IMCOM integrates and delivers base support to enable readiness for a self-reliant and globally-responsive All Volunteer Army

WE ARE THE ARMY’S HOME
Army End-Strength on our installations (FY15 ASIP data)

- OFF: 78,116
- WOF: 16,197
- ENL: 455,759
- USD: 147,363
- OTH: 19,087

Command Overview (FY15 vs. Baseline)

- 13.3% Energy Intensity Reduction
- 19.3% Water Intensity Reduction
- 50.0% Waste Diversion

Land Acreage Managed by the Cmd

- United States: 14,417,325
- Europe: 136,156
- Asia: 28,959

# Installations

- 4 Regions and 62 IMCOM Managed Installations

Rocks

- Paved: 101,625,883 SY
- Unpaved: 42,126,531 SY

Paved Area (excluding roads)

- 354,807,080 SY

Railroads

- 551 Miles

Family Housing

- Owned: 10,974
- Leased: 4,978
- Privatized: 84,882
- Community*: 414,934

Barracks

Adequate Spaces

- Permanent Party: 189K
- Training: 72K
- ORTC: 57K

*69% Army Families live in local community housing

Full Time Energy Managers

- Total Requirements: 138
- # Civ Assigned: 57
- # REM Contracted: 27
- # Military: 0

Utilities (Electric, Gas, Water, Sewer)

- 39,510 Miles

Airfields

- Army Airfields: 36
- Army Heliports: 9

Buildings (Million square feet)

- United States: 610.4
- Europe: 90.5
- Asia: 48.4

Command Universe
# IMCOM Energy Overview

## Energy and Water Efficiency and Security

**Objective:** Create energy and water efficient installations by holding users accountable, modernizing facilities, installing new technologies, and leveraging partnerships that will provide Senior Commanders an increased level of energy and water security leading to sustainable and resilient infrastructure and mission assurance.

## Keys to Success

1. **Conservation** - Reduce energy and water consumption.
2. **Facility Efficiency** - Increase energy and water efficiency and modernized infrastructure.
3. **Resiliency** - Improve development of renewable/alternative energy

## IMCOM Leads the Way

- One of the best EUIs in DoD and Federal government
- Most successful alternative financing (UESC/ESPC) program in Federal government
- Attained statutory water and waste diversion goals
## IMCOM Scorecard

<table>
<thead>
<tr>
<th>Mandate</th>
<th>Congressional/OMB Goal</th>
<th>IMCOM FY15 Score</th>
<th>IMCOM Performance</th>
<th>Issues/Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reduction in Energy Intensity:</strong></td>
<td>Reduce 3% per year to total by 30% by 2015 (2003 baseline)</td>
<td>Red</td>
<td>• -13.3% vs. -30% goal</td>
<td>• BRAC square footage impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 1.3% increase in energy intensity in FY15 vs. -3% goal</td>
<td>• RCI housing impacts</td>
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<td></td>
<td></td>
<td></td>
<td>• BRAC square footage impacts</td>
<td>• FY15 consumption down 2.8% and cost down 10.1%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Alternative financing (ESPC, UESC) will be required to meet goals</td>
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</tr>
<tr>
<td>Use of Renewable Energy:</td>
<td>At least 3% of total electricity consumption (FY07-09), 5% (FY10-12), 7.5% (FY13 +)</td>
<td>Yellow</td>
<td>• EPACT: 5.0% vs. 7.5% goal</td>
<td>• Increased from 1.8% to 5.0% on EPACT goal from FY14-15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• NDAA: 12.4% vs. 25% by 2025 goal</td>
<td>• Increased from 7.8% to 12.4% on NDAA goal from FY14-15</td>
</tr>
<tr>
<td></td>
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<td>• Total renewable energy produced/purchased increased 56% over FY14</td>
<td>• Small projects (&lt;10MW) executed with ESPC/UESCs and ECIP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Increased from 7.8% to 12.4% on NDAA goal from FY14-15</td>
<td>• OIE executing large projects (10MW)</td>
</tr>
<tr>
<td>Reduction in Potable Water Intensity:</td>
<td>Reduce consumption by 2% annually for 26% total by FY 2020 (2007 baseline )</td>
<td>Green</td>
<td>• -19.3% vs. -16% goal</td>
<td>• BRAC square footage impacts</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>• 4% increase in water intensity in FY15 vs -2% goal</td>
<td>• Privatization of water systems has resulted in reduced waste and increased efficiency</td>
</tr>
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<td></td>
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<td></td>
<td>• Emphasis on water conservation and non-potable water for irrigation</td>
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</tr>
<tr>
<td>Reduction in Fleet Petroleum Use:</td>
<td>Reduce by 2% per year thru FY2020 (Base 2005)</td>
<td>Green</td>
<td>• Army wide usage has decreased 21% since FY05</td>
<td>• Efficient use of NTVs included in Energy OPORD</td>
</tr>
<tr>
<td></td>
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<td>• Alternative fuel usage has increased 800% since FY10 to 16% of total fuel in FY15</td>
<td>• Funded CNG station at Fort Benning</td>
</tr>
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<td></td>
<td>• USAG Bavaria purchased electric vehicle NTVs for DPW shop use</td>
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<tr>
<td>Solid Waste:</td>
<td>50% of Non-Hazardous Solid Waste Diverted from the Waste Stream by FY 2015</td>
<td>Green</td>
<td>• 50% diversion rate vs. 50% DoD SSPP FY15 goal</td>
<td>• Data from 6 installations under review</td>
</tr>
</tbody>
</table>
FY 16 Sustainment Allocation

Initial FY16 Total
$2,665,243.4K = 100% FSM
$2,136,171K = 80% FSM*

* Subject to change once actual allocations are developed and forwarded to IMCOM by ABO

Uses of sustainment funds:

- Regularly scheduled adjustments & inspections
- Preventive maintenance tasks
- Emergency response & service calls
- Major repairs or replacement of facility components that are expected to occur periodically throughout life cycle of facilities (e.g., roof replacement, refinishing of wall surfaces, repairing and replacement of heating and cooling systems, replacing tile and carpeting)
- Manpower payroll
**FY16 - R&M**

<table>
<thead>
<tr>
<th>Program Description</th>
<th>Approved – 20 JAN 16 ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe Infrastructure Consolidation*</td>
<td>$73.4</td>
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<tr>
<td>Cyberspace Strategy*</td>
<td>$118.1</td>
</tr>
<tr>
<td>Stationing (1&lt;sup&gt;st&lt;/sup&gt; TSC / 3&lt;sup&gt;rd&lt;/sup&gt; ESC)*</td>
<td>$18.2</td>
</tr>
<tr>
<td>Cadet Barracks Upgrade Program*</td>
<td>$81.1</td>
</tr>
<tr>
<td>Facility Reduction Program (QDEM)</td>
<td>$0</td>
</tr>
<tr>
<td>Army Energy and Utility Program R&amp;M (QUTM)</td>
<td>$17.0</td>
</tr>
<tr>
<td><strong>IMCOM 1-N List</strong></td>
<td></td>
</tr>
<tr>
<td>Recapitalization Deficit R&amp;M (ERVT)</td>
<td>Available Funds ($146.7)</td>
</tr>
<tr>
<td>Force Projection Outload Facility R&amp;M (EFPR)</td>
<td></td>
</tr>
<tr>
<td>Unaccompanied Housing Permanent Party R&amp;M (E4H8)</td>
<td></td>
</tr>
<tr>
<td>Initial Entry Training (IET) Barracks R&amp;M (E3H8)</td>
<td></td>
</tr>
<tr>
<td>Utility Repair Projects (QUTM)</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$454.5</strong></td>
</tr>
</tbody>
</table>

* = DA Leadership Initiatives
Example of MCA Achieving 50% saving

GreenGov Presidential Awards 2016:

13th CAB ASB Hangar, Fort Carson

136,377 SF aircraft maintenance facility including administrative & operations space, maintenance and repair shops, parts and tool storage, over 86,500 sf of aircraft maintenance bays. Design-Build (DB) Net Zero Energy Usage and LEED Platinum certified facility at the cost of LEED Silver.

Included a guaranteed energy savings over ASHRAE 90.1-2007 baseline facility (as required by the RFP and calculated in accordance with Appendix G of the standard) of 51% without renewable energy systems with an additional 49% savings through the use of renewable systems.

Examples of ECM features incorporated are increased building envelope thermal performance, detailing the air barrier to achieve leakage rate of 0.15 cfm/sf, transpired solar collection wall to preheat outdoor air during heating days, energy recovery from exhaust air streams to pretreat outside air, including dual gasketing on the hangar doors to limit air infiltration at the hangar, LED lighting with addressable ballasts, a building automation system automatically controlling lights with daylighting and occupancy sensors, timers and overrides, in-slab radiant heating system in the hangar to decrease forced air inefficiencies, a variable speed air compressor system, connecting the facility to a district cooling and heating plant, and incorporating a photovoltaic solar panel array that produces approximately 2,132 MWh of electricity annually.
IMCOM implements Army Policy

• Commands will implement Net Zero to the maximum extent practical and fiscally prudent

• use life-cycle cost analysis to assess any proposed new Net Zero initiative or project.

• Renovate as a high performance building for a 30% energy efficiency or Better compared to ASHRAE Standard 90.1 if fiscally prudent.

• Limited SRM Funding:
  - Limits ability to perform deep energy retrofits
  - Alternative financing methods required to execute energy projects
  - Combination of SRM and ESPC funding to execute deep energy retrofits?