

Climate change policies and the SEEA

Sokol Vako

United Nations Statistical Institute for Asia and the Pacific

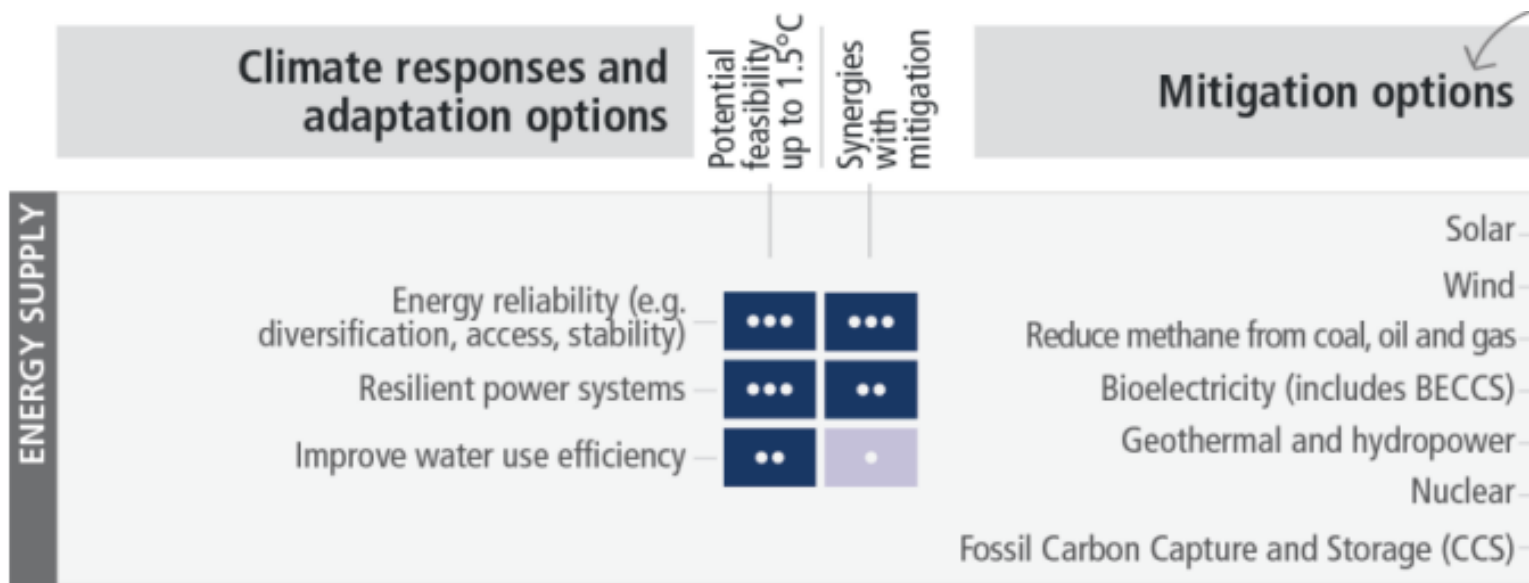
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An update on where things stand

*“**Human activities**, principally through emissions of greenhouse gases, **have unequivocally caused global warming**, with global surface temperature reaching 1.1°C above 1850–1900 in 2011–2020. Global greenhouse gas emissions have continued to increase, with unequal historical and ongoing contributions arising from **unsustainable energy use, land use and land-use change, lifestyles and patterns of consumption and production** across regions, between and within countries, and among individuals.”–*

Synthesis Report (SYR) of the IPCC Sixth Assessment Report (AR6)
(March 2023)

What can we do—Energy supply



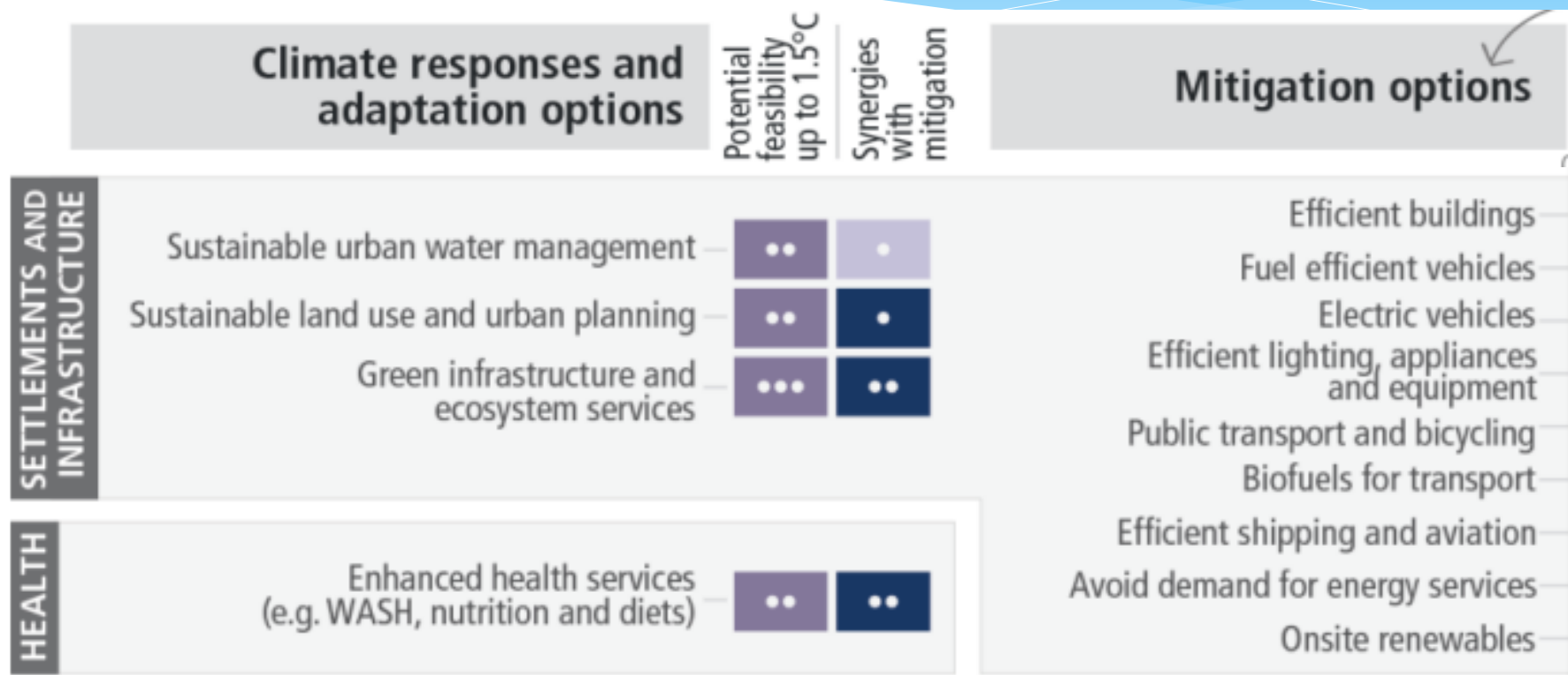
Synthesis Report (SYR) of the IPCC Sixth Assessment Report (AR6) (March 2023)

What can we do—Land, water, food

		Climate responses and adaptation options		Potential feasibility up to 1.5°C	Synergies with mitigation	Mitigation options
LAND, WATER, FOOD	Efficient livestock systems	..	..	..	..
	Improved cropland management	..	..	..	...	Reduce conversion of natural ecosystems
	Water use efficiency and water resource management	..	..	..	..	Carbon sequestration in agriculture
	Biodiversity management and ecosystem connectivity	..	..	..	...	Ecosystem restoration, afforestation, reforestation
	Agroforestry	..	..	..	...	Shift to sustainable healthy diets
	Sustainable aquaculture and fisheries	..	..	..	..	Improved sustainable forest management
	Forest-based adaptation	...	...	...	...	Reduce methane and N ₂ O in agriculture
	Integrated coastal zone management	...	...	...	..	Reduce food loss and food waste
	Coastal defence and hardening	...	...	...	not assessed	

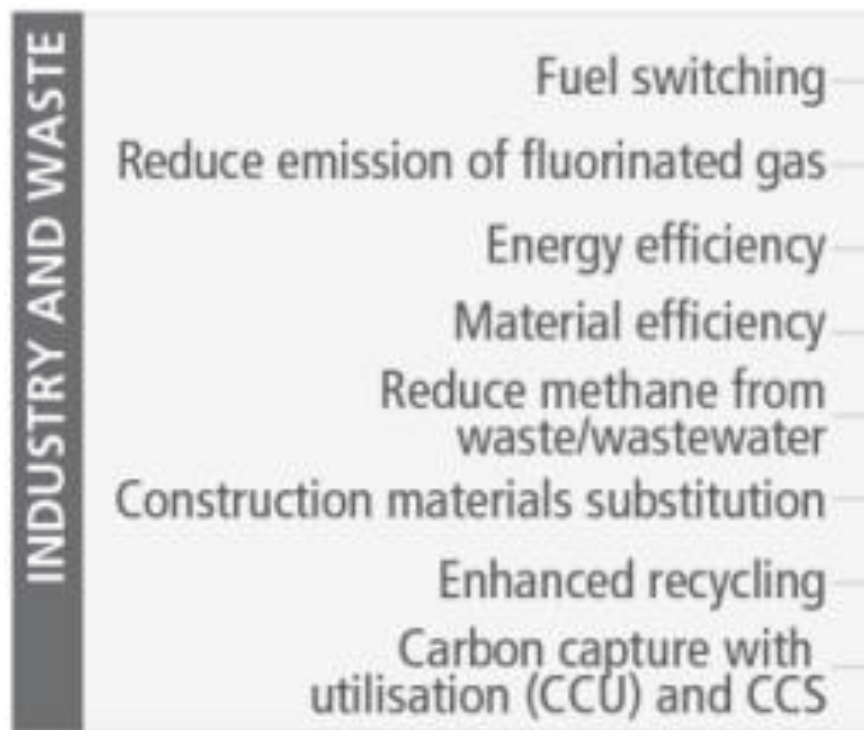
Synthesis Report (SYR) of the IPCC Sixth Assessment Report (AR6) (March 2023)

What can we do—Settlement and infrastructure



Synthesis Report (SYR) of the IPCC
Sixth Assessment Report (AR6) (March 2023)

What can we do—Industry and waste



Synthesis Report (SYR) of the IPCC
Sixth Assessment Report (AR6) (March
2023)

How can we do it?

FAMILY	TYPE	DESCRIPTION	EXAMPLE
Direct government action	Government expenditure	Transfers across agencies and institutions, or the private sector	Investment in flood control
	Government services	Current expenditure on services associated with climate objectives or services required in the case of climate extreme events	Current expenditure on protected areas, health, emergency expenditure
Agent-based policy instruments	Regulatory instruments	Also known as 'command-and-control', these instruments force the economic agent, through regulation and enforcement, to comply with a specified action, such as a certain level of emissions, or practices for adaptation	Mandated emissions control or emissions standards
	Market incentives	Instruments affecting market solutions without imposing regulations. This can be done by imposing an explicit (tax) or implicit (other market-based instrument) price instrument, such as emissions permits. ¹¹	Taxes, fees, emission trading systems
	Educational campaigns	Education or information on the consequences of specific practices, aimed at affecting the preferences (and consequent behaviour) of economic agents	Energy efficiency campaigns, public transport campaign

Natural Capital Accounting For Integrated Climate Change Policies (UNDESA)

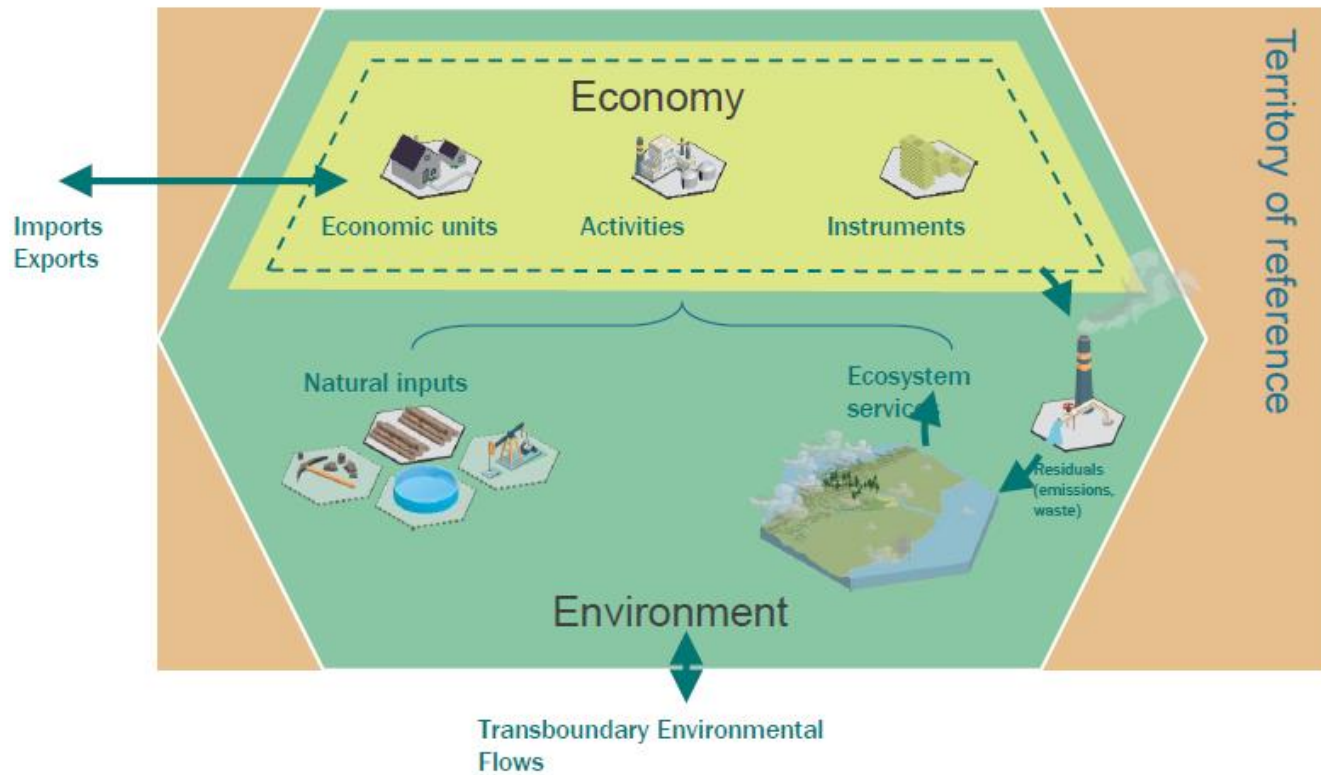
What information do we need?

We need to understand the relationship between the economy and climate change-> need good data to inform our understanding and what we need to do to mitigate and adopt!

SEEA is the statistical framework that allows us to link economic activity and the many facets of climate change.

More broadly, an integrated data approach is needed.

What is the SEEA?



What SEEA accounts can be used to support climate change policies?

TYPE OF INFORMATION

ACCOUNTS

	SNA			SEEA-CF			SEEA-EEA	
	Asset Accounts	Flow Accounts	Functional Accounts	Asset Accounts	Physical Flow Accounts	Environmental Activity Accounts	Asset Accounts	Flow Accounts
Climate Change Drivers		SUT	Government Expenditure Account (COFOG)	Land use and Cover Accounts, Forest Accounts, Timber Accounts, Carbon Accounts	Material Flow Accounts, Energy Flow Accounts, Agriculture Accounts		Ecosystem Condition by LCEU, Carbon Stock Account	Physical Flow of Ecosystem Services
Emissions				Carbon Accounts	Air Emission Accounts	Environ. Taxes and Transfer		
Sinks				Land use and Cover Accounts, Forest Accounts, Timber Accounts, Carbon Accounts		Environ. Taxes and Transfer	Ecosystem Condition by LCEU, Carbon Stock Account	Physical Flow of Ecosystem Services
Impacts	Physical Assets	SUT	Government Expenditure Account (COFOG)	Land use and Cover Accounts, Forest Accounts, Timber Accounts, Aquatic Resource Accounts, Natural Biological Accounts, Water Resource Accounts	Water Accounts, Agriculture, Forestry, Fisheries Accounts		Ecosystem Condition by LCEU, Carbon Stock Account	Physical Flow of Ecosystem Services
Mitigation				Land use and Cover Accounts, Forest Accounts, Timber Accounts	PSUT, Material Flow Accounts, Energy Flow Accounts, Agriculture Accounts	EPEA, EGSS, Environ. Taxes and Transfer	Ecosystem Condition by LCEU, Carbon Stock Account	Physical Flow of Ecosystem Services
Adaptation				Land use Accounts, Forest Accounts, Timber Accounts, Soil Accounts	Material Flow Accounts, Energy Flow Accounts, Agriculture Accounts	EPEA, EGSS, Environ. Taxes and Transfer	Ecosystem Condition by LCEU, Carbon Stock Account	Physical Flow of Ecosystem Services

Natural Capital Accounting For Integrated Climate Change Policies (UNDESA)

Global and National Response to Climate Change

- Headline agreement is the UNFCCC
- Latest and most prominent component of UNFCCC: Paris Agreement
 - Aim: intensify and accelerate efforts to combat climate change
 - Country owned and led: Nationally determined contributions
 - Focus is on anthropogenic (human caused) climate change



National Response to Climate Change

- Looking at NDCs (or other national documents that you might be aware of), what are 2-3 major policy areas in your country/targets that you think can be informed by SEEA?
- 15 min of reviewing NDC
- Please write your responses in the white boards (5 min)



National Response to Climate Change—an example from Albania

Table 2. Summary of the main mitigation actions for the energy sector

N°	Sector	Name	Subsector	Policy context	Description
E1	Energy	Energy efficiency	Transport	National Energy Efficiencies Actions Plans (NEEAP), NSE, Action Plan of Transport sector, National Energy Strategy 2018-2030	Efficient transport system: Increasing the share of public transport for passengers and freight (roads, railways and waterways). Up to 2030, 30% of the road transport of over 300 km shall be shifted to other transport modalities, like the rail. Up to 2050 the goal to be achieved is 50%. Energy labelling of new vehicles.
E1	Energy	Energy efficiency	Buildings - Residential & Tertiary	National Energy Efficiencies Actions Plans (NEEAP), National Energy Strategy 2018-2030	Improving the energy performance in buildings keeping into account the local and climatic conditions of the country, interior comfort of buildings and cost effective. Renovation of public building stock each year by 2% of the heated /cooled area for buildings that are under administration of, or used by a public authority, or provide a public service, with a view to meeting the minimum energy performance requirements.
E1	Energy	Energy efficiency	Power sector (electricity generation, transmission and distribution)	National Energy Efficiencies Actions Plans (NEEAP), National Energy Strategy 2018-2030	Reduction of transmission and distribution losses by promotion of distributed generation.
E1	Energy	Energy efficiency	Industry	National Energy Efficiencies Actions Plans (NEEAP), National Energy Strategy 2018-2030	Reduction of emissions from industries based on energy efficiency.