Tennessee Valley Authority

January 2013 OMB Scorecard on Sustainability/Energy



Scope 1&2 GHG Emission Reduction Target

For Scope 1&2 GHG Reduction Target of 17% by 2020: 11.1% reduction in 2012 and on track



Scope 3 GHG Emission Reduction Target

For Scope 3 GHG Reduction Target of 21% by 2020: 1.6% **increase** in 2012 and behind schedule



Reduction in Energy Intensity

Reduction in energy intensity in goal-subject facilities compared with 2003: 21.2% and on track for 30% by 2015



Use of Renewable Energy

Use of renewable energy as a percent of facility electricity use: Total of 7.9% from renewable electricity sources including at least 2.5% from new sources (thermal, mechanical, or electric)



Reduction in Potable Water Intensity

Reduction in potable water intensity compared with 2007: 31.1% and on track for 26% in 2020



Reduction in Fleet Petroleum Use

Reduction in fleet petroleum use compared to 2005: 13.0% **increase** and not on track



Green Buildings

Sustainable green buildings: 1.02% of buildings sustainable



Score: GREEN

Score: RED

Score: GREEN

Score: GREEN

Score: GREEN



Standards for Success — Red Standard, Yellow Standard, Green Standard







Reduction in Energy

Intensity



GREEN: Achieved its 2012 Sustainability Plan proposed reduction for GHG Scopes 1&2 and is on track to achieve its 2020 target.

YELLOW: Achieved at least half of its 2012 Sustainability Plan proposed target for GHG Scopes 1&2.

RED: Did not achieve at least half of its 2012 Sustainability Plan proposed target for GHG Scopes 1&2 or did not provide trajectory for 2020.

GREEN: Achieved its 2012 Sustainability Plan proposed reduction for GHG Scope 3 and is on track to achieve its 2020 target.

YELLOW: Achieved at least half of its 2012 Sustainability Plan proposed target for GHG Scope 3.



compared with 2003.

RED: Did not achieve at least half of its Sustainability Plan proposed target for GHG Scope 3 or did not provide trajectory for FY 2020.

GREEN: Reduced energy intensity (Btu/GSF*) in EISA goal-subject facilities by at least 21 percent compared with 2003 and is on track for 30 percent reduction by 2015.

YELLOW: Reduced energy intensity (Btu/GSF) in EISA goal-subject facilities by at least 18 percent compared with 2003.



RED: Did not reduce energy intensity (Btu/GSF) in EISA goal-subject facilities by at least 18 percent





GREEN: Uses at least 5 percent electricity from renewable sources as a percentage of facility electricity use & at least 2.5 percent of facility electricity use comes from new sources (post-1999). (Thermal and mechanical renewable can be included in the 2.5 percent new requirement, but not the 5 percent goal; i.e., an agency meets all new sources requirement with thermal or mechanical energy (2.5 percent) but would still need an additional 5 percent from renewable electricity sources.)

YELLOW: Uses at least 5 percent renewable energy from electric, thermal or mechanical sources to power facilities and equipment; but less than half was obtained from new sources (post-1999) or part of the requirement was met with thermal and mechanical renewable energy.

RED: Did not use at least 5 percent renewable energy from electric, thermal or mechanical sources to power facilities and equipment.

GREEN: Reduced water intensity by at least 10 percent from final approved 2007 baseline and is on track for 26 percent reduction by 2020.

YELLOW: Reduced water intensity by at least 8 percent from final approved 2007 baseline.



RED: Did not reduce water intensity by at least 8 percent from final approved 2007 baseline.

Reduction in Fleet Petroleum Use



GREEN: Achieved a 14 percent reduction in petroleum use in its entire vehicle fleet compared to 2005 and is on track for 20 percent reduction by 2015.

YELLOW: Achieved at least 12 percent reduction in petroleum use in the entire vehicle fleet compared to 2005.

RED: Did not achieve at least 12 percent reduction in petroleum use in its entire vehicle fleet since 2005.





GREEN: Demonstrates implementation of Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (GP) for new, existing and leased buildings; and is on track to meet 15% goal by 2015 by reporting that at least 9% of buildings >5,000 GSF meet GP as reported in the Federal Real Property Profile (FRPP).

YELLOW: Incorporates Guiding Principles into all new design contracts for construction, major renovations and leases and at least 9 percent of GSF of its building inventory over 5,000 GSF meets GP as reported in FRPP.

RED: Cannot demonstrate compliance with GP on new construction, major renovations, or leases; and/or less than 9 percent of building inventory, either by number of buildings or GSF, over 5,000 GSF meets GP as reported in FRPP.

*GSF = Gross Square Footage

Details on January 2013 OMB Scorecard for FY 2012 Status

Scope 1 & 2 GHG Inventory, baseline & target - Status: Green

TVA has met its yearly Scope 1 & 2 goal provided in the Strategic Sustainability Performance Plan. TVA has a 17% reduction target for Scope 1 & 2 GHG emissions, which is currently based on reductions in building energy use, use of renewable energy, and reductions in light duty fleet petroleum energy use to be met by FY 2020.

Scope 3 Inventory, baseline & target - Status: Red

TVA has fallen behind in meeting its yearly Scope 3 goal provided in the Strategic Sustainability Performance Plan due to re-evaluation and updating of employee commuting data. TVA has a 21% Scope 3 GHG emissions reduction target, which covers emissions from employee business and commuter travel, municipal solid waste disposal, and waste water treatment and emissions related to transmission of power to TVA buildings that has to be met by FY 2020. TVA is implementing a reporting system for Scope 3 GHG accounting which should help us show reductions for next January's reporting.

Reduction in energy intensity for goal-subject buildings - Status: Green

TVA has consistently met building energy reduction goals and currently is using almost half the energy of the Federal average for goal-subject buildings.

Use of renewable energy in its buildings - Status: Green

TVA has consistently met renewable energy use goals in its buildings. TVA has already exceeded the 7.5% by FY 2013 goal.

Reduction in potable water - Status: Green

TVA has well exceeded the water reduction goal through the closing of its Muscle Shoals water plant, major water leak repairs, and water efficiency retrofits. Even though the goal is now met, TVA will continue to implement cost effective water-saving projects in its buildings to further reduce water use.

Reduction in fleet petroleum use - Status: Red

TVA's vehicle fleet has been historically excluded from past requirements due to the nature of its make-up, use, and its connection to "the operation and maintenance of the TVA power system." Going forward, TVA has agreed to apply the petroleum reduction goal and alternative fuel requirements to its light duty vehicles. Because TVA just recently became subject to fleet goals, it finds it difficult to catch up with the current requirement of a 14% reduction from 2005 baseline, but it is making its best effort.

Sustainable green buildings - Status: Red

TVA has continued retrofitting the Sustainable Guiding Principles (SGPs) in its two largest buildings, which, once completed, will well exceed the 15% requirement based on square footage. At the same time, TVA continues to retrofit a greater number of smaller buildings. To date, three buildings have been completed (met 100% of SGP requirements), construction modifications have been completed in an additional nine buildings, and design documents needed to meet SGP requirements have been completed in 18 more buildings.