Climate Adaptation Plan

2022 Progress Report

Agency	Department of the Treasury
Climate Adaptation Official	Trevor Norris, Acting Assistant Secretary for Management
Agency Climate Adaptation Webpage	https://home.treasury.gov/about/budget-financial-reporting-planning-and-performance/strategic-plan/goals-and-objectives/goal-4-combat-climate-change

SECTION 1: UPDATES ON PRIORITY ACTIONS

1. Priority action progress summary

Priority Action Progress			
Action	**Current Status**	**Completion**	**Brief Description of Progress**
Rebuilding Program Capacity	In Progress	2026	An additional subject matter expert has been recruited as a detailee to coordinate climate/sustainability initiatives. Climate Literacy Curriculum development is underway.
Sustainable Operations	In Progress	2026	As of June 2022, 33% of vehicles acquired for FY-22 were ZEV. Furthermore, several major renovations/construction efforts underway across the Department (detailed in Section 2).
Real Property	In Progress	2026	The Department of the Treasury and its bureaus are expanding telework and right-sizing their facilities portfolios which will reduce the associated climate risks. The Bureaus have also started compiling information for climate-related quantitative risk assessments.
Management of Procurement	In Progress	2026	Treasury's office of the Senior Procurement Executive has been participating with other federal agencies in the Chief Acquisition Officers on Climate working group to advance acquisition of sustainable products and services to reach net-zero emissions procurement by 2025. The IRS Office of the Chief Procurement Officer (OCPO) is also a leader in the implementation of Treasury's procurement strategy (detailed in Section 1.2).
Financial Investment	In Progress	2026	Treasury will be using its annual Budget Quarterly Performance Reviews (QPRs) with Treasury bureaus to identify climate-related budgetary requirements. Particularly noteworthy is the IRS's $19.2M in funding for climate-resilient, sustainable Treasury operations in Puerto Rico in FY-22. Treasury bureaus are developing plans for transitioning its entire fleet operations to electric vehicles (EVs), with the FY-22 incremental additional costs invested for EV leases estimated to be $2M.

2. **Priority Action Progress Examples:**
Include up to 5 examples of progress related to your priority actions. Limit the examples to 1 paragraph each. These examples are in addition to the high-level description in the table for Section 1. To the maximum extent possible, please apply five "SMART" criteria (Specific, Measurable, Attainable, Relevant, and Time-Bound).

Since October 2021, the Climate Literacy Working Group (CLWG) has begun developing an execution strategy for Treasury's climate literacy curriculum to maximize impact and empower agency executives and managers to incorporate resilience and adaptation in operational decision-making. CLWG is collaborating with subject-matter experts at the National Oceanographic and Atmospheric Administration (NOAA) to develop high quality content and training materials for the curriculum roll-out beginning in late-FY-22.

Since October 2021, Treasury has ordered 198 electric vehicles (or ~33% of all FY-22 acquisitions as of June 2022) despite the absence of dedicated appropriations for the transition to an electric fleet and with supply-chain constraints. Moreover, Treasury's Bureau Fleet Managers are completing EV Fleet Strategies for FY-22 through FY-27. The incremental cost estimates for EV acquisition will be incorporated into discussions on Treasury's Strategic planning and budget requirements for attaining its established targets.

Since October 2021, several Treasury Bureaus have made advancements in reducing property footprints and energy consumption. The Alcohol and Tobacco Tax and Trade Bureau reduced its real property footprint by 3.2%, the Bureau of Engraving and Printing reduced energy demand in its production facility through installation of smarter lighting (saving 1,850 MWh annually), and the Bureau of Fiscal Service achieved a 3.75% reduction in its data center footprint along with an 8% reduction in the number of applications hosted on its IT mainframe (and, thus, less energy consumed for storage).

Since October 2021, the IRS Office of the Chief Procurement Officer has estimated a baseline for the Bureau's procurement-associated Scope 3 emissions (greenhouse gas emissions not associated with onsite energy production or energy purchased from a provider), assessed climate-dependent risks associated with supply chains, and convened a sustainability working group to provide subject-matter expertise.

Since October 2021, the IRS began implementation of its $19.2M FY-22 plan designated for the expansion of its operations in Puerto Rico. This exceptional capital investment is intended to boost the climate-resiliency of Treasury's operations on the island and provide a significant employment opportunity.

SECTION 2: UPDATES ON OTHER INITIAL PLAN TOPICS

1. **Climate-Risk Reduction:**

   A. Does the agency use a structured method for assessing operating risk to climate-related hazards[1] (e.g., making facilities and infrastructure more resilient to climate hazards such as flooding, extreme heat)?
   Yes

[1] Climate hazards or physical climate risks can be either acute or chronic. Acute risks include droughts, floods, extreme precipitation and wildfires, and extreme temperatures. Chronic risks include slowly rising temperatures, sea level rise etc.

i. If yes, how, and what type of risk was reduced (facilities, infrastructure)? **Because Treasury's Bureaus have diverse missions and operations, the Department issued broad guidelines rather than overly restrictive instructions for conducting climate risk assessments. The following factors were highlighted for consideration: flooding, sea level rise, extreme temperatures, drought, wildfires, landslides, severe weather, and low water or air quality. Through expansion of telework and subsequent rightsizing of facility footprints, risks from flooding, extreme heat, and wildfires have been reduced across Bureaus and Main Treasury. See the attached Climate Change Risk Assessment, Adaptation, and Resilience Check List (Appendix II).**

ii. If no, what barriers exist for developing a robust assessment of climate risk exposure?

B. Did the agency use a method for assessing fiscal risk exposure due to climate change (e.g. likely changes in asset values as a result of physical climate risk and/or climate policy impacts)? **Yes**

iii. If yes, what are the major financial risks expected in the near term and in the longer term? **The Climate Change Risk Assessment, Adaptation and Resilience Checklist includes a review of vulnerabilities that may impact the delivery of public services (e.g., mailing tax refunds), as well as building/infrastructure repairs, both of which can be directly quantified in fiscal terms. The intent is for the bureaus to document their risk exposure including mitigation cost estimates and associated loss of operational capacity attributable to climate-related disruptors. For example, the Bureau of Engraving and Printing is constructing a new, weather-resilient production facility in Maryland, greatly reducing operational risks compared to the current older Washington D.C. facility. Also, the new IRS facilities in Puerto Rico are incorporating climate-resilient features into their location and architecture to minimize the risk of weather-related disruptions to operations.**

iv. If no, what barriers exist for developing a robust assessment of climate risk exposure?

C. What agency actions have been taken since October 2021 and what planned actions over the next year will help to reduce the agency's climate related financial risks? **The Main Treasury Building is currently undergoing extensive repair and restoration work to weatherize and update its exterior façade, preventing water intrusion into the historic landmark structure. Its emergency backup power capabilities are being assessed for its ability to sustain operations should there be a localized failure in the power grid. Expansion of telework capabilities will allow the workforce to continue essential functions if the Main Treasury buildings were catastrophically impacted by a climate-related event such as flooding or power disruptions.**

2. **Climate Vulnerability Assessments:**

A. Has the agency completed its climate vulnerability assessment? **No**

i. If yes, how have you incorporated it into agency policies and decision-making?

ii. If no, when will the vulnerability assessment to be completed? **As indicated in the Department of the Treasury's Climate Action Plan, Treasury will begin to address real property and operational vulnerabilities and risks over a five-year period (FY-21 through FY-26). The assessment checklist was issued to the bureaus in November 2021 along with guidance for development of Bureau Climate Action Plans (B-CAPs). This vulnerability assessment will include the potential costs associated with climate-related disruptions, alongside the costs associated with weatherization upgrades to facilities (both at the rough-order-of-magnitude or ROM level). While no hard deadline was set for completion, bureaus have been working on risk assessments and a Department-wide assessment report is expected to be completed by FY24 and communicated to the Treasury Operations Executive Council.**

3. **Climate Literacy:**
   A. Has the agency conducted or begun to develop climate training programs on a broad scale? **Yes**
   B. How is the agency fostering a culture of knowledge and practice for climate adaptation? **In addition to the initial Climate Literacy content development and roll-out, the Department aims to schedule several live (online/virtual) follow-up sessions for colleagues to ask questions or express ideas to their peers and subject-matter experts to cultivate a learning community. A push is also being made to incorporate a Climate and Sustainability section into Department-wide newsletters that compiles important developments on policy, science, and technology in this space; where applicable, direct links to the Treasury's mission will be highlighted.**
   C. How did employees put the knowledge into practice? **The Climate Literacy curriculum will empower employees to take steps at the individual, collective, and agency-wide levels. There will be a focus on small yet meaningful actions (e.g., reducing individual waste generation, making energy-efficient decisions for home/cars, etc.) alongside broader collective efforts (e.g., supporting local resilience groups, voting, and shaping policy), and examples of successes at both levels will be critical to achieving change.**

4. **Tribal Engagement:**
   A. Did implementation of the Plan include consideration of Tribal Treaty Rights? **No**
      i. If yes, how and what were the results?
      ii. If no, what actions (e.g. consultation, policy and guidance development, staff training, grant awards, etc.) has the agency identified to further support integration of Tribal Treaty and Reserved Rights in your Climate Adaptation Plan? **The Department of the Treasury has two main collaborative entities with Tribes: Tribal Consultations and the Treasury Tribal Advisory Committee. Both maintain the government-to-government relationship critical for mutual mission success, and our operations staff will consult with these bodies to determine how best to engage and support the needs of the tribes.**
   B. Did implementation of your Plan include consideration of Indigenous Traditional Ecological Knowledge (ITEK)? **No**
      i. If yes, how?
      ii. If no, what action(s) has the agency identified to further support integration of ITEK in your Climate Adaptation Plan? **In line with the goal to ensure Tribal perspectives are incorporated into the CAP, ITEK will play an integral role in ensuring that Tribal sovereignty is respected. Treasury's overall environmental justice efforts are sensitive to, and supportive of, the interests of indigenous communities.**

5. **Environmental Justice:**
   A. Has the agency considered environmental justice in the implementation of the Plan? **Yes**
      i. If yes, how? **The IRS operations in Puerto Rico are being fortified through new infrastructure investments in facilities designed to withstand severe weather events. Due to Puerto Rico's geographical location, it is particularly vulnerable to disruption from hurricanes, which cause widespread destruction and impose a disproportionate economic, environmental, and public health burden on the American citizens living there. This investment will not only create jobs, but also allow for increased taxpayer access to bi-lingual services. An estimated 2000 new federal positions will be created on the island, which has a median household income of less than $21,000 (or 32% of the US median household income). Additionally, Treasury encourages positive changes in procurement policy through the FAR Council, including prioritizing procurements to support disadvantaged communities that are more heavily impacted by climate change.**
      ii. If no, what action(s) does the agency intend to take to incorporate environmental justice into the Plan?

6. **Partnerships:**
   A. Since October 2021, did the agency expand existing or establish new interagency or external partnerships on climate adaptation? **Yes**
      i. If yes, describe in a few sentences. **The Department of the Treasury has partnered with the National Oceanic and Atmospheric Administration (NOAA) to develop and deliver its climate literacy curriculum. Involvement in an interagency working group regarding implementation of federal Climate Action Plans led to the discovery of the science communication branch at NOAA, and subsequent conversations with their colleagues initiated the partnership. NOAA's SMEs have experience communicating science to educated non-experts (such as those within the Department of the Treasury workforce), and, in taking advantage of NOAA's wealth of educational material on climate change and resilience, Treasury will avoid duplicating NOAA's existing efforts.**
      ii. If no, what opportunities exist over the next year to expand partnerships or create a new partnership?

SECTION 3: NEW TOPICS FROM E.O. 14057

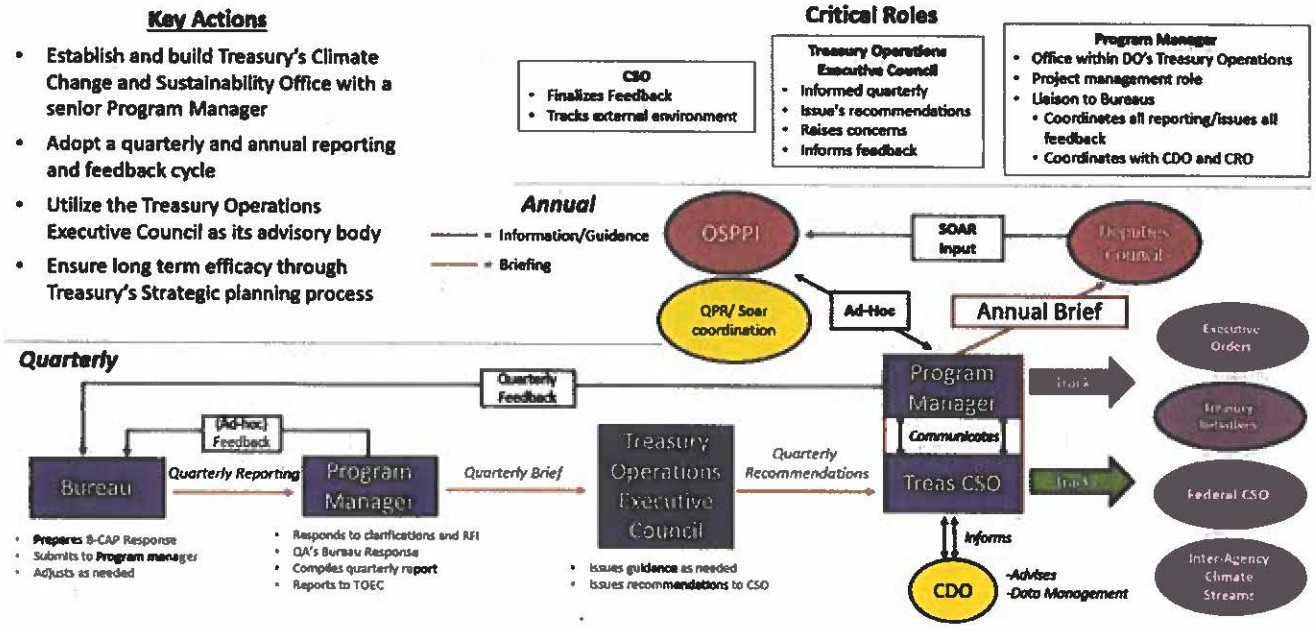
1. **Policy Review:**
   A. What is the agency's approach to reviewing agency policies to ensure climate-resilient investment and to removing maladaptive policies and programs (Section 209 of Executive Order 14057)? **The Department of the Treasury is currently gathering estimates of the funding that will be required to meet the administration's climate goals under E.O. 14057 (e.g., current efforts to project future costs associated with the zero-emission vehicle acquisition goals to make sure that Treasury gets what it needs to operate). This way, the Department can more-effectively collaborate and advocate to OMB the need for the funds since they will be itemized and tied directly to the President's agenda. Furthermore, Treasury is participating in inter-agency conversations regarding home-to-work-assigned electric vehicle charging infrastructure, which has been identified as an administrative barrier to agency compliance with E.O. 14057.**
      i. What, if any, barriers have you identified to completing this policy review? **Potential barriers may include access to accurate/representative data for cost estimation, as well as adequate vehicle supply, on the part of GSA and automotive suppliers.**

2. **Climate Scenario Analysis:**
   A. Does the agency use climate projections in decision-making? **No**
      i. If yes, what approach was taken to incorporating it into agency process and decisions?
      ii. If no, how does the agency plan to incorporate climate projections in future planning? **The Department currently makes strategic plans to promote operational adaptation and resilience by incorporating and considering the general projections from the National Climate Assessments. The incorporation of climate scientists into significant adaptation and resilience operational decisions to ensure that more detailed quantitative projections will be considered is a Department goal for the future. Furthermore, the Climate Literacy curriculum will empower other change-makers at the Treasury to consider detailed modeling projections as these can inform the anticipated returns or risks associated with certain investments or policies.**

   B. Does the agency have the climate data and information it needs for its decision-making? **No**
      i. If yes, what is the primary information source(s)?
      ii. If no, what would be helpful to have? **To support its strategic planning for operational adaptation and resilience, the Department of the Treasury needs ready access to a central repository of climate data (quantitative, machine-readable information) in**

multiple formats (shapefiles, excel tables, csv files, etc.), as well as data analysts and subject matter experts who can understand, analyze, and use the data to propose and support policy decisions. Climate information, qualitative and quantitative, is being used broadly to consider climate implications for operations and facility risks. All would benefit from the development and pooling of greater resources for interagency shared use.

C. Identify the offices within the agency that are already incorporating climate information into decision-making. Use of a visual or organizational chart is encouraged. **The graphic below highlights the key stakeholders within the Department of the Treasury involved with implementing and assessing progress on Treasury's Climate Action Plan.**



Janet L. Yellen

08-08-2022

Janet L. Yellen
Secretary of the Treasury

Date

Appendix I: Climate Change Risk Assessment, Adaptation, and Resilience Check List

In response to Section 211 of Executive Order 14008 (Tackling the Climate Crisis at Home and Abroad), Treasury issued its Climate Action Plan that requires Treasury Bureaus to develop bureau-level Climate Action Plans. When creating their plans, bureaus should conduct a vulnerability assessment to identify those climate change impacts that create a potential operational vulnerability in the bureaus' operations, and based on those risks, establish up to five adaptation climate actions.

Recommended below is a strategy for developing climate actions for bureaus to undertake and a checklist of issues to consider.

1. **Identify known climate change related effects that may create vulnerabilities for Bureau programs and operations**

   Consider all known climate change related effects that can impact, or have already impacted, a bureau, its facilities, fleet, and workforce including:

   - Flooding or sea level rise
   - Extreme temperatures (heat and cold)
   - Drought, wildfires
   - Landslides
   - Violent weather events (hurricanes, tornadoes, and severe storms)
   - Water quality, including contamination
   - Air quality and associated health impact

2. **Conduct a vulnerability assessment**

   Consider the likelihood and magnitude of climate change related effects to identify how they may pose a risk to bureau's programs, operations, facilities, and other assets, overall mission, the communities we serve, and fiscal exposure. Examples include:

   - Loss of facility usage or damage to the facility
   - Commuter access restrictions
   - Supply chain disruptions
   - Power grid outages, including brown outs
   - Loss of vehicular usage
   - Dependency on carbon-based fuel
   - Computer network interruptions or loss of service
   - Lack of subject matter experts and lack of access to information
   - Insufficient staff education on how their jobs relate to climate change
   - Inability to access the public for delivered services
   - Higher exposure of certain underserved social economic communities

3. **Develop adaptation actions in response to vulnerabilities and risks**

   Consider what adaptation actions the bureau will undertake in response to vulnerabilities and risks potentially affecting bureau operations and mission, such as:

   - Purchase Renewable Energy Credits (RECs) to incentivize the energy sector to move to renewable, sustainable energy sources

- Develop a 4-year plan to transition the vehicular fleet to electric vehicles (EV), plug-in electric vehicles (PEV), and hybrid electric vehicles during each GSA Fleet ordering cycle using the federal ZPAC Tool. Note that the Federal Chief Sustainability Officer may provide additional guidance to federal departments and agencies in the near future.
    - If a replacement vehicle needed must be a regular non-electric, non-hybrid vehicle, give notice to the Treasury Fleet Manager as soon as possible and provide justification that is specific for each vehicle replacement no later than December 31
    - Identify all Treasury locations at which charging stations can be installed
- Train staff on climate change and the programmatic and operational vulnerabilities potentially created by those changes
- Develop climate change subject matter experts within the workforce
- Establish worksite options and flexibilities, including mobile teleworking capabilities and/or additional alternate worksites), to ensure continuity of operation and worker safety
- Collaborating with other bureaus and federal agencies to diversify worksite locations and mission resilience
- Establishing key capabilities and systems
    - Onshore and local supply chains
    - Emergency power systems
    - Alternate data centers
    - Relocate facilities
    - Conduct emergency weather event preparation exercises
    - Procure services and supplies from climate resilient sources to ensure additional and separate secondary options are available when needed
- Consider flood plain area locations and seasonal ground water elevation for facility siting and selection, with attention to regions that are more highly prone to increased intense cycles in seasonal storms occurrences
- Seek to harden and make secure operating facilities, especially from water intrusion, such as roofing, sealed basements, below grade building areas
- Install facility back-up electric energy supply, generators, or battery UPS hardware-based systems been
- Plan to include environmental justice considerations to ensure Treasury services are available to support the needs of regions that are more prone to, and are negatively impacted by, the impacts from climate change
- Plan to include environmental justice consideration for financial investment that aids in the development of the economy and infrastructure for communities or geographic areas that are disproportionally affected by climate change effects

4. **Estimate the costs associated of adaptation actions**

   Per the Treasury Climate Action Plan, for each of the adaptation actions, provide an estimated cost (rough order of magnitude, if necessary) anticipated for each year of the B-CAP and indicate if the budgetary resources have already been programmed, or planned, in that year's budget. Provide a total cost of all of the adaptation actions for the entire B-CAP, and what additional funding is required to support the plan.