Area C Road Map (2024 Version)

Work elements/ topics	Lead agencies (partner agencies)	Objectives for 2021-2025	Steps toward the 2025 target	Timelines	Possible objectives for 2026-2030	Links to other areas
PRIORITY ACCOUNTS						
Air emissions (GHG, air pollutants)	OECD (with Eurostat and UNSD)	Expand geographical coverage: Ensure that (i) all official AEAs are included in global databases; (ii) all AEA related national data are compiled or estimated.	 Develop tiered questionnaire with minimum set of information to be compiled by countries without SDMX transmission. Establish regular data collection and maintain annual updates of global compilation and estimation. 	completed completed	Aim at uniform coverage of emission sources and gases, time	SEEA CF Update (Relevant for all accounts) DGI-3 Rec. 1
		Improve coverage of emission sources	 Develop methodology for estimating emissions from international air and maritime transport, residence basis. 	completed		EUROSTAT-IEA-IMF- OECD-UNSD Task Team on Estimating Quarterly Emissions of Greenhouse Gases
			 Develop methodology for estimating annual AEAs for non- Annex I countries of UNFCCC. 	2022-24/25		
		Improve timeliness & frequency: Develop a methodology for quarterly estimation to meet the demand from policy makers.	• Develop methodology for quarterly AEAs (aiming ultimately at t+2 months' time lag after the end of the reference quarter). Would also lead to early annual emission estimates (collaboration between IMF, OECD, Eurostat, IEA, UNSD)	2021-22 Ongoing		Area A: climate indicators (UNECE core set)
		Carry out further research			Potential further research areas: LULUCF, road transport	Area B1: issues related to LULUCF
Energy	UNSD (with Eurostat and OECD)	Establish and maintain global database Finalise the estimation methodology	 <u>SEEA database</u> Develop common data questionnaire for national reporting Establish regular data collection Undertake regular data collection Maintain annual updates of database <u>Estimation methodology</u>: 	Completed Completed Ongoing Medium term		DGI-3 Rec. 2 Area A: climate
			Further exploration of estimation methodologies for accounts derived from energy balances, in coordination with DGI-3 efforts		PEFA / AEA	indicators (UNECE core set)
Economy-wide material flows	UNEP (with	Maintain and further develop the global database	UNEP IRP <u>global material flow database</u> (last updated Dec. 2023, frequency every two years)	Ongoing	Increase national capacity to build EW-MFA and Material Footprint	Area A: CE indicators

Work elements/	Lead	Objectives for 2021-2025	Steps toward the 2025 target	Timelines	Possible objectives for	Links to
topics	agencies (partner				2026-2030	other areas
	agencies)					
(EW-MFA)	Eurostat				calculations, and to report national	
	and OECD)				data to global databases	
	0200)		Progressively integrate national data using a common data	Ongoing		Area D1: capacity
			template (for non-EU countries - via the pre-filled EW-MFA			building
			questionnaire for SDGs, every two years from 2022, UNEP; for EU countries - Eurostat database)			
			 Reconcile national data with international estimates (UNEP 			
			and UNEP IRP)			
			Continue capacity building in countries (UNEP)	Ongoing		Area D1: capacity building
		Refine the methodology for demand-based	Material footprints	2021-22		Area B1: indicators
		material flows (input-output based approach	• Further develop and test the harmonised estimation method for	Ongoing		from I-O analysis
		for use in international work)	 demand-based material flows (OECD with Eurostat & UNEP) Update the roadmap for required developments & research 			
			(OECD with Eurostat & UNEP)			
			Develop a Global Footprint Tool based on the GLORIA	2023-2025		Area D1: capacity
			MRIO Database and pilot test it at the national level (UNEP)			building
		Implement automatic data transfer among	Put in place an automatic data transfer and exchange mechanism	Completed &		
		IOs	(using SDMX) between UNEP and other IOs (UNSD, OECD,	Ongoing		
			Eurostat)	0 0		
		Carry out further research and improve relevance for circular economy policies	 Integrate MF data/accounts with waste statistics/accounts. Explore links with product statistics, and EGSS and tax 	TBD		Area A: CE indicators Area B1: classifications
			revenue accounts.			Area DT. classifications
Land	OECD,	Develop international consensus on data to	Data collection from countries:	Ongoing	Next steps will depend on the	Area B2: ecosystem
(cover)	EEA and FAO (with	be collected, develop an estimation methodology to use for gap-filling.	 Agree on the scope of future data collection (Q1-2024) Agree on the attributes of the reporting template (Q2-2024) 		outcome of the 2024 pilot test.	accounts
	UNSD)		Pilot-test the template with countries (Q4-2024)			
		Maintain a global database with regular	Determine next steps depending on the outcome			
		updates, agree on practical co-operation arrangements among IOs, and, should it be	Estimation methodology:	0004.05		
		required, implement an automatic data	Use estimates based on global data	2024-25		
		exchange between IOs	Integrate LCML into ARIES for SEEA			
			Next steps:			
			Review coherence between existing data databases and	Ongoing		

Work elements/ topics	Lead agencies	Objectives for 2021-2025	Steps toward the 2025 target	Timelines	Possible objectives for 2026-2030	Links to other areas
	(partner agencies)					
			collection – FAO, OECD, EEA, UNCCD: structure and content,			
			 data sources, methodology Develop an agreed hierarchy and ontology of LC classes that meet various information needs, while promoting 			
			Develop a common data template for national reporting on	Q3-Q4 2022		
			Pilot data template with countries	2024-2025		
			• Establish regular data collection [& validation by countries]	TBD		
Water (physical supply and use tables)	OECD (with Eurostat)	Populate simple SEEA water accounts (pilot)	 Develop and agree on tiered reporting templates for water accounts building on the SEEA Technical Note (OECD, Eurostat) 	TBD		Area B2: ecosystem accounts
	in cooperatio n with		 Test the use of country replies to the OECD/Eurostat questionnaire on inland waters for populating the standard template (OECD, Eurostat) 	TBD		Area A: CE indicators
	UNSD, UNEP ,		• Establish a database on SEEA water accounts (starting with EU countries and OECD member and partner countries)	TBD		
	FAO		Conduct a feasibility study (OECD)Conduct a feasibility study (Eurostat)	2024 Under preparation		
OTHER DEVELOPMENTS						
Additional priority accounts	All involved	Identify a small set of future priority accounts	 Discuss the potential of other accounts to become priority accounts at UNCEEA meeting 	2022	Discuss the potential of other accounts to become priority accounts at UNCEEA meeting	
			• Review the status of the selected accounts, identify the developments required and related arrangements among IOs	Ongoing		
			Decide upon future priority accounts and roadmap at UNCEEA meeting	TBD		
- Environmen tal subsidies account		Eurostat starting first data collection on mandatory basis by end 2025	 Drafting/Updating guidelines. Doing pilot collections of environmental harmful subsidies (Called "potentially environmental damaging subsidies" at Eurostat) 	2025		DGI-3 Rec.6
- Forest account		Eurostat starting first data collection on mandatory basis by end 2025	Drafting/Updating guidelines.	2025		
- Investment			Publish first estimate of investments on climate change	2024		DGI-3 Rec.7

Work elements/ topics	Lead agencies (partner agencies)	Objectives for 2021-2025	Steps toward the 2025 target	Timelines	Possible objectives for 2026-2030	Links to other areas
on climate change mitigation			mitigation.Start data collection with legal basis in the EU	2025		
- Climate change adaptation (expenditur			Eurostat to conduct a feasibility study	Under preparation		
e) account - Ecosystem account		Eurostat starting first data collection on mandatory basis by end 2025				
Overall coordination and governance	OECD (all involved)	(pending tasks)				
Responsibilitie s for quality assurance and validation		Reach a consensus and agreement on the sharing of responsibilities	Sharing of responsibilities for data collection from national sources, and for data quality assurance and validation (subsidiarity principle). to be discussed; arrangements will differ depending on the account considered	Ongoing		
Dissemination of priority accounts	UNSD (all involved)	Establish a SEEA dissemination portal	Establish a portal providing access to SEEA databases and links to accounts hosted by lead (and partner) agencies.	2023-4		
Data ownership and copyright			For discussion	TBD		

Area C Status of Accounts (2024 version)

Table 1 Priority Accounts

Accounts	Agencies involved	Country coverage in IO databases	Time coverage	Classifications used	Data sources	Available databases/datasets	Status of methodology (compilation, estimation)
Air emissions	Eurostat, OECD	AUS, CAN, CHE, COL, CRI, IDN, ISL, JPN, KOR, MEX, NOR, NZL, SRB, TUR, UKR, USA Estimated by IO: KAZ, RUS, USA	Reported: 1990-2022* Estimated: 1997-2021 (CO2, CH4, N2O) *Annual updates: 2023 update expected by Dec.2024	ISIC Rev4 Households	Country reporting and OECD methodology to estimate accounts using UNFCCC data	Eurostat: <u>http://ec.europa.eu/eurostat/data/database</u> , tables env_ac_ainah_r2, env_ac_aibrid_r2, env_ac_aeint_r2, env_ac_io10 OECD: <u>https://data-explorer.oecd.org/</u> Air Emission Accounts UNSD: <u>https://data.un.org/SdmxBrowser/start</u>	Mature Based on <u>Eurostat Manual</u> and <u>OECD Methodology</u> (endorsed by SEEA-CF TC)
Energy	Eurostat, IEA, OECD, UNSD	Reported data: EU, ALB, AUS, CAN, CHE, CRI, ISL, MKD, NOR, SRB, TUR, WSM.	2000-2022* *Annual updates: 2023 update expected by Dec.2024	ISIC Rev4 Households	Country reporting	Eurostat: <u>http://ec.europa.eu/eurostat/data/database</u> , tables env_ac_pefasu, env_ac_pefa04, env_ac_pefa05 OECD : <u>https://data-explorer.oecd.org/</u> (Forthcoming) UNSD : <u>https://data.un.org/SdmxBrowser/start</u>	Mature <u>SEEA CF, SEEA-Energy,</u> Eurostat Manual
Economy-wide material flows	Eurostat, OECD, UNEP (and UNEP IRP)	Global	1970-2024	Material groups (no ISIC breakdown)	Country reporting and international databases from Eurostat, UNEP IRP, (<i>and OECD</i> *), Global SDG Database	UNEP IRP: <u>https://www.resourcepanel.org/global-</u> <u>material-flows-database</u> OECD: <u>https://data-explorer.oecd.org/</u> Material Flow accounts Eurostat: <u>http://ec.europa.eu/eurostat/data/database</u> , tables env_ac_mfa, env_ac_mfadpo, env_ac_mfabi, env_ac_mfain, env_ac_rme, env_ac_rmefd & others for derived indicators Global SDG Database (SDG indicators 8.4.1/12.2.1 and 8.4.2/12.2.2): <u>https://unstats.un.org/sdgs/dataportal</u>	Production-based: Mature Based on <u>UNEP global</u> <u>manual</u> (released in 2021 and revised in 2023) and <u>Eurostat manual</u> (2001) <u>Demand-based:</u> Refined methodology under development (OECD with Eurostat and UNEP IRP) Eurostat estimating material foortprints for all EU countries; UNEP IRP estimating material footprint for the UN Member States
Land (cover)	EEA, OECD,	Global	1992-2022	Land cover classes (SEEA-CF)	ESA and Université Catholique de Louvain Geomatics – Climate	FAO: http://www.fao.org/faostat/en/#home :Land Cover Domain: http://www.fao.org/faostat/en/#data/LC	Ongoing, not (yet) endorsed by UNCEEA

Accounts	Agencies involved	Country coverage in IO databases	Time coverage	Classifications used	Data sources	Available databases/datasets	Status of methodology (compilation, estimation)
	FAO, UNSD ARIES	(countries, macro- regions)			Change Initiative - Land Cover (via FAO and OECD)	OECD: https://data-explorer.oecd.org/ Land cover and land cover change https://doi.org/10.1787/72a9e331-en (currently being updated)	http://fenixservices.fao.org/fao stat/static/documents/LC/LC_e _2020.pdf
Water (resources, use)	Eurostat, OECD, UNSD, UNEP, FAO	Selected countries depending on data availability (EU, OECD, other)	1970-2022 (limited availability for some variables and years)	ISIC industries (limited availability)	Country reporting on water statistics: OECD/Eurostat coordinated with UNSD/ UNEP (+ FAO Aquastat **, +UN-Habitat, WHO (wastewater))	OECD: https://data-explorer.oecd.org/ Water Accounts – assets, Water Accounts – supply and use	(SEEA water, SEEA CF,and SEEA water Technical note)

Table 2 other accounts

Accounts	Agencies involved	Country coverage in IO databases	Time coverage	Classifications used	Data sources	Available databases/datasets	Status of methodology (compilation, estimation)
Mineral & Energy resources - asset accounts	OECD	Currently covering 9 countries	1960-2022 (availability varies)	14 resources prioritized (same as World Bank)	Country reporting	OECD : https://data-explorer.oecd.org/ Mineral and Energy Resources	OECD Green Growth Working paper (2018)
Environmentally-related tax revenue (ERTR)	OECD, Eurostat	Selected countries depending on data availability (EU, OECD, other)	1994-2022	ISIC Rev4, Households Tax bases: energy, transport, pollution, resources. Domains: Total, air pollution, biodiversity, climate change, ocean, etc.	Country reporting: OECD/Eurostat	Eurostat: http://ec.europa.eu/eurostat/data/database Tables env_ac_tax, env_ac_taxener, env_ac_taxind2 OECD: https://data-explorer.oecd.org/ Environmentally related tax revenue	Based on Eurostat manual and <u>OECD methodological</u> <u>guidelines</u>
Environmental Goods and Services	Eurostat	EU countries, CHE, ISL, MKD, NOR, SRB, TUR	2000-2022	Total, Ancillary, Market, non-market, own final-use ISIC CEPA and CReMA	Country reporting, Eurostat	Eurostat: <u>http://ec.europa.eu/eurostat/data/database</u> , tables env_ac_egss1, env_ac_egss2, env_ac_egss3	SEEA Central Framework Eurostat manual Eurostat compilation guide
Environmental protection expenditure accounts (EPEA)	OECD, Eurostat	EU countries, CHE, GBR, ISL, KOR, MKD, NOR, SRB, TUR	2004-2022	Final and intermediate consumption, GFCF, imports, output, others. Institutional sector ISIC for some variables CEPA and CReMA	Country reporting, Eurostat	Eurostat: http://ec.europa.eu/eurostat/data/database , tables env_ac_epea and sub tables OECD: https://data-explorer.oecd.org/	SEEA Central Framework Eurostat manual
Environmental subsidies and similar transfers	Eurostat	EU countries (Not all), CHE, NOR	2011-2022	Institutional sector ISIC CEPA and CReMA	Country reporting, Eurostat	Eurostat: http://ec.europa.eu/eurostat/data/database , tables env_esst_gg, env_esst_ggcp Data on potentially environmentally damaging subsidies not published yet (pilot data collection)	SEEA Central Framework Eurostat manual

Accounts		Country coverage in IO databases	Time coverage	Classifications used	Data sources	Available databases/datasets	Status of methodology (compilation, estimation)
						OECD: Regular data collection on government support for forssil fuels, fisheries, agriculture, industry	
Forest accounts	Eurostat	EU countries, BIH, CHE, GBR, MKD, NOR	2012-2022 (some countries back to 1986)		Country reporting, Eurostat	Eurostat: <u>http://ec.europa.eu/eurostat/data/database</u> , table for_eaf	SEEA Central Framework
Ecosystem accounts (extent, condition (for forest), and select services currently available)	UNSD	Global	1992-2019	ISIC Rev4 Households SEEA CF Land cover interim classification IUCN Global Ecosystem Typology	Global datasets and models	https://seea.un.org/content/aries-for-seea	SEEA Ecosystem Accounting Eurostat developing guidance notes for EU reporting