

Memorandum
CLIMATE-RELATED
FINANCIAL DISCLOSURE FRAMEWORK
April 7, 2023

To: Members of the Board

From: Robin M. Gilliam, Assistant Director

Thru: Monica R. Valentine, Executive Director

Subject: **Agency Climate-related Reporting Research** (Topic A)

INTRODUCTION

Staff presents research on Federal Legislative Acts and Presidential Executive Orders that are currently directing agency climate-related activity and reporting.

REQUEST FOR FEEDBACK BY April 14, 2023

Prior to the Board's April meeting, please review the attached staff analysis and respond to the ensuing questions on page 26 by **April 14, 2023**. Please submit responses to Robin Gilliam at gilliamr@fasab.gov with a cc to Monica Valentine at valentinem@fasab.gov.

NEXT STEPS

Staff will continue to present education and discussion sessions on research findings to help the Board develop a climate-related financial disclosure framework.

ATTACHMENTS

1. Staff Analysis

Staff Analysis

CLIMATE-RELATED FINANCIAL DISCLOSURE FRAMEWORK

April 7, 2023

Topic A - Attachment 1

Context

The objective of the Climate-related Financial Reporting project is to develop a climate-related financial disclosure framework. The project is currently in the research phase. The following research is intended to address previous Board questions.

Research Completed:

At the December 2022 Board meeting, staff presented an education and discussion session to address the following questions: Which governments are using the Task Force for Climate-related Financial Disclosures (TCFD) for disclosures in their financial reports? How are these governments implementing TCFD, the challenges, and lessons learned?

Members learned that Canadian cities are the only government implementing TCFD reporting. That TCFD was not the only model the Canadian cities used—some cities created their own framework from multiple models to report on ESG [environmental, social, and governance] and not just climate; and the cities determined the scope of ESG/climate reporting by understanding what is material and relevant to stakeholders.

At the February 2023 Board meeting, staff presented an education and discussion session to brief the Board on SEC's proposed climate-related reporting rules and common themes from the 12K+ comment letters received. Members learned that SEC is proposing:

1. Climate-related disclosures in a separately captioned section, to improve the consistency of and accessibility to information that investors can identify and analyze;
2. Two types of assurances:
 1. The first will be for the climate-related disclosures, such as the financial metrics in the S-X proposed amendments. Those would be included in the financial statement footnotes and would be subject to the financial statement audit.
 2. A separate requirement is for greenhouse gas (GHG) emissions scopes 1 and 2 metrics that is a phased-in attestation requirement that starts with a limited assurance in fiscal years two and three, after the Scope 1 and 2

emission disclosure compliance date. Then there is a reasonable assurance for fiscal year four and beyond. This attestation assurance would be applicable to accelerated filers and large accelerated filers under the proposal. There is an accommodation for smaller filers.

STAFF RESEARCH AND ANALYSIS

This memorandum presents staff research to address the following Board questions related to agency climate-related reporting:

- I. What types of reporting are agencies currently using to comply with the various Federal climate-related Legislative Acts and Presidential Executive Orders?
 - II. What information are agencies reporting in financial reports based on the OMB A-136 optional and required climate-related reporting?
 - III. Can FASAB leverage and reference current agency climate-related reporting, including climate-related risks, to help users understand the reporting entity's ability to sustain operations?
-
- I. What types of reporting are agencies currently using to comply with the various climate-related Federal Legislative Acts and Presidential Executive Orders?**

To address this question staff polled the climate task force (CTF) agencies. The CTF includes 14 of the 24 CFO Act agencies:

1. Department of Agriculture (USDA)
2. Department of Commerce (Commerce)
3. Department of Defense (DOD)
4. Department of Energy (Energy)
5. Department of Health and Human Services (HHS)
6. Department of Homeland Security (DHS)
7. Department of Housing and Urban Development (HUD)
8. Department of the Interior (Interior)
9. Department of Transportation (DOT)
10. Department of the Treasury (Treasury)
11. Department of Veterans Affairs (VA)
12. Environmental Protection Agency (EPA)
13. General Services Administration (GSA)
14. National Aeronautics and Space Administration (NASA)

A. Climate-related Federal Legislative Acts CTF agencies are responding to and reporting on.

As of the end of January 2023, CTF agencies reported on the following six Federal Legislative Acts that are driving their climate-related activity and related reporting.

1. **U.S. Code: Title 10 Acts - DOD** addresses seven climate-related matters in U.S. Code: Title 10 Acts for national defense. DOD provides compliance reporting, includes some information in A-136, and includes FY2020 National Defense Authorization Act (NDAA) information in annual budget submission.
2. **U.S. code 42 Acts - Interior** addresses seven climate-related matters in related to energy policies for U.S. code 42 Acts. Interior provides compliance (non-federal) reports for each of these acts.
3. **Public Law (PL) 111-11, Section 9505, Secure Water Act of 2009**, CTF agency **Interior, Bureau of Reclamation**, provided the following information.

Reclamation's mission is to manage, develop, and protect water and related resources. Reclamation has many programs related to water conservation including resiliency, efficiency, and recycling. The AFR also addresses the status and risk of drought. Discussions are in the MDA, in note about funds from dedicated collections, and Other Information (OI) OMB A-136.

The FY2022 Interior agency financial report (AFR) provides a general statement regarding the possibility of loss of hydropower revenues if Lake Mead or Lake Power fall below the minimum elevation needed to run the dams' hydroelectric plants. The AFR states Lake Mead will operate in Level 2 Shortage Condition and provides the percentage of reduction required for FY2023. This is in OI per OMB A-136.

4. **PL 117-58, Infrastructure Investment and Jobs Act (IIJA)**

USDA explained:

- With a \$2 billion investment through loans and grants as part of the ReConnect Program, the Bipartisan Infrastructure Law is funding the construction, improvement, or acquisition of facilities and equipment needed to provide high-speed internet service in eligible rural areas.
- USDA's Natural Resources Conservation Service (NRCS) is investing \$918 million to safeguard health and the environment in rural communities by maintaining and upgrading community drinking and wastewater systems. These projects – which focus on previously underserved communities – include new dam construction, flood prevention projects, repairs to existing watershed infrastructure and more.

- USDA's Forest Service is investing around \$5.5 billion from the Bipartisan Infrastructure Law across the shared landscape, reducing wildfire risk, restoring healthy, productive forests, and improving environmental, recreation and economic infrastructure.

USDA provides citizen updates through fact sheets and news releases.

For example, <https://www.usda.gov/infrastructure>

<https://www.fs.usda.gov/managing-land/infrastructure>

For one-year accomplishments: <https://www.usda.gov/media/press-releases/2022/11/15/fact-sheet-one-year-bipartisan-infrastructure-law-usda>

Interior explained that the Bureau of Safety and Environmental Enforcement is

- working on the decommissioning of offshore wells and remediation of related sites that either contribute to climate impacts or have climate risk exposure,
- developing regulations for a new offshore program and activity, and
- reducing carbon dioxide through offshore injection and long-term storage below the seabed

5. **PL 117-169**, *Inflation Reduction Act (IRA) of 2022*

USDA explained that the IRA provides USDA with nearly \$40 billion to invest over the next 10 years to improve life and livelihoods in rural communities, including by expanding programs for climate-smart agriculture and forestry, renewable energy and energy efficiency, and protection from wildfires; and will invest:

- nearly \$20 billion to support farmers, ranchers, and private forest landowners working to reduce greenhouse gas emissions, increase storage of carbon on their lands, and make their operations more productive;
- \$13.4 billion for the long-term resilience, reliability, and affordability of rural electric systems. The investment will support financial assistance to purchase renewable energy, other zero-emission systems, and energy efficiency improvements that will achieve the greatest reduction in greenhouse gas emissions associated with the rural electric system; and
- \$5 billion to protect communities from the risks of extreme wildfires, conserve forests with significant carbon sequestration benefits, and cool communities vulnerable to the threats of extreme heat.

6. **PL 117-221**, December 5, 2022, *Disaster Resilience Planning Act*, **GSA** explained the following about upcoming guidance required for property asset management and investment decisions by the agency.

SEC. 3. GUIDANCE.

(a) **IN GENERAL.**—Not later than 180 days after the date of enactment of this Act, the Director shall establish guidance requiring the head of each agency to incorporate natural disaster resilience into real property asset management and investment decisions made by the agency.

(b) **CONTENTS.**—The guidance required under subsection (a) shall direct each head of an agency to incorporate assessments of natural disaster risk information conducted by the agency, such as from vulnerability and other risk assessments, into real property asset management investment decisions made by the agency.

(c) **MODIFICATION.**—The Director may periodically update the guidance required under subsection (a) as the Director may determine necessary for the purpose of further enhancing natural disaster resilience.

B. Climate-related Presidential Executive Orders (EO) that CTF agencies are responding to and reporting on:

As of the end of January 2023, CTF agencies reported on the following eight executive orders (EO) that are driving their climate-related activity and related reporting.

1. **EO 13990**: January 20, 2021, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. **DOD, Interior**, and **USDA** provide information about the implementation of EO 13990 in their financial reports according to A-136¹
2. **EO 14008**: January 27, 2021, *Tackling the Climate Crisis at Home and Abroad*

*Sec. 211. (a) Calls for: **Climate Action Plans (CAP)** and Data and Information Products to Improve Adaptation and Increase Resilience. ...Action plans should, among other things, describe the agency's climate vulnerabilities and describe the agency's plan to use the power of procurement to increase the energy and water efficiency of United States Government installations, buildings, and facilities and ensure they are climate-ready.*

Agencies shall consider the feasibility of using the purchasing power of the Federal Government to drive innovation, and shall

¹ Please see Section II for OMB-A136 staff research and analysis

seek to increase the Federal Government's resilience against supply chain disruptions. Such disruptions put the Nation's manufacturing sector at risk, as well as consumer access to critical goods and services. Agencies shall make their action plans public, and post them on the agency website, to the extent consistent with applicable law.

Agencies released their CAP and Resilience Plans in October 2021, and are posted to agency websites and on [sustainability.gov](https://www.sustainability.gov)

*Sec. 211 (c) After submitting an initial action plan, the head of each agency shall submit to the Task Force and Federal Chief Sustainability Officer **progress reports annually on the status of implementation efforts**. Agencies shall make progress reports public and post them on the agency website, to the extent consistent with applicable law.*

- **Commerce, DOD, DOT, Energy, EPA, GSA, Interior, Treasury, USDA, and VA** said their climate adaption plans could be found at www.sustainability.gov and that they provided these references in their MD&As as required by OMB A-136.
- **USDA** also explained about the Partnerships for Climate Smart-Commodities that will build and expand market opportunities for American commodities produced using climate-smart practices through pilot projects, positioning American producers as global leaders in climate-smart agricultural production.

For example, USDA will invest up to \$2.8 billion in 70 selected projects under the first pool of this funding opportunity; and \$325 million in an additional 71 projects under the second funding pool. [The Commodity Credit Corporation (CCC) provides the funding. USDA has authority under the CCC Charter Act Section 5(e) to use the CCC to aid in the expansion of markets for agricultural commodities.]

3. **EO 14017:** February 24, 2021, *America's Supply Chains*. **DOD** provides this information in the financial reports per OMB A-136 required and recommended climate-related reporting. **USDA** provides information about this executive order on their website. [Physical risk]
4. **EO 14030:** May 25, 2021, *Climate-Related Financial Risk*. **DOD, GSA, Treasury,** and **USDA** said their financial reports include information about the implementation of EO 14030 per OMB A-136 recommendations and requirements.
5. **EO 14037:** August 5, 2021, *Strengthening American Leadership in Clean Cars and Trucks*. **Interior** said that information about implementing EO 14037

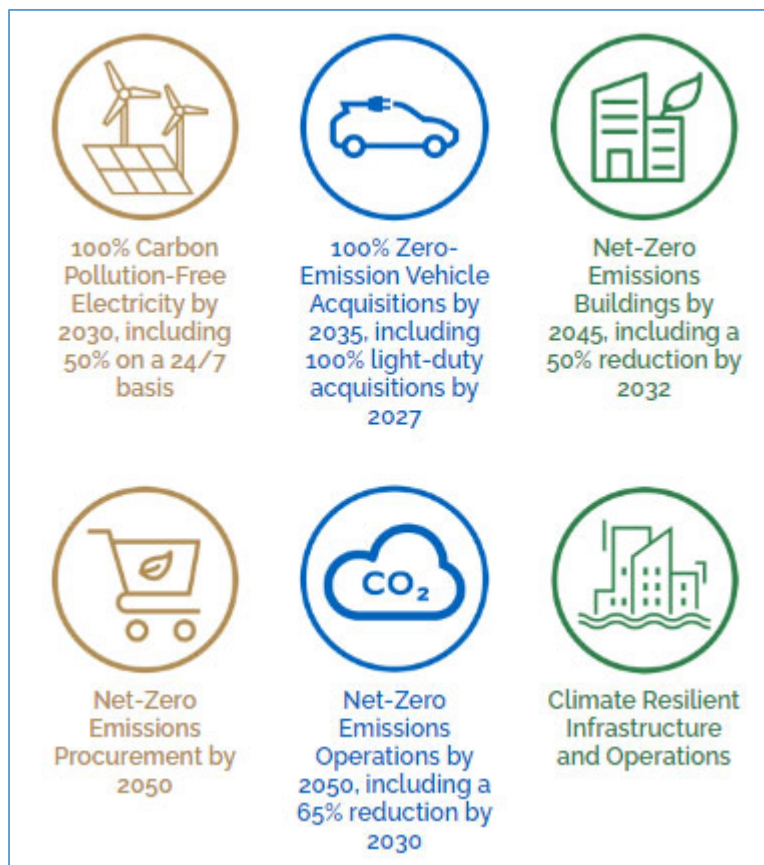
is reported annually in the bureau's Energy Data Report [percentage based, not financial]

6. **EO 14057**, December 8, 2021, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*.

Per [sustainability.gov](https://www.sustainability.gov)

President Biden's Executive Order 14057 on catalyzing American clean energy industries and jobs through Federal sustainability and accompanying Federal Sustainability Plan (collectively referred to as "The Federal Sustainability Plan") sets out a range of ambitious goals to deliver an emissions reduction pathway consistent with President Biden's goal of reducing U.S. greenhouse gas emission by 50–52 percent from 2005 levels by 2030 and limiting global warming to 1.5 degrees Celsius, as the science demands.

Through the Federal Sustainability Plan, the Federal Government will achieve the following:



- **Commerce, DOD, Energy, Transportation, GSA, Interior, USDA,** and **VA** referred us to their link at [sustainability.gov/agency.html](https://www.sustainability.gov/agency.html)

- **Interior** noted that they report annually as part of their Enterprise Risk Management (ERM) procedures.
 - **Interior** explained that the Bureau of Safety and Environmental Enforcement is reducing waste and pollution, single-use plastics, bureau greenhouse gas emissions, increasing energy and water efficiency, and transitioning to a zero-emission vehicle fleet.
7. **EO 14072**, April 22, 2022, *Strengthening the Nation's Forests, Communities, and Local Economies*. **USDA** includes information on their website about the work they are doing in relation to this executive order, such as press releases.
 8. **EO 14081**, September 12, 2022, *Executive Order on Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe, and Secure American Bioeconomy*. **USDA** is responding to this executive order, which includes a plan, and annual progress updates.

II. What information are agencies reporting in financial reports based on OMB A-136 optional and required climate-related reporting?

Staff collected information for this section from the CTF agencies, OMB A-136, *Financial Reporting Requirements for 2022*, and the analysis of the 24 CFO Act agencies in the *Financial Report of the United States Government, Management's Discussion and Analysis, Reporting on Climate Change (pages 35-38)*.

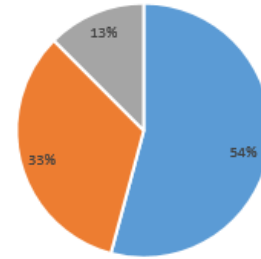
- A. **OMB A-136, II.2.6 Forward-Looking Information** - recommends that agencies report climate-related forward-looking information in the MD&A as follows:

For FY 2022, significant entities should summarize any efforts taken or planned to assess, measure, and mitigate any significant climate-related risks that could affect the entity's performance, financial position, or financial condition. The risks include risks to assets (such as property, plant, and equipment, and loan portfolios), liabilities (including loan guarantee liabilities), contingent liabilities, and program costs.

Staff reviewed and consolidated information from the CTF agency responses and the remaining 24 CFO Act agencies to determine how many discussed forward-looking climate-related information in MD&A. Staff presents the following results.

Forward-Looking Climate-related Information Discussed in MD&A		
	1 DHS	CTF
	1 DOI	CTF
	1 DOJ	Non-CTF
	1 DOL	Non-CTF
	1 DOS	Non-CTF
	1 GSA	CTF
	1 HUD	CTF
	1 NASA	CTF
	1 SBA	Non-CTF
	1 SSA	Non-CTF
	1 USAID	Non-CTF
	1 USDA	CTF
	1 VA	CTF
Discussed forward-looking climate-related information in MD&A		
Subtotal	13	
	1 DOC	CTF
	1 DOD	CTF
	1 DOE	CTF
	1 DOT	CTF
	1 EPA	CTF
	1 HHS	CTF
	1 NSF	Non-CTF
	1 Treasury	CTF
Included climate-related information in MD&A but not specifically referenced as forward-looking		
Subtotal	8	
	1 Education	Non-CTF
	1 NRC	Non-CTF
	1 OPM	Non-CTF
Did not discuss climate in MD&A		
Subtotal	3	
Discussed forward-looking climate-related information in MD&A	54%	
Included climate-related information in MD&A but not specifically referenced as forward-looking	33%	
Did not discuss climate in MD&A	13%	

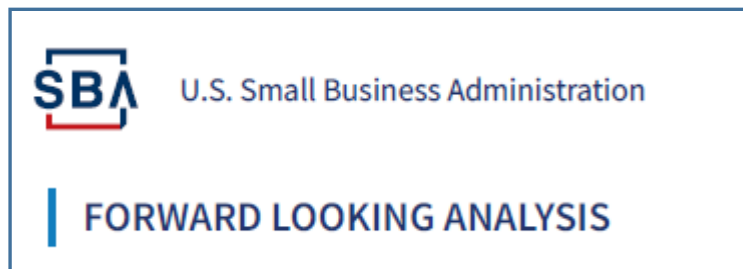
% of Agencies Discussed Forward Looking Climate Information in MD&A



- Discussed forward-looking climate-related information in MD&A
- Included climate-related information in MD&A but not specifically referenced as forward-looking
- Did not discuss climate in MD&A

AGENCY MD&A REPORTING EXAMPLES

SBA included the following forward-looking information about climate change in MD&A:



Climate Crisis

A natural disaster can destroy lives, businesses, and communities. Moreover, natural disasters have become more intense and more costly. In 2021, the U.S. experienced 20 separate billion-dollar weather and climate disaster events, second only to the record 22 separate billion-dollar events in 2020.¹⁶ Although the SBA has programs that can respond to hurricanes, tornados, forest fires, and floods, the growing threat and number of these occurrences remains a serious concern. Disaster preparedness is a key component of the SBA's Disaster Assistance program and has helped many small businesses prepare for the unexpected. Research shows that for every \$1 spent on hazard mitigation, up to \$6 in future disaster recovery costs are saved.¹⁷ In 2022, the SBA spotlighted the promotion of its disaster mitigation loan option through an Agency Priority Goal to drive increased awareness of this mitigation option and encourage businesses and homeowners to invest in their own preparedness. By financing property improvements that help prevent future damage caused by flooding, fires, severe winds, or other natural disasters, businesses and homeowners can proactively reduce the impact of future disasters and shorten recovery time when disasters do occur. The SBA continues to modernize its response in communities that have experienced a natural disaster event by updating technology and streamlining its ability to onboard staff.

In addition to the Disaster Assistance program, the SBA is responding to Executive Order 14057 *Catalyzing Clean Energy Industries and Jobs through Federal Sustainability* by prioritizing resources for the operation and procurement of electric vehicles and associated charging infrastructure. The Agency will only replace vehicles from the existing fleet when necessary, to accomplish the transition to a motor vehicle fleet of clean and zero-emission vehicles.

State included the following forward-looking information about climate change in MD&A:

Forward-Looking Information

Climate Change

President Biden has declared combating the global climate crisis as one of the four "historic" crises confronting the United States, and reasserting U.S. leadership on climate as one of his highest international priorities. On January 27, 2021, he issued Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad, which committed the Administration to "put the climate crisis at the center of foreign policy and national security."

Under this Order, the President created the position of the Special Presidential Envoy for Climate (SPEC). He named former Secretary of State John Kerry to hold the position with a mandate to lead diplomatic engagement on the climate crisis, exercise climate leadership in international fora, increase international climate ambition and ensure that climate change is integrated into all elements of the Administration's foreign policy-making processes. The SPEC office is playing a leadership and coordinating role across all relevant U.S. agencies and elements of the Department, including the Department's existing climate diplomacy structures, to execute the climate diplomacy mission.

The Department's Bureau of Oceans and International Environmental and Scientific Affairs, Office of Global Change (OES/EGC) has been the Department's long-running permanent program office for climate issues. SPEC Kerry, the SPEC staff office, and OES/EGC staff are fully integrated and coordinated in advancing the Administration's international climate policy strategy. The agency's Chief Sustainability Officer, the Under Secretary for Management, has oversight on climate risks to Department operations. The Chief Sustainability Officer is supported by the Deputy Chief Sustainability Officer and Greening Diplomacy team in the Office of Management Strategy and Solutions, which coordinates relevant plans and actions across the Department. Refer to the Other Information section of this report for more information on Climate-Related Financial Risk, the Department's Climate Adaptation and Resilience Plan (CARP), and work to date to assess and mitigate climate risks for the Department's supply chains, facilities, and personnel.

USAID compared the net costs for their climate related efforts from FY2021 to FY 2022 in MD&A.

COMPARISON OF FY 2022 AND FY 2021 NET COSTS BY PROGRAM AREA

(In Thousands)

Categories	Program Areas*	FY 2022	FY 2021	Difference (\$)
Democracy, Human Rights and Governance	Good Governance	\$ 573,624	\$ 625,009	\$ (51,385)
	Civil Society	421,167	321,669	99,498
	Political Competition and Consensus-Building	161,264	163,374	(2,110)
	Human Rights	120,736	104,626	16,110
	Rule of Law (ROL)	117,292	159,002	(41,710)
	Independent Media and Free Flow of Information	82,726	79,940	2,786
Democracy, Human Rights and Governance Total		1,476,809	1,453,620	23,189
Economic Growth	Macroeconomic Foundation for Growth	8,272,656	56,667	8,215,989
	Agriculture	1,030,332	848,309	182,023
	Private Sector Productivity	536,138	378,682	157,456
	Environment	337,694	295,275	42,419
	Modern Energy Services	168,590	381,712	(213,122)
	Trade and Investment	129,949	165,124	(35,175)
	Climate Change – Sustainable Landscapes	129,885	88,908	40,977
	Workforce Development	106,261	90,047	16,214
	Climate Change – Clean Energy	45,254	1,024	44,230
	Financial Sector	40,815	49,512	(8,697)
	Climate Change – Adaptation	21,008	3,480	17,528
Information and Communications Technology Services	13,401	9,369	4,032	
Transport Services	11,127	99,211	(88,084)	
Economic Growth Total		10,843,110	2,467,320	8,375,790

In addition, USAID provided a break out of climate costs in NOTE 16. *SCHEDULE OF COST BY STANDARDIZED PROGRAM STRUCTURE AND DEFINITION (SPSD)*

USAID FY 2022 AGENCY FINANCIAL REPORT / FINANCIAL SECTION

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Categories	Africa	Asia	BHA	CPS	DDI	Europe & Eurasia	Global Health	Latin America & Caribbean	Middle East	RFS	2022 Consolidated Total	2021 Consolidated Total
EG.11-Climate Change – Adaptation												
Gross Costs	1,000	16,333	-	-	890	-	-	2,573	179	187	21,162	3,490
Less: Earned Revenue	(9)	(109)	-	-	(7)	-	-	(26)	(3)	-	(154)	(10)
Net Program Costs	991	16,224	-	-	883	-	-	2,547	176	187	21,008	3,480
EG.12-Climate Change – Clean Energy												
Gross Costs	27,376	6,494	-	-	4,415	75	-	7,155	-	-	45,515	1,024
Less: Earned Revenue	(149)	(30)	-	-	(22)	-	-	(60)	-	-	(261)	-
Net Program Costs	27,227	6,464	-	-	4,393	75	-	7,095	-	-	45,254	1,024
EG.13-Climate Change – Sustainable Landscapes												
Gross Costs	15,524	38,184	-	-	6,869	-	-	63,035	-	7,495	131,107	89,293
Less: Earned Revenue	(107)	(360)	-	-	(34)	-	-	(721)	-	-	(1,222)	(385)
Net Program Costs	15,417	37,824	-	-	6,835	-	-	62,314	-	7,495	129,885	88,908

OMB A-136 - II.4.10.1 Required Hyperlinks to Reports:

*For FY 2022, significant entities **must** include hyperlinks to Climate Action Plans, Sustainability Reports and Implementation Plans, and other similar reports with information relevant to climate-related risk or climate-related financial risk that the entity issued during FY 2022.*

DOD included the following hyperlinks in OI:

The [DoD Climate Risk Analysis](#) and the [DoD Climate Adaptation Plan](#) meet the requirements of EO 14008, and outline the Department's efforts to achieve climate change adaptation and resilience while preserving operational capability and enhancing the natural ecosystems and infrastructure essential to the Department's success.

[DoD Sustainability Report and Implementation Plan](#) meets the data and information requirements of EO 14057 and sets forth the Department's planned actions to mitigate climate change and transform how the Department builds, buys, and manages electricity, vehicles, buildings, and other operations to be clean and sustainable.

The following are additional reports with information relevant to climate-related risk that the Department issued or contributed to during FY 2022:

- [DoD Climate Adaptation Plan 2022 Progress Report](#)
- [Comprehensive Annual Energy Data and Sustainability Performance](#)

In alignment with the Department-wide climate-related efforts, the Military Departments have developed and published the following plans or strategies to operationalize climate adaptation and mitigation, with actions to enhance operational readiness, resilience, and capabilities of the force:

- [United States Army Climate Strategy](#)
- [Department of the Navy Climate Action 2030](#)
- [Department of the Air Force Climate Action Plan](#)

VA included the following hyperlinks in OI:

OTHER INFORMATION

CLIMATE-RELATED FINANCIAL RISK

CLIMATE-RELATED FINANCIAL RISK

CLIMATE ACTION PLAN AND OTHER REPORTS

VA's climate-related reports provide valuable information relevant to climate-related to VA services, operations, programs and assets. Hyperlinks to VA's latest Climate Action Plan and other climate-related reports are below:

- **2021 Climate Action Plan:** [Department of Veterans Affairs 2021 Climate Action Plan \(sustainability.gov\)](https://www.sustainability.gov/2021-climate-action-plan)
- **2022 Climate Action Plan Progress Report:** [Department of Veterans Affairs Climate Action Plan 2022 Progress Report \(sustainability.gov\)](https://www.sustainability.gov/2022-climate-action-plan-progress-report)

OMB A-136 - II.4.10.2 *Optional Budget Information:*

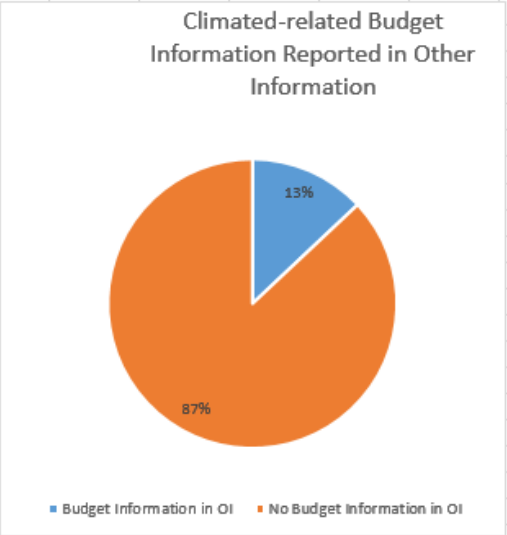
In addition, for FY 2022, significant entities are encouraged to report the following information to the extent it is available:

FY 2021 budget authority or outlays related to reducing the Federal Government's exposure to climate-related financial risks. Related expenditures include:

- preparedness for extreme weather events;*
- efforts to reduce risks from sea level rise, such as investments in modeling, levees, or natural barriers;*
- flood mitigation, flood communication, and flood mapping activities;*
- maintenance and repairs to Federal facilities that aim to reduce future risks from climate change;*
- investments in federally managed land, infrastructure, and waterways that reduce future climate risks;*
- climate-smart agriculture practices;*
- response, safety, and preparedness efforts around extreme heat;*
- expenditures that improve energy efficiency and the capability of future climate-related risks;*
- tools used to assess exposure to future climate risks; and*
- incentives for nature-based solutions to climate risks.*

Staff reviewed and consolidated information from the CTF agency responses and the remaining 24 CFO Act agencies to determine how many discussed budget information in OI. Staff presents the following results.

Climate-related Budget Information Reported In OI		
	1 DOS	Non-CTF
	1 DOT	CTF
Budget Information in OI	1 SSA	Non-CTF
Subtotal	3	
	1 DHS	CTF
	1 DOC	CTF
	1 DOD	CTF
	1 DOE	CTF
	1 DOI	CTF
	1 DOJ	Non-CTF
	1 DOL	Non-CTF
	1 Education	Non-CTF
	1 EPA	CTF
	1 GSA	CTF
	1 HHS	CTF
	1 HUD	CTF
	1 NASA	CTF
	1 NRC	Non-CTF
	1 NSF	Non-CTF
	1 OPM	Non-CTF
	1 SBA	Non-CTF
	1 Treasury	CTF
	1 USAID	Non-CTF
No Budget Information in OI	1 USDA	CTF
	1 VA	CTF
Subtotal	21	
Budget Information in OI	13%	
No Budget Information in OI	87%	



SSA included the following budget information in OI:

BUDGET, GOVERNANCE, STRATEGY, RISK MANAGEMENT, AND METRICS

Our financial risk exposure related to climate change mainly concerns the impact of energy usage to cool and heat our delegated sites. We budget for energy use and use previous usage to adjust for the upcoming year for our delegated sites. Within each of the five priority areas mentioned above, we face funding challenges if these events take place and affect our operations. These funding challenges include the loss or replacement of facilities, fleet, and IT equipment, as well as health and safety costs to keep operations active during severe climate-related events.

State included the following budget information in OI:

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CLIMATE-RELATED FINANCIAL RISK | OTHER INFORMATION

The Department spent a total of \$658.3 million in 2021 for climate change programming to reduce the Federal Government's exposure to climate related financial risks. Related expenditures included preparedness for extreme weather events; efforts to reduce risks from sea level rise, such as investments in modeling, levees, or natural barriers; flood mitigation, flood communication, and flood mapping activities; maintenance and repairs to Federal facilities that aim to reduce future risks from climate change; investments in Federally managed land, infrastructure, and waterways that reduce future climate risks; climate-smart agriculture practices; response, safety, and preparedness efforts around extreme heat; expenditures that improve energy efficiency and the capability of future climate-related risks; tools used to assess exposure to future climate risks; and incentives for nature-based solutions to climate risks.

The Bureau of Budget and Planning managed the Diplomatic Engagement portion of the 2021 budget expenditures for climate change and climate-related financial risk (\$39.3 million of the total). Of the

Diplomatic Engagement total, funding was expended on projects to improve energy efficiency and resilience, such as the installation of on-site renewable energy storage systems, for maintenance and repairs to Department facilities, for tools to analyze potential for future climate risks, and for travel, salary, and operational costs.

The Office of Foreign Assistance managed the Foreign Assistance portion of the 2021 budget allocations for climate change programming globally, which supports multi-, pluri-, and bi-lateral country and regional programs to mitigate and adapt to the effects of climate change, including bolstering host-country resilience and capacity. In 2021, we allocated \$619.0 million in Foreign Assistance toward climate programming, which has a period of availability of two-years and expends over five years.

Transportation included the following budget information in OI:

FY 2021 BUDGET AUTHORITY AND OUTLAYS

In FY 2021, DOT engaged in the actions listed below to help reduce the Federal Government’s exposure to climate-related financial risks. Related outlays for each activity include:

- \$130 thousand for improvements in energy efficiency and the capability of future climate-related risks;
- \$90 thousand for tools used to assess exposure to future climate risks; and
- \$2 thousand for flood mitigation, flood communication, and flood mapping activities.

The following OMB A-136 optional reporting is very similar to TCFD recommendations as it references the four core TCFD pillars: governance, strategy, risk management, and metrics (and targets). Therefore, staff is referring to the OMB A-136 optional reporting as “TCFD-like”.

The OMB A-136 request for loan and loan guarantee program information* supports EO 14030, sec.5c.

OMB 1-136 - II.4.10.3 *Optional Governance, Strategy, Risk Management, and Metrics Information:*

Also, for FY 2022, significant entities are encouraged to report the following four types of information regarding the entity’s assessment and management of any significant climate-related risk.¹¹

OMB Footnote¹¹ Climate-related risk in this section refers to extreme weather events and/or weather-related risks, which is slightly different from the definition used by Task Force on Climate-related Financial Disclosures (TCFD), which is the potential negative impact of climate change on an entity. Climate change resources, including the Fourth National Climate Assessment | GlobalChange.gov (NCA4), the U.S. Climate Resilience Toolkit | U.S. Climate Resilience Toolkit, and resources for Federal climate change adaptation, are available at: GlobalChange.gov.

Governance: Describe (1) the entity head's and/or other senior leadership's oversight of climate-related risks and opportunities and (2) management's role in assessing and managing climate-related risks and opportunities.

Strategy: Describe (1) the climate-related risks (both immediate and long-term physical risk, as defined above, and transition risk, i.e., risk to transitioning to a lower-carbon economy) and opportunities the entity has identified over the short, medium, and long term; (2) the impact of these risks and opportunities on the entity's programs, strategy for achieving organizational objectives, and future plans; and (3) the resilience of the entity's strategy to changes in climate-related risk (i.e., considering alternative climate-related scenarios).

**Significant entities with loan and loan guarantee programs are encouraged to describe significant concentrations of credit program exposure to carbon-related assets, any climate-related scenarios used to assess climate-related risk, and how the entity's strategy may be affected by a transition to a lower-carbon economy.*

Risk Management: Describe (1) the entity's processes for identifying and assessing climate-related risks; (2) the entity's processes for managing climate-related risks; and (3) how these processes are integrated into the entity's overall risk management. See OMB Circular A-123 for guidance on enterprise risk management generally.

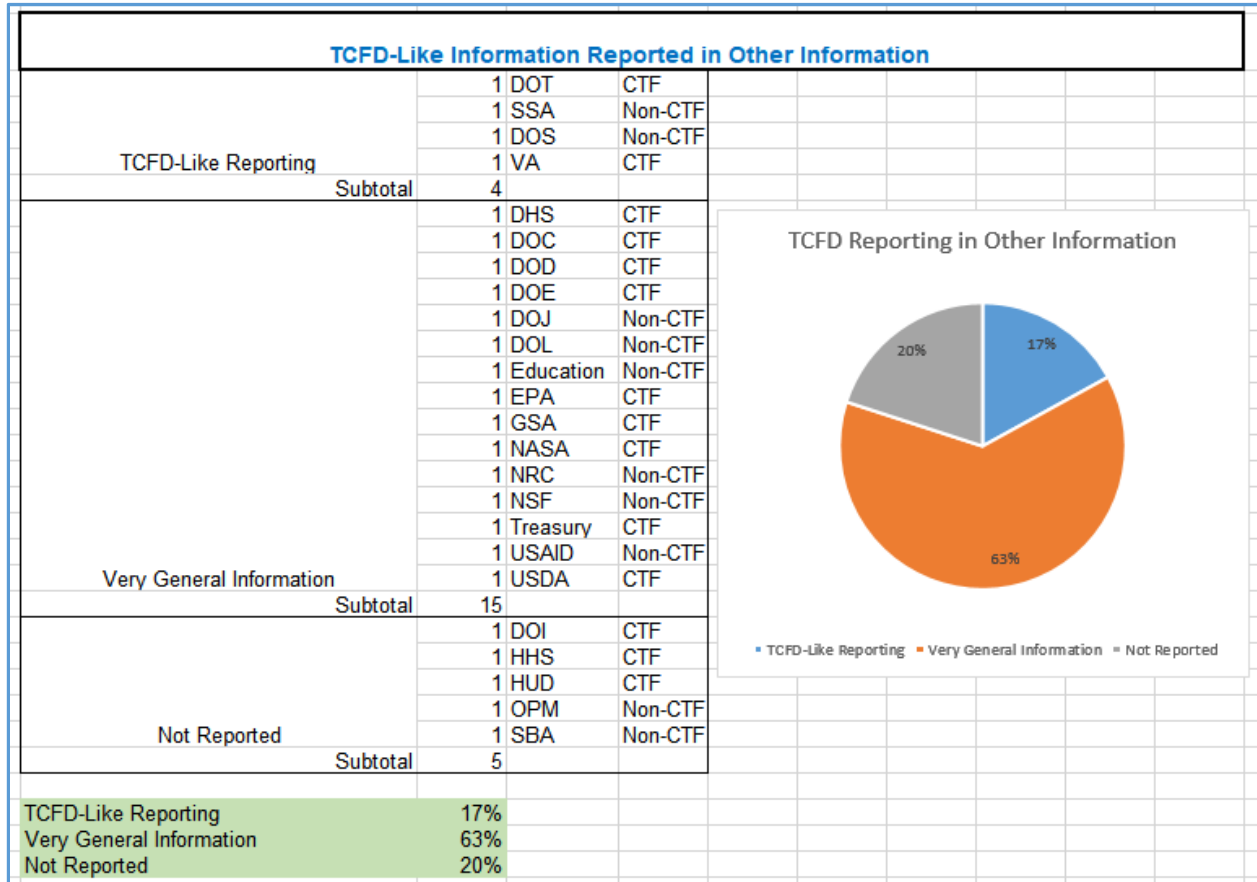
**Significant entities with loan and loan guarantee programs are encouraged to characterize any climate-related risks (both physical and transitional, as described above) as credit, liquidity, operational or other risk. Such entities are also encouraged to describe how their portfolio is positioned to transition to an economy with lower-carbon energy supply, production, and use.*

Metrics: (1) Describe the metrics used by the entity to assess climate-related risks and opportunities in line with the entity's overall organizational strategy and risk management; (2) provide a link to the Scope 1 and 2 greenhouse gas emissions section of the entity's Sustainability Report, Federal Sustainability and Adaptation Progress | Office of the Federal Chief Sustainability Officer, and describe any related risks; and (3) describe the targets used by the entity to manage climate-related risks and opportunities and performance against those targets.

**Significant entities with loan and loan guarantee programs are encouraged to consider whether climate-related risks should be broken down by industry, geography, credit quality, time to maturity, or other relevant characteristic. If possible, such entities are encouraged to report aggregated risk exposure to weather-related catastrophes to program assets or collateral and describe whether these metrics have changed over time and how they factor into asset management.*

Significant entities with significant housing or other buildings programs are encouraged to report metrics related to the potential impact of greenhouse gas emissions, energy, and water on revenue, costs, assets, and/or liabilities.

Staff reviewed and consolidated information from the CTF agency responses and the remaining 24 CFO Act agencies to determine how many discussed TCFD-like information in OI. Staff presents the following results.



Transportation included TCFD-like information in OI – *Climate-Related Financial Risk*:

CLIMATE RISK GOVERNANCE, STRATEGY, RISK MANAGEMENT, AND METRICS INFORMATION

OST is responsible for the oversight of climate-related risks and opportunities, through the leadership of the Deputy Assistant Secretary for Climate Policy and Chief Sustainability Officer (CSO), in coordination with the Department's modal OAs, the Office of the General Counsel, and the Office of the Chief Financial Officer. Additionally, the Office of Policy, within OST, coordinates climate adaptation actions with support from DOT's Climate Change Center.

Within OST, the Office of the Assistant Secretary for Administration and Department's CSO (as delegated by 49 Code of Federal Regulations (CFR) 1.38(c)(2)) is responsible for assessing and managing climate-related risks for DOT property, plant, equipment, and operations.

The Department's infrastructure is comprised of office buildings, air traffic control towers, research facilities and laboratories, ship fleets, academic buildings, heavy machinery, vehicle fleets, electrical substations, safety

test tracks, data centers, and facilities associated with critical safety communication assets. These assets are located across the United States and are susceptible to climate change. The anticipated climate impacts on these assets include temperature increase, precipitation change, extreme storms, sea level rise, change in snowmelt, ecosystem degradation, and land change.

For example, air traffic control towers may experience higher frequency of storms and stronger winds than they were designed to withstand. Additionally, high heat or storms may hinder communication systems and halt activities. Moreover, heat waves and extreme storms could affect the reliability of facility power and could cause fires and other disruptions. Facilities located near water sources are expecting significant flooding risk due to sea level rise and increased frequency of storms. As such, climate change, without specific action, may damage DOT buildings and equipment, potentially jeopardizing the safety and health of DOT employees, the travelling public, and interstate commerce.

Given the great diversity of asset types held, the Department will need to develop multiple strategies to ensure climate resilience at its facilities. First, the Department has identified its major mission-critical buildings and operational assets. Mission-critical buildings are DOT-leased or -owned facilities that support activities that cannot be disrupted. Mission-critical assets include non-building infrastructure (e.g., ships or equipment), operations, and activities that support statutory goals, provide vital services, and maintain the safety and health of the public. In addition, mission-critical operations include activities completed in support of DOT's own business processes.

Second, the Department will continue performing climate change vulnerability assessments for mission-critical buildings and operational assets using the internally developed Climate Hazard and Exposure Risk (CHER) tool. The CHER tool combines climate projections (heat and precipitation data) from downscaled global climate models with critical system vulnerability data and historical exposure data from the Federal Emergency Management Agency's (FEMA's) national risk index to calculate a more robust site-specific climate-risk score for Departmental mission-critical assets. Each OA (except FAA) is anticipated to complete assessments of their mission-critical assets by November 2022. The plan for FAA is more complex due to 1) the quantity of real property assets, and 2) training key personnel necessary to perform the nationwide assessment. Upon completion of the assessment, each mission-critical building and operational asset will have a climate risk score which can be ranked in priority order and addressed through adaptation strategies as resources are available.

Finally, to proactively integrate climate resilience into existing management processes, OAs can incorporate priority adaptation and mitigation strategies into their Capital Asset Plans, new building design standards, and facility operation and maintenance schedules.

OST has developed internal energy, environmental, and sustainability performance metrics. Aligned with the Administration's climate and environmental priorities, these metrics will include ambitious adaptation targets along with other important energy, environmental, and procurement actions. The internal report will also establish accountability and governance across the agency, ensuring DOT leads by example through continued progress. The Department's CSO and the DOT Climate Change Center, with representatives from across all DOT offices, will oversee and coordinate these efforts.

VA included TCFD-like as well as loan and loan guarantee information in OI.

GOVERNANCE, STRATEGY, RISK MANAGEMENT AND METRICS

GOVERNANCE

E.O. 14008, *Tackling the Climate Crisis at Home and Abroad* (2021), established requirements for agencies to revitalize and prioritize responding to the climate crisis. E.O. 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability* (2022), expanded on those requirements. In response to E.O. 14057, VA adapted its Climate Change Task Force into a Sustainability Task Force, led by VA's Chief Sustainability Officer, to make senior-level decisions on policy and programs to implement the goals of E.O. 14057, including climate adaptation plans. The Task Force will engage two of VA's existing governing bodies, the Evidence-Based Policy Council and Investment Review Council, where needed to establish and roll out agency-wide solutions.

STRATEGY

VA's strategy balances the need for climate adaptation and resilience with other needs crucial to VA's mission of providing quality care and benefits to Veterans. VA understands the importance of anticipating and planning for future changes in the climate and is working to expand its adaptation efforts to include the full scope of its operations while continuing to deploy its climate adaptation strategy. The adaptation strategy falls into two primary categories, infrastructure resilience and health care resilience.

RISK MANAGEMENT

VA will continue its effort to identify mission critical functions at risk from the impacts of a changing climate. As impacts are further identified by the best available science, VA will incorporate climate change adaptation and resilience across agency programs and the management of Federal procurement, real property, public lands and waters and financial programs. Mitigation of known risks are incorporated into the agency's normal business operations to the extent practicable.

VA incorporates climate resilience into long-term planning, investments, construction and training, in conjunction with other policy and practical imperatives. In 2011, VA conducted an agency-wide high-level study focusing on the risks that climate change poses to critical agency operations, facilities and systems. For the 2021 Climate Action Plan, VA built on prior adaptation actions and climate vulnerability analysis to update its assessment of climate vulnerabilities. VA also used its Department-level risk register and guidance from the Fourth National Climate Assessment and identified five vulnerabilities tied to management functions and decision points.

For more information on the five vulnerabilities, refer to the Forward-Looking Information section on page 39 in the Management's Discussion and Analysis Section. In FY 2023, VA plans to complete a nationwide assessment of climate vulnerabilities of its mission critical facilities.

METRICS

VA developed an internal tool to track implementation of its climate adaptation commitments from the 2021 Climate Action Plan. Progress is updated and shared with VA stakeholders on a monthly basis. In accordance with E.O. 14057, VA is also generating annual plans or progress reports on climate adaptation activities.

HOME LOAN PROGRAMS

Impact: VA's Home Loan Program within the Loan Guaranty Service involves loans made, insured or guaranteed by VA to assist Veterans in obtaining, retaining and adapting homes. The program includes direct home loans for Native American Veterans to purchase homes on trust lands and grants to assist eligible Veterans with certain service-connected disabilities to construct or adapt their home to accommodate their needs. The program also manages and sells properties acquired by VA from foreclosures and manages direct loans for purchase of real estate owned properties. The primary concerns for VA are the potential indirect impacts resulting from newly constructed or existing homes in and around the U.S. coastline where sea level rise can pose a threat or areas where wildfires are common due to drought conditions.

Adaptation: VA will continue to consider approaches to better integrate climate-related financial risk into underwriting standards, loan terms and conditions and asset management and servicing procedures, as related to housing policies and programs. The local government and planning authorities are ultimately responsible for infrastructure and development of the Veteran housing supported by VA home loans. The Energy Efficient Mortgage program allows for a loan to be increased by up to \$6,000 over and above the established reasonable value of a property and provides a valuable incentive for borrowers to adopt sustainable best practices, improve the value of their property and mitigate climate risk. Additionally, VA recognizes that an energy-efficient home will have lower operating costs, making homeownership more affordable for Veteran borrowers. VA is evaluating whether changes to the program are warranted and if increases to the \$6,000 cap will require statutory amendments.

Timeline: VA has begun collecting and analyzing data to comprehensively assess climate risk exposures to the VA Home Loan Program. VA will also use the assessment to inform programmatic changes to policies or procedures, such as underwriting standards, loan terms and conditions and asset management and servicing procedures. The initial dashboard was provided in June 2022, and VA is reviewing the information to determine recommended changes, as needed.

Resources: VA will use existing resources to begin necessary assessments to determine costs associated with increased climate threats. If additional resources are required, VA will request funding through the budget process.

Disclosure: Once VA identifies potential costs associated with increased threats to homes financed through the VA Home Loan Program, it will disclose them in the AFR.

III. Can FASAB leverage and reference current agency climate-related reporting, including climate-related risks, to help users understand the reporting entity's ability to sustain operations?

According to staff's research, we believe the Board can leverage and reference current agency climate-related reporting, including climate-related risks, to help users to understand the reporting entity's ability to sustain operations.

The above research shows that agencies are capable of reporting climate-related activity and impact through

- quantitative budget information and explanations about what it expects to achieve;
- quantitative net cost information,
- qualitative TCFD-like information as it relates to government operations; and
- quantitative and qualitative information about loan and loan guarantees as impacted by climate-risk.

However, staff's research also shows that the content is not consistent across agencies. Qualitative content ranges from very high-level general discussions (boilerplate) to more detail based on agency risks and expected results. Budget and cost information ranges from a break out of net cost by program in a Statement of Net Cost structure to a paragraph that discusses a lump sum amounts for general categories of outlays. This inconsistency may make it difficult for users and decision makers to compare agencies' information and for the Financial Report of the United States Government to consolidate the information.

For example, staff particularly liked USAID's presentation of the net cost of their climate activities, VA's graphic representation of the TCFD-like and loan information, and Transportation's climate-related risks and how those risks are being managed. A consolidation of these styles would help to produce more consistent climate-related reporting in the agency financial reports.

In addition, staff is confident, as shown through our research, that TCFD can be adapted for the federal government. Staff believes the Board can use this research as a starting point to develop a climate-related financial disclosure framework that provides guidance for consistent reporting.

Questions for the Board:

1. Please provide any feedback on staff's research.
2. What additional information would members like for staff to research to help the Board begin to develop a climate-related financial disclosure framework?

NEXT STEPS:

The following are open questions the Board asked staff to research to help develop a climate-related financial disclosure framework.

1. How are federal agencies calculating and tracking the cost and budget information for climate-related financial risk exposure?
2. Where to present climate-related risks in financial reports, such as, is RSI appropriate?
3. What information will federal financial statement users find useful as it relates to climate risk?
4. Determine if GHG scopes 1, 2, or 3 are useful for climate-related federal financial statement disclosures (transition risk).
5. Is tiered reporting an option? For example, should the significance or materiality of climate-related activity determine different levels of reporting?