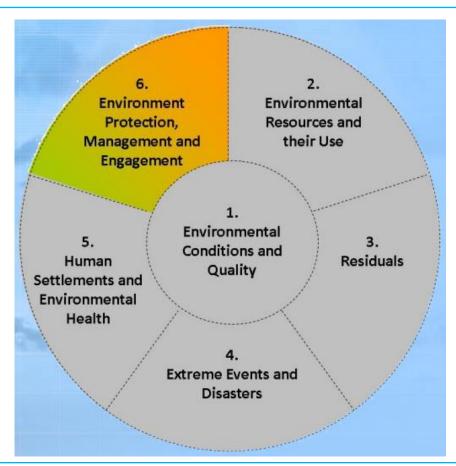


# Components, sub-components and statistical topics of the FDES 2013

Component 6: Environment Protection, Management and Engagement

Introduction



This component Organizes information on environment protection and resource management measures and expenditure as well as social responses that aim at improving the environment and maintaining the health of ecosystems.



Scope and content

- Statistics on environment protection and natural resource management expenditure
- Statistics about environmental governance, institutional strength, enforcement of regulations and extreme event preparedness.
- Contains information on programmmes and actions to increase awareness, including environmental information and education, as well as private and community activities aimed at diminishing environmental impacts and improving the quality of local environments.



#### Overview

Component 6  Environment Protection, Management and Engagement	Sub-Component 6.1 Environment Protection and Resource Management Expenditure (two topics, 8 statistics)	Topic 6.1.1: Government environment protection and resource management expenditure  Topic 6.1.2: Corporate, non-profit institution and household environment protection and resource management expenditure
	Sub-Component 6.2 Environmental Governance and Regulation (three topics, 19 statistics)	Topic 6.2.1: Institutional strength Topic 6.2.2: Environmental regulation and instruments Topic 6.2.3: Participation in MEAs and environmental conventions
	Sub-Component 6.3 Extreme Event Preparedness and Disaster Management (two topics, 10 statistics)	Topic 6.3.1: Preparedness for natural extreme events and disasters  Topic 6.3.2: Preparedness for technological disasters
	Sub-Component 6.4 Environmental Information and Awareness (four topics, 13 statistics)	Topic 6.4.1: Environmental information Topic 6.4.2: Environmental education Topic 6.4.3: Environmental perception and awareness Topic 6.4.4: Environmental engagement



Sub-Component 6.1: Environment Protection and Resource Management Expenditure

- This subcomponent is closely related to the environmental activity accounts of the SEEA-CF and is based on the CEA.82 Expenditure on environmental protection and resource management.
- Can be used as one measure of the public and private engagement in protecting, restoring and managing the environment towards its more sustainable use.
- Important for policy makers, analysts and civil society to determine the current and desired levels of engagement and commitment from the government and the private sector.





Sub-Component 6.1: Environment Protection and Resource Management Expenditure

- Environmental protection activities: the primary purpose is the prevention,
  reduction and elimination of pollution and other forms of degradation of the
  environment which include the protection of ambient air and climate, wastewater
  management, waste management, protection and remediation of soil, groundwater
  and surface water, noise and vibration abatement, protection of biodiversity and
  landscapes, protection against radiation, research and development for
  environmental protection and other environmental protection activities.
- Resource management activities: the primary purpose is preserving and
  maintaining the stock of natural resources and hence safeguarding against
  depletion which include reducing the withdrawals of natural resources; restoring
  natural resource stocks; the general management of natural resources; and the
  production of goods and services used to manage or conserve natural resources.



### Sub-Component 6.1: EP and Resource Management Expenditure

Topic 6.1.1: Government environment protection and resource management expenditure

- Government expenditure (local, regional and central) aiming primarily to protect the environment and manage its resources. It is calculated by identifying and aggregating the expenditures used primarily for environmental protection and resource management. These expenditure are in the official government finance statistics in government budgets and/or administrative reports on actual government expenditure incurred.
- Institutional partners: official institutions in charge of reporting government expenditure (e.g., internal revenue services) and the national and subnational level institutions (e.g., municipalities) and NSO where national accounts and government finance statistics also contribute to the development of government expenditure statistics



### Sub-Component 6.1: EP and Resource Management Expenditure

Topic 6.1.1: Government environment protection and resource management expenditure

Statistics and related information for To	pic 6.1.1								
Component 6: Environmental Protection, Manage	ement and Enga	gement							
Subcomponent 6.1: Environmental Protection and R	Subcomponent 6.1: Environmental Protection and Resource Management Expenditure								
Topic 6.1.1: Government environmental protection a	Topic 6.1.1: Government environmental protection and resource management expenditure								
Statistics and related information									
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	Category of measurement	Potential aggregations and scales	Methodological guidance						
a. Government environmental protection and resource management expenditure		<ul><li>By environmental activity</li><li>By type of expenditure: current, investment</li></ul>	Eurostat-SERIEE Environmental Protection Expenditure Accounts Compilation Guide (2002)						
Annual government environmental protection expenditure	Currency	By ministry     National	<ul> <li>Eurostat-Environmental Expenditure Statistics.</li> <li>General Government and Specialised Producers</li> <li>Data Collection Handbook (2007)</li> </ul>						
Annual government resource management expenditure	Currency	<ul><li>Subnational</li><li>By funding</li></ul>	Classification of Environmental Activities (CEA)     SEEA Central Framework (2012) Annex 1						

- The resulting statistics will usually be at the national level and can sometimes be disaggregated by functional governmental entities or level of government.
- The statistics are expressed in monetary units, typically with annual periodicity, depending on the availability of resources



### Sub-Component 6.1: EP and Resource Management Expenditure

Topic 6.1.2: Corporate, non-profit institution and household EP and resource management expenditure

Statistics and related information for Topic 6.1.2

1. Annual corporate environmental protection expenditure 
Currency

2. Annual corporate resource management expenditure

3. Annual non-profit institution environmental protection

4. Annual non-profit institution resource management

5. Annual household environmental protection expenditure

6. Annual household resource management expenditure

management expenditure

expenditure

### This topic supplement 6.1.1 and Includes:

- Corporate, non-profit institution and household environmental expenditure aiming primarily to protect the environment and manage its resources.
- Statistics on environmental protection and resource management expenditure for corporations, non-profit institutions and households usually require the use of specific surveys of establishments in different sectors and industries (business surveys) and households.

Component 6: Environmental Protection, Management and Engagement Subcomponent 6.1: Environmental Protection and Resource Management Expenditure Topic 6.1.2: Corporate, non-profit institution and household expenditures on environmental protection and resource management expenditure (Bold text—Core Set/Tier 1; regular text—Tier 2; italicized Category of text—Tier 3) Methodological guidance neasurement Potential aggregations and scales a. Private sector environmental protection and resource By environmental activity · Eurostat-Environmental expenditure statistics. Industry data collec-

Currency

Currency

Currency

Currency

Currency

· By type of expenditure: current, investment

By ISIC economic activity

National

Subnational



tion handbook (2005)

Eurostat-Environmental expendi-

ture Statistics, General Govern-

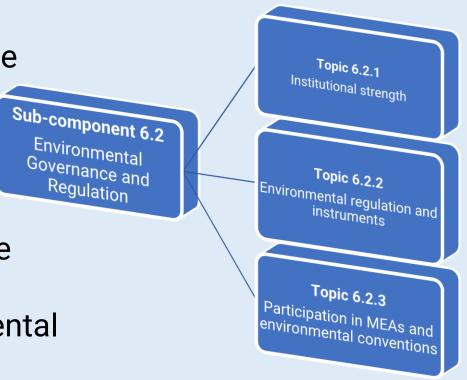
ment and Specialised Producers

Data Collection Handbook (2007)

Sub-Component 6.2: Environmental Governance and Regulation

 This sub-component provides a holistic view of a country's efforts towards sustaining and protecting the environment, policymakers, analysts and civil society require statistics on environmental governance and regulation at the national level.

- It includes setting standards and norms, providing adequate resources and ensuring the ability to enforce those standards and norms
- A nation's participation in MEAs and global environmental conventions





Topic 6.2.1: Institutional strength

- This topic Includes statistics on environmental institutions and their resources organized according to the main environmental authority (name, budget and staff), and other relevant environmental bodies (names, budget and staff).
- The information should be mainly descriptive but can also include monetary statistics on budgets. It is usually compiled at the national level but should also cover sub-national authorities.
- Institutional Partners: Environmental authority, other environmentally relevant authorities, and other institutions where environmental regulations are enforced (e.g., local governments or sectoral authorities).



#### Topic 6.2.1: Institutional strength

#### Statistics and related information for Topic 6.2.1

Cor	mponent 6: Environmental Protection, Management and Engagement			
Sub	ocomponent 6.2: Environmental Governance and Regulation			
Top	oic 6.2.1: Institutional strength			
Sta	tistics and related information	_ Category of	Potential aggregations	
(Bo	ld text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	measurement	and scales	Methodological guidance
a.	Government environmental institutions and their resources		National	
	1. Name of main environmental authority and year of establishment	Description	<ul> <li>Subnational</li> </ul>	
	2. Annual budget of the main environmental authority	Currency	_	
	3. Number of staff in the main environmental authority	Number		
	4. List of environmental departments in other authorities and year of establishment	Description		
	5. Annual budget of environmental departments in other authorities	Currency		
	6. Number of staff of environmental departments in other authorities	Number		
b.	Other environmental institutions and their resources			
	1. Name of institution and year of establishment	Description	_	
	2. Annual budget of the institution	Currency	_	
	3. Number of staff in the institution	Number		



Topic 6.2.2: Environmental regulation and instruments

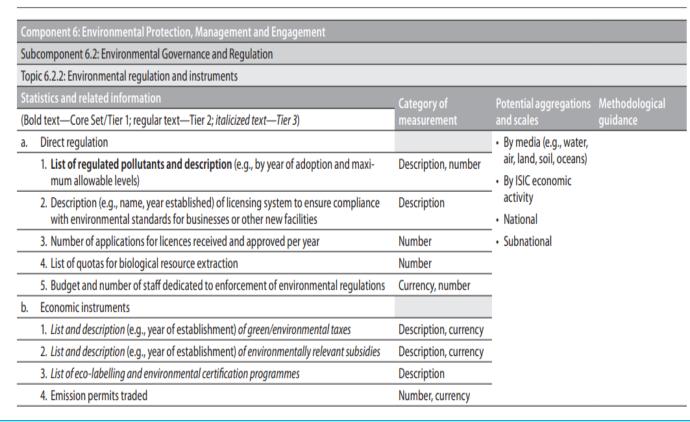
This topic Includes information on **social responses** aiming to regulate and establish acceptable limits for protecting the environment. It entails:

- Direct regulation includes environmental and related laws, standards, limits
  and their enforcement capacities. They can be measured through statistics
  about regulated pollutants, licensing systems, applications for licences, quotas
  for biological resource extraction, as well as budget and the number of staff
  dedicated to enforcement of environmental regulations.
- Economic instruments may be exemplified by the existence and volume of green taxes, green subsidies, eco-labelling and certification, as well as emission permits.



#### Topic 6.2.2: Environmental regulation and instruments

#### Statistics and related information for Topic 6.2.2



Information mainly descriptive but may also include quantitative data on budgets or emission permits traded.

Institutional Partners: Environmental authority, internal revenue services, other relevant authorities, and other institutions where environmental regulations are enforced (e.g., local governments or sectoral authorities).



Topic 6.2.3: Participation in MEAs and environmental conventions

- This topic includes information on a country's participation in different MEAs and other global environmental conventions. Such conventions include the Montreal and Kyoto protocols.
- The information to be produced in this topic is mainly descriptive, however, comparable time series can also be derived from these statistics.
- Institutional partners: The environmental authority, along with other possible institutions in charge of MEAs or environmental conventions.



Topic 6.2.3: Participation in MEAs and environmental conventions

#### Statistics and related information for Topic 6.2.3

Component 6: Environmental Protection, Management and Engagement								
Subcomponent 6.2: Environmental Governance and Regulation								
Topic 6.2.3: Participation in MEAs and environmental convention	Topic 6.2.3: Participation in MEAs and environmental conventions							
Statistics and related information		Potential						
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	Category of measurement	aggregations	Methodological guidance					
a. Participation in MEAs and other global environmental conventions			MEA Secretariats					
<ol> <li>List and description (e.g., country's year of participation<sup>d</sup>) of MEAs and other global environmental conventions</li> </ol>	Description, number							

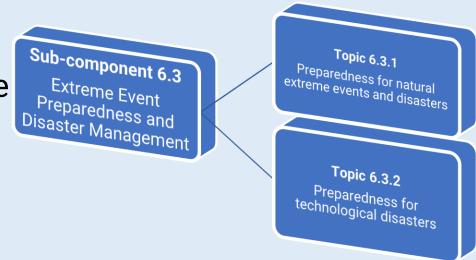


# **Q & A**



Sub-Component 6.3: Extreme Event Preparedness and Disaster Management

- This subcomponent covers statistics describing extreme event preparedness and disaster management will differ by country, based on the type of extreme event and disaster that usually occurs or may occur. The statistics also detail existence and strength of the disaster management agency's facilities and infrastructure
- Extreme event preparedness and disaster management expenditure refers to any public or private expenditure whose primary purpose is to help inform, educate and protect the population from extreme events and disasters



Examples: The set up and maintenance of warning systems, monitoring stations and systems, signals, communication systems, emergency centres and shelters, etc.



Topic 6.3.1: Preparedness for natural extreme events and disasters

- This topic Includes Statistics such as existence and description of national disaster plans; the type and number of shelters in place; the type and number of internationally certified emergency and recovery management specialists; the number of volunteers; the quantity of first aid, and emergency supplies and equipment that are stockpiled. The existence of early warning systems for all major hazards, as well as the expenditure on disaster prevention, preparedness, clean-up and rehabilitation.
- Data sources: National and sub-national authorities responsible for disaster management and assistance, emergency management agencies and municipalities, global and regional meteorological forecasting agencies, NSOs, authorities responsible for flood and drainage control and the agro-meteorological collaboration



Topic 6.3.1: Preparedness for natural extreme events and disasters

#### Statistics and related information for Topic 6.3.1

Component 6: Environmental Protection, Management and Engagement			
Subcomponent 6.3: Extreme Event Preparedness and Disaster Management			
Topic 6.3.1: Preparedness for natural extreme events and disasters			
Statistics and related information	- Category of	Potential	
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	measurement	aggregations and scales	Methodological guidance
a. National natural extreme event and disaster preparedness and management systems		<ul> <li>National</li> </ul>	<ul> <li>International Emergency</li> </ul>
1. Existence of national disaster plans/programmes	Description	<ul> <li>Subnational</li> </ul>	Management Organization
2. Description (e.g., number of staff) of national disaster plans/programmes	Description	_	(IEMO)
3. Number and type of shelters in place or able to be deployed	Description, number	_	UNISDR     Hyaga Framework for Action
<ol> <li>Number and type of internationally certified emergency and recovery management specialists</li> </ol>	Description, number		Hyogo Framework for Action
5. Number of volunteers	Number	_	
6. Quantity of first aid, emergency supplies and equipment stockpiles	Number	_	
7. Existence of early warning systems for all major hazards	Description	_	
8. Expenditure on disaster prevention, preparedness, clean-up and rehabilitation	Currency	_	



Topic 6.3.2: Preparedness for technological disasters

- This topic covers Information about emergency management plans, as well as the expenditure on disaster preparedness, clean-up and rehabilitation.
- It Measures of corporate disaster preparedness vary according to size of enterprise, its location and historical profile for technological disasters.
- Preparedness for technological disasters can be quite different from that of natural extreme events and disasters.
- Technological disasters usually arise at an industrial location or on a mode of transportation where it is often the corporate sector which has a vested interest or legal obligation in contributing to preparedness and clean-up.



Topic 6.3.2: Preparedness for technological disasters

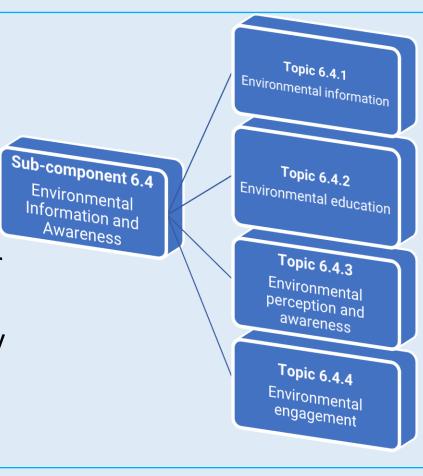
#### Statistics and related information for Topic 6.3.2

Component 6: Environmental Protection, Management and Engagement			
Subcomponent 6.3: Extreme Event Preparedness and Disaster Management			
Topic 6.3.2: Preparedness for technological disasters			
Statistics and related information	Category of	Potential aggregations	
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	measurement		Methodological guidance
a. National technological disaster preparedness and management systems		National	• IEMO
<ol> <li>Existence and description (e.g., number of staff) of public disaster management plans/programmes (and private when available)</li> </ol>	Description	Subnational	<ul><li>UNISDR</li><li>Hyogo Framework for Action</li></ul>
2. Expenditure on disaster prevention, preparedness, clean-up and rehabilitation	Currency	-	.,-5



Sub-Component 6.4: Environmental Information and Awareness

- This subcomponent covers information about diverse processes that contribute to increasing social awareness of environmental issues, thereby promoting pro-environmental engagement and actions by the public and decision-makers at both local and national levels.
- Statistics relevant for policy makers, analysts and civil society to understand information and education programmes in their country, also on refining policies and programmes
- Understanding environment perceptions of the public and key local constituencies, also useful for policy makers when shaping local and national environmental policies and programmes.





Topic 6.4.1: Environmental information

This topic includes information on the characterization:

- National environmental information systems (e.g., existence of publicly accessible systems and number of users)
- Environment statistics programmes within national statistical systems (e.g., description of programme, number and type of environment statistics products, inter-agency platforms or committees).

Environment information includes quantitative, qualitative or geographically referenced facts representing the state of the environment and its changes, as described in FDES.



#### Topic 6.4.1: Environmental information

- The production and dissemination of environment statistics within national statistical systems enables the production of robust environmental and sustainable development indicators (SDIs) to substantiate reports on the changing environment, and to guide policy making.
- Determining which institution is responsible for producing which types of information can be helpful in identifying information gaps, areas of overlapping responsibility or efforts, and areas where efficiency gains can be achieved.
- Institutional partners: The environmental authority and the NSO, and other institutions where databases containing environmental information and reports containing environmental statistics and indicators are produced.



#### Topic 6.4.1: Environmental information

#### Statistics and related information for Topic 6.4.1

Component 6: Environmental Protection, Management and Engagement							
Subcomponent 6.4: Environmental Information and Awareness							
Topic 6.4.1: Environmental information							
Statistics and related information	_ Category of	Potential aggregations	Methodological				
(Bold text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	measurement	and scales	guidance				
a. Environmental information systems		National					
1. Existence of publicly accessible environmental information system	Description	Subnational					
<ol><li>Annual number of visits/users of specific environmental information programmes or environmental information systems</li></ol>	Number	_					
b. Environment statistics							
<ol> <li>Description of national environment statistics programmes (e.g., existence, year of estab- lishment, lead agency, human and financial resources)</li> </ol>	Description						
2. Number and type of environment statistics products and periodicity of updates	Description, number	-					
<ol> <li>Existence and number of participant institutions in inter-agency environment statistics platforms or committees</li> </ol>	Number	-					



Topic 6.4.2: Environmental education

- This topic includes specific actions associated with environmental education and the results they achieve in terms of the number of people participating in these programmes.
- Can include allocation of resources for education, the number and description of the education programmes in schools, and the number of students pursuing environment-related higher education.
- Institutional partners: The ministry of education, ministry of environment or equivalent institution, and the NSO, along with other institutions, such as universities and non-profit institutions, where curricula on environmental education are developed and delivered.



Topic 6.4.2: Environmental education

#### Statistics and related information for Topic 6.4.2

Cor	nponent 6: Environmental Protection, Management and Engagement							
Sub	component 6.4: Environmental Information and Awareness							
Top	oic 6.4.2: Environmental education							
Sta	tistics and related information	_ Category of	Potential aggregations					
(Bo	Id text—Core Set/Tier 1; regular text—Tier 2; italicized text—Tier 3)	measurement	and scales	Methodological guidance				
a.	Environmental education		National					
	<ol> <li>Allocation of resources by central and local authorities for environmental education</li> </ol>	Currency	Subnational					
	2. Number and description of environmental education programmes in schools	Description, number	_					
	<ol> <li>Number of students pursuing environment-related higher education (e.g., science, management, education, engineering)</li> </ol>	Number	_					



Topic 6.4.3: Environmental perception and awareness

- General public or a specific group's perceptions and awareness of the environment through the measurement of knowledge, attitudes, values and actions.
- It also encompasses people's perceptions about governments' environmental
  policies aimed at addressing pressing environmental concerns. Increasingly,
  countries and international polling companies have been surveying the public to
  measure such information across society.
- Knowledge about environmental issues influences people's attitudes (predispositions for action/participation in pro-environmental activities).
- Institutional Partners: The environmental authority, NSO, and other institutions where environmental perception surveys are carried out (e.g., by local governments or polling companies).



Topic 6.4.3: Environmental perception and awareness

#### Statistics and related information for Topic 6.4.3

Co	Component 6: Environmental Protection, Management and Engagement								
Suk	Subcomponent 6.4: Environmental Information and Awareness								
Top	Topic 6.4.3: Environmental perception and awareness								
Sta									
	Id text—Core Set/Tier 1; regular text—Tier 2; icized text—Tier 3)	Category of measurement	Potential aggregations and scales	Methodological guidance					
a.	Public environmental perception and awareness		National						
	Knowledge and attitudes about environmental issues or concerns	Description	Subnational						
	Knowledge and attitudes about environmental policies	Description	_						



Topic 6.4.4: Environmental engagement

- Environmental engagement involves the progression of transforming perception and attitudes into concrete, pro-environmental actions.
- Includes statistics on the existence of pro-environmental NGOs and their, human and financial resources, as well as on pro-environmental activities and the number of people participating in them.
- Data about environmental participation and actions are based on either administrative records or are obtained from surveys and are usually produced at the sub-national level.



Topic 6.4.4: Environmental engagement

#### Statistics and related information for Topic 6.4.4

Cor	Component 6: Environmental Protection, Management and Engagement									
Sub	Subcomponent 6.4: Environmental Information and Awareness									
Тор	Topic 6.4.4: Environmental engagement									
Sta	tistics and related information									
	Id text—Core Set/Tier 1; regular text—Tier 2; icized text—Tier 3)	Potential aggregations and scales	Methodological guidance							
a.	Environmental engagement		National							
	<ol> <li>Existence of pro-environmental NGOs (number of NGOs and their respective human and finan- cial resources)</li> </ol>	Currency, number	Subnational							
	2. Number of pro-environmental activities	Number	_							
	3. Number of pro-environmental programmes	Number	-							



# **Q & A**



Exercise

Component 6: Environmenta	l Protect	ion, Manag	eme	ent	and	En	ıga	gen	nen	t														
Statistics and Related Information	ent	and Scales	National Level nt/Not Applicable)	Collection Priority)	nal Level ble)	Inst Respo Co St Che		on(s) le for ing ic that	•	Usei C Rep	Req Collectin Ortin Stati	ments uests ction/ g on t istic that ap	for / this	her [specify])	ole	le	vidual records)		Mai	is	asons not A ck all	vaila	ble	
Bold Text - Core Set/Tier  1  Regular Text - Tier 2  Italicized Text - Tier 3	Category of Measurement	Aggregations	of Statistic at the /Low/Not Releva	Priority for National Data Collectior (High /Medium /Low/Not a Priority)	Availability of Statistic at the National (Identical/Similar/Not Available)	NSO	Ministry of Environment or equivalent institution	Other (specify):	Type of Data Source	Sub-national	National	Regional	International	Periodicity (Annual/Monthly/Daily/Hourly/Other [specify])	Earliest Year Available	Latest Year Available	Format of Statistic (Publication/Excel/Database/Website/Individual	Unit of Meas	Resource constraints	Methodological/Technical difficulty in data collection	Insufficient quality	Inaccessibility	Lack of institutional set-up /coordination	Other (specify):



Primary institution (s) responsible for the following statistics

Topic 6.1.1: Government environmental protection and resource management expenditure	
Statistics	Institution (s)
a.1. Annual government environmental protection expenditure	
Topic 6.2.2: Environmental regulation and instruments	
a.1. List of regulated pollutants and description (e.g., by year of adoption and maximum allowable levels)	
Topic 6.2.3: Participation in MEAs and environmental conventions	
<b>a.1. List and description</b> (e.g., country's year of participation(d)) of MEAs and other global environmental conventions	



## Thank you



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