Maximize recycling through partnership with installation
- Expand recycling to include healthcare-specific materials and waste streams
- Develop waste diversion options, such as composting
- Purchase items with minimal / reduced packaging
- Repurpose materials as appropriate
- Partner with vendors to attain sustainability/net zero goals
- Educate staff and encourage program awareness and participation

***A true cradle-to-cradle strategy considers  
the end state at the time of purchase***



# MEDCOM Waste Success Story: Blue Wrap Recycling at Madigan AMC

- Blue wrap is used to wrap instruments prior to sterilization
- Blue wrap is made of #5 polypropylene plastic, is a valuable, recyclable commodity
- Blue wrap comprises 10% of OR waste
- Madigan AMC recycles 415 pounds of blue wrap per month
- Goal: coordinate feasibility of host installation recycling blue wrap and incorporate reusable hard case for sterilization





# MEDCOM Waste Success Story: Polystyrene Elimination at Winn ACH

- Polystyrene foam containers are significant component of DFAC solid waste stream and supply cost.
- Polystyrene elimination is a visible statement of MEDCOM commitment to sustainability.
- Replaced polystyrene with biodegradable and microwaveable tableware
- Goal: Polystyrene Reduction Policy for all MEDCOM DFACs





# MEDCOM Waste Success Story: SUD Reprocessing at Carl R. Darnall AMC

- Single-use device (SUD) reprocessing is third-party remanufacturing of medical devices labeled “single use”
- Regulated by Food & Drug Administration
- Third party remanufacturers must meet the same quality and safety standards as original manufacturer of single-use device
- CRDAMC diverted 6,000 pounds of waste and saved >\$291K in 2011 through SUD reprocessing





# MEDCOM Waste Success Story: Evans ACH Laundry

- > 2,500 pounds of linens used daily
- Evans ACH partnered with Goodwill to develop laundering operations at Colorado Springs Goodwill Facility
- Plastic wrap for clean Evans ACH linens was 43% of the total waste plastic generated by Goodwill
- Change in process eliminated 354,000 linear feet of plastic wrap and saved \$12K per year in disposal cost
- Goal: Continue to pursue beneficial partnerships with host installation and local community.





# MEDCOM Waste Success Story: Xeriscaping at William Beaumont AMC

- Targeting waste from yard trimmings
- Landscaping with plant species suited to the local climate (i.e. drought resistant plantings)
- Serves as constructive landscape shading
  - creates shade and respite areas for MTF beneficiaries
  - decreases energy consumption to windowed areas
- Hardscape replaces plant landscape with elements of inanimate masonry work or woodwork
- Goal: Increase percentage of xeriscaped or hardscaped areas





# Questions?



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