

C.5 Climate Change (CC) Expenditures Guidance Note TC version

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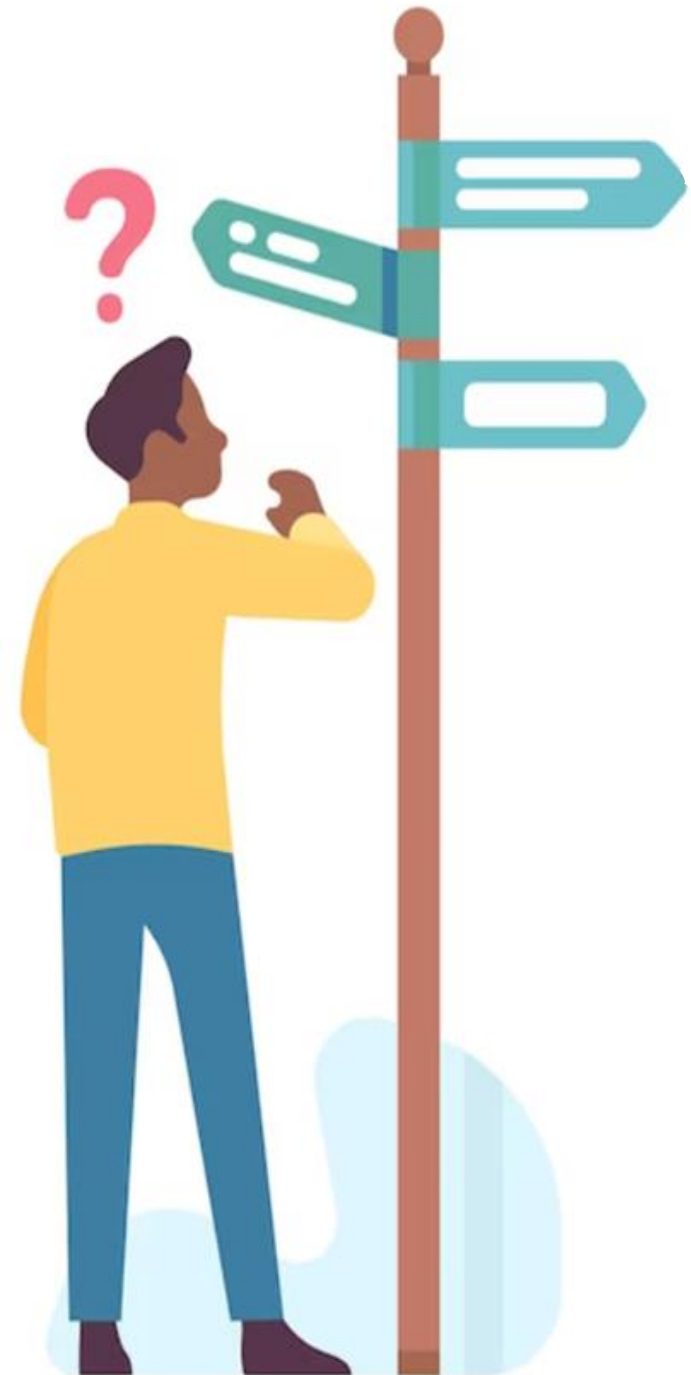
Background – C.5 Issue

- “The integrated framework describes the general framework for environmental transfers. The EPEA covers part of this, namely the expenditure side. Given the great importance of climate expenditure, it warrants for a **separate description (module)** providing **a definition, scope and account (based on the integrated accounts), separately for mitigation and adaptation**. This issue links to several initiatives, including green budget tagging, GFS [Government Finance Statistics] and preliminary work done through the DGI [G20 Data Gap Initiative].”
- NOTE: **Separate accounts**



To be decided/clarified...

1. Does C3 expand the SEEA scope to include climate change expenditures? Including adaptation?
2. CC Mitigation expenditure & CC Adaptation expenditure definitions
3. Are CC-Mit and CC-Adapt Exp additive or not? Can a total for Climate Change Expenditures be calculated?
4. Classification of mitigation expenditures – extend the CEP to include these? Or make new starting w CEP?
5. Classification of adaptation expenditures – need to develop – use CC disasters as starting point
6. Philosophy of inclusion in SEEA?
Are both CC-mit and CC-adapt expenditure accounts ‘mature enough’ to be included in the SEEA-CF?



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C.3 – Categories Env “friendly” and “related”

Environmentally friendly		Environmental related
<i>Core</i>	<i>Extension</i>	<i>Extension</i>
Environmental protection	Climate Change mitigation	Climate Change adaptation
Resource management	Circular Economy	Bioeconomy

Source: GN C3 of Nov 2025 – §8, Figure 1

§ 61 C.3 GN:

“The cornerstone approach of this guidance note to operationalise the scope is following two sequential phases:

1) setting (or adopting) a definition [of] the topic (environmental protection, circular economy, bio economy etc) and

2) setting a list of activities and products relevant for that topic.

This is done for each topic in a consistent way for each environmental area (environmentally friendly and environmental related).”

Climate Change Mitigation & Adaptation

Decision: use UN IPCC definitions as starting point

Mitigation of Climate Change

A human intervention to reduce emissions or enhance the sinks of greenhouse gases.

(<https://apps.ipcc.ch/glossary/>)

Adaptation

“In *human systems*, the process of adjustment to actual or expected *climate* and its effects, in order to moderate harm or exploit beneficial opportunities.

In *natural systems*, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects.”

(<https://apps.ipcc.ch/glossary/>)

Proposed Definition CC-mitigation expenditures

- Climate change mitigation expenditures include products and economic activities that serve a climate change mitigation purpose that reduce emissions or enhance the sinks of greenhouse gases, including nature-based sinks. In addition, climate change mitigation products may be designed and produced to have a climate change mitigation primary or secondary purpose (cleaner or more resource-efficient alternative).

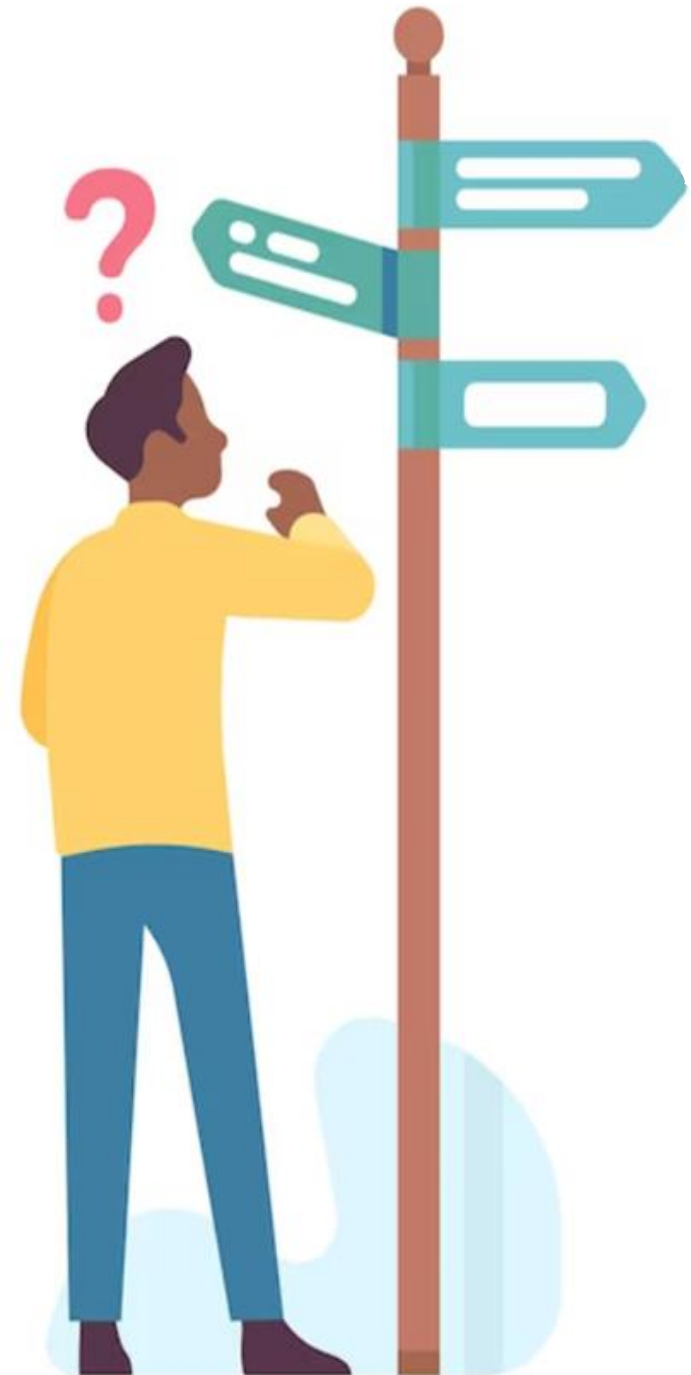
Mitigation definition - includes

- Purpose of climate change mitigation
- Economic activities and products
- Primary purpose and technical nature (which includes secondary purpose)
- System boundary – expanded from Environmental Protection / Resource Management mostly to include other non-carbon emitting energy sources but also transportation (public & rail)
- **Currently no agreement on**
 - **CC Mitigation economic activities or products**
 - **Full cost, additional/extra cost**
 - **Public transport and rail transportation (freight and passenger)**

Proposed Definition CC-Adaptation Expenditures

- Climate change adaptation expenditures include economic activities and products that serve the purpose to substantially reduce, moderate or helps avoid harm in natural ecosystems and in human systems, and which maintain or increase adaptive capacity and resilience in response to changing climate conditions.

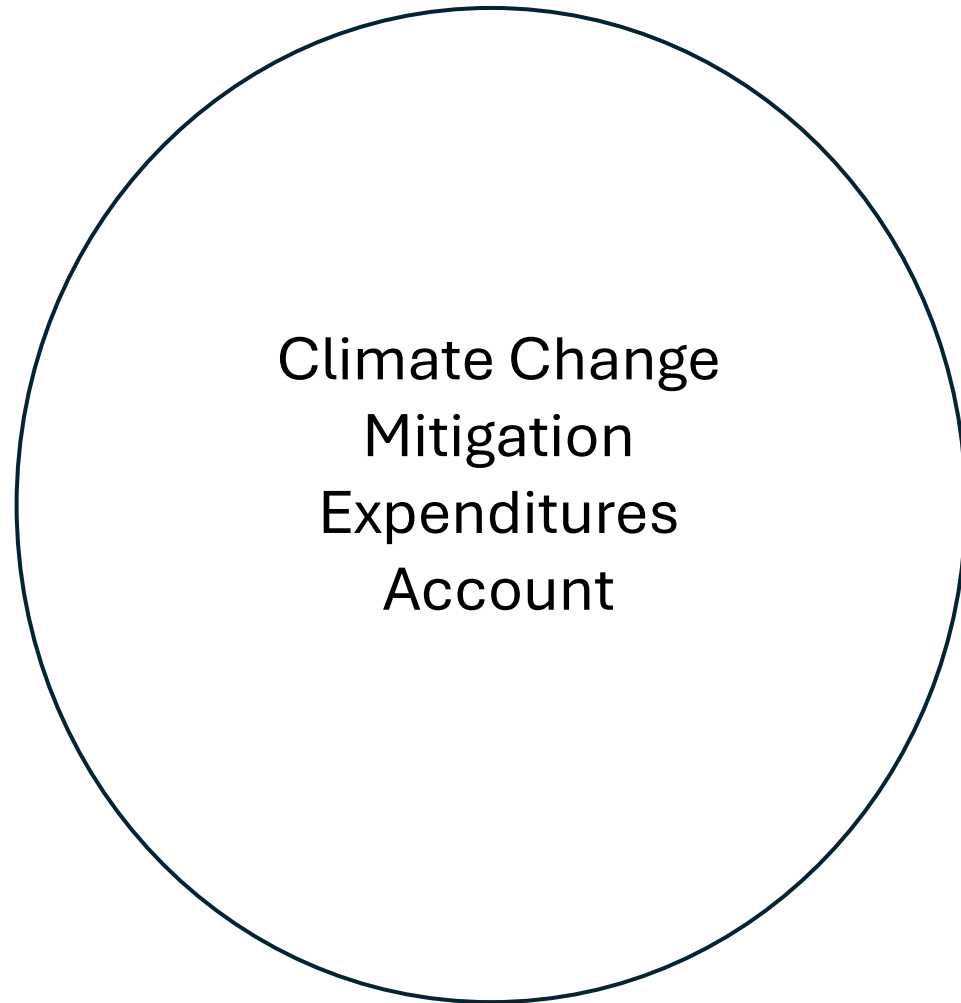
need something here



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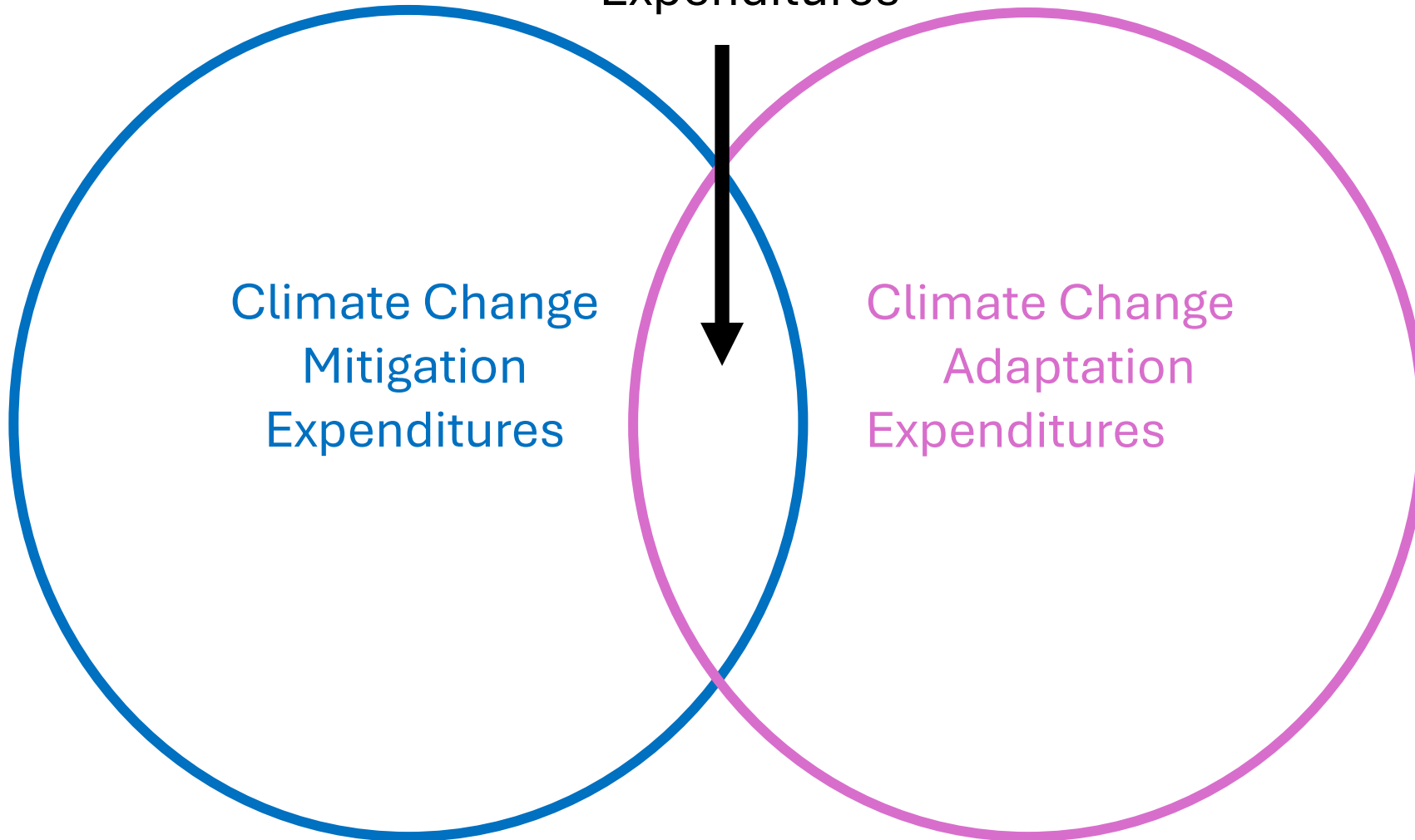
Separate Climate Change Expenditures Accounts?



Additive CC-Mitigation and CC-Adaptation Expenditures Accounts?



Climate Change
Mitigation and Adaptation
Expenditures



Overlap examples:

1. Re-planting Mangroves
Mit: Carbon capture & storage
Adapt: Coastal protection

2. Wetlands restoration
Mit: Carbon capture & storage
Adapt: Flood protection and reduction

3. Add insulation to Buildings
Mit: Reduces energy use for heating and cooling
Adapt: Helps people adapt to more extreme temperatures

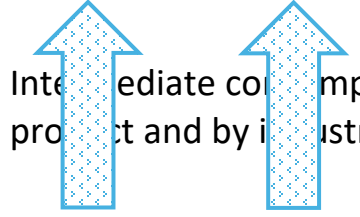
Assumes CC-Mitigation and CC-Adaptation Expenditures are additive

IMF – DGI 3, Rec 7: Use Table (Products x Industries)

		Industries			Final Uses			Total
		CC- Mitigation Activities	CC- Adaptation Activities	Other Activities	Final Consumption	Gross Capital Formation	Exports	
Products	CC- mitigation products	Intermediate consumption by product and by industry			Final uses by product and by industry	Gross Capital Formation	Exports by product	Total use by product
	CC- Adaptation products							
	Other products							
Value Added		Value Added by component and by industry			Not applicable			Total value added
Total		Total output by industry			Total Final uses by category			

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	CC-Adaptation products							
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Use Table – Adaptation only / need separate Mitigation SUT

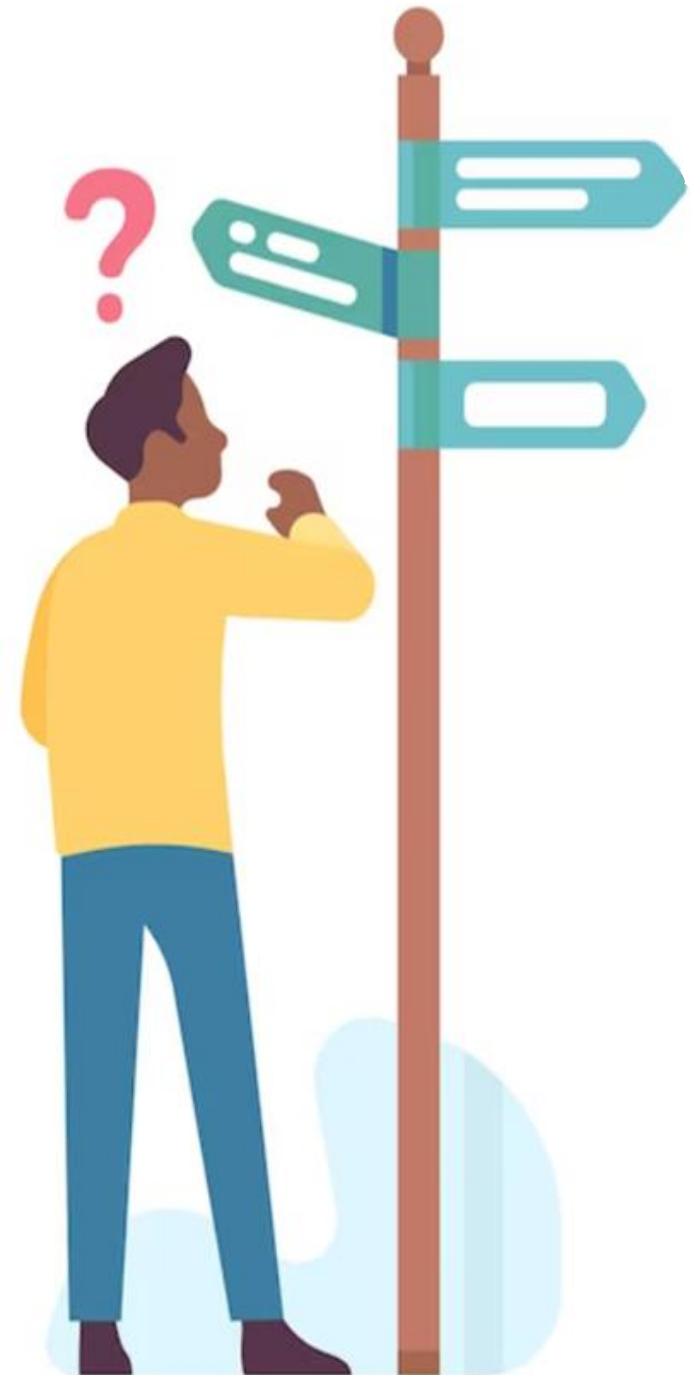
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		Industries		Final Uses			Total
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Main economic variables – CC expenditure Accts

	Institutional Sector	CC-Mitigation	CC-Adaptation
Output	Total economy		
	<i>Corporations</i>		
	<i>Households</i>		
	<i>General Government</i>		
Imports	Total economy		
	<i>Corporations</i>		
	<i>Households</i>		
	<i>General Government</i>		
Exports	Total economy		
	<i>Corporations</i>		
	<i>Households</i>		
	<i>General Government</i>		
Intermediate Consumption	Total economy		
	<i>Corporations</i>		
	<i>Households</i>		
	<i>General Government</i>		
Final Consumption	Total economy		
	<i>Households</i>		
	<i>General Government</i>		
Gross Capital Formation	Total economy		
	<i>Corporations</i>		
	<i>Households</i>		
	<i>General Government</i>		

More detailed classification for CC-expenditures

Climate Change Mitigation

- CEP Annex – Identifies some CEP categories and out of scope activities
- Eurostat – reporting categories for investments
- IMF – DGI 3, Rec 7 – reporting categories

Climate Change Adaptation

- IMF – DGI 3, Rec 7 – reporting categories
- Various green budget tagging and other methodologies

No consensus

Climate Adaptation Products – CA1

CA1	<i>Construction, installation, repair and other related products</i>
CA11	<i>Flood Protection and Adaptation Products</i>
CA111	Flood barriers
CA112	Elevated structures
CA113	Wetlands restoration
CA114	Flood warning systems.
CA12	<i>Sea Level Rise Protection and Adaptation Products</i>
CA121	Sea walls
CA122	Mangrove restoration
CA123	Raised walkways and buildings.

Product codes relevant for initial list of products

Wetlands restoration	CPC code: 94412 Site remediation and clean-up services, surface water 9442 Containment, control and monitoring services and other site remediation services n.e.c. 9490 Other environmental protection services n.e.c.
Flood warning systems.	CPC code: 48219 Other surveying, hydrographic, oceanographic, hydrological, meteorological, or geophysical instruments and appliances 48251 Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers
Sea walls	CPC code: 54290 General construction services of other civil engineering works; 53290 Other civil engineering works
Mangrove restoration	CPC code: 83232 Landscape architectural services
Raised walkways and buildings.	CPC code: Part of 541 General construction services of buildings

Hazards Classification used in the Disaster-Related Statistics Framework (DRSF)

- Uses the IRDR Peril and Hazard Glossary (2014)

Hazard Families:

- Geo-physical
- Hydrological
- Meteorological & Climatological
- Biological
- Others

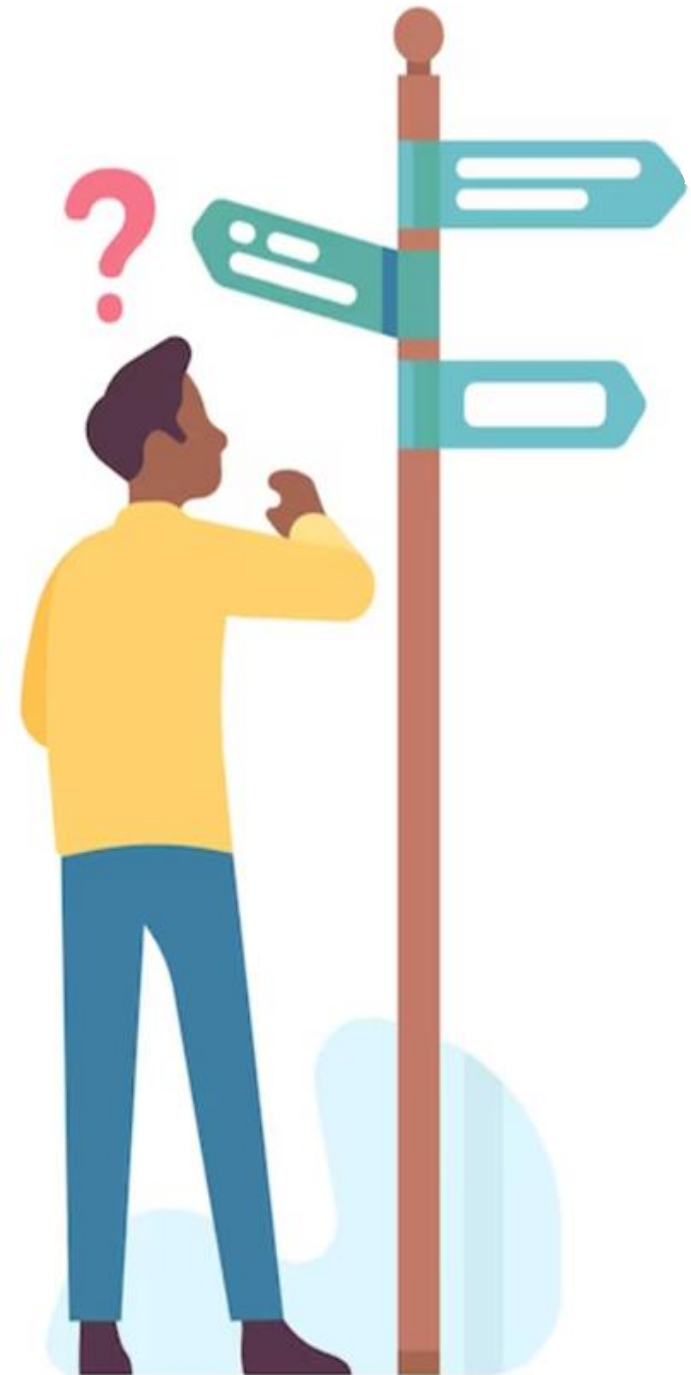
DISASTER-RELATED STATISTICS FRAMEWORK (DRSF)

Expert Group on Disaster-related Statistics in Asia and the Pacific



Climate Change results in all of these types of disasters

- A **slow-onset disaster** emerges gradually over time. Slow-onset disasters could be associated with, e.g., **drought, desertification, sea level rise, epidemic disease**.
- A **sudden-onset disaster** is one triggered by a hazardous event that emerges quickly or unexpectedly. Sudden-onset disasters could be associated with, e.g., earthquake, volcanic eruption, **flash flood**, chemical explosion, critical infrastructure failure, and transport accident.
- A **cascading multiple-hazard disaster occurrence** is a disaster in which one type of hazard, such as a **strong storm**, causes one or more additional hazards, e.g., **flooding or landslides**, creating combined impacts to the population, infrastructure and the environment



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Philosophy of inclusion?

- Have climate change expenditure accounts matured enough to be included in the revised SEEA-CF?
 - If we don't do it, then others will!
 - Missed opportunity – need to include
- Take a two-tiered approach?
 - CC-Mitigation Expenditures – more complete accounts?
 - CC-Adaptation Expenditures – “experimental” – be more general with details to be worked out later?



1. Does C3 expand the SEEA scope adequately to include climate change expenditures? Including adaptation?
2. CC Mitigation expenditure & CC Adaptation expenditure definitions – Any comments? Revisions?
3. Are CC-Mitigation and CC-Adaptation Expenditures additive or not? Is there overlap (i.e. are some products and activities BOTH mitigation and adaptation). Can a total for Climate Change Expenditures be calculated?
4. Classification of mitigation expenditures – extend the CEP to include these? Or make a new classification by extending the CEP? Or start new?
5. Classification of adaptation expenditures – need to develop – propose to use CC disasters as starting point. Does not yet exist – so what do we do?
6. How should public transport and rail transport be included? In mitigation? In Adaptation? All? None? Only a portion?
7. Any comments to the economic variables proposed?
8. What is the philosophy of inclusion in SEEA?
For the SEEA-CF 2012 – only topics we all agreed on were included – the rest went into the applications and EEA-manuals. What is the plan this time?
Are both CC-mitigation expenditures and CC-adaptation expenditure accounts ‘mature enough’ to be included in the SEEA-CF?

Thank you for your attention!

Comments to:
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