

A new indicator for policy makers. The impact of general government expenditure on the six environmental objectives as a percentage of GDP POSTER SESSION February 22nd-23rd 2024, Pescara

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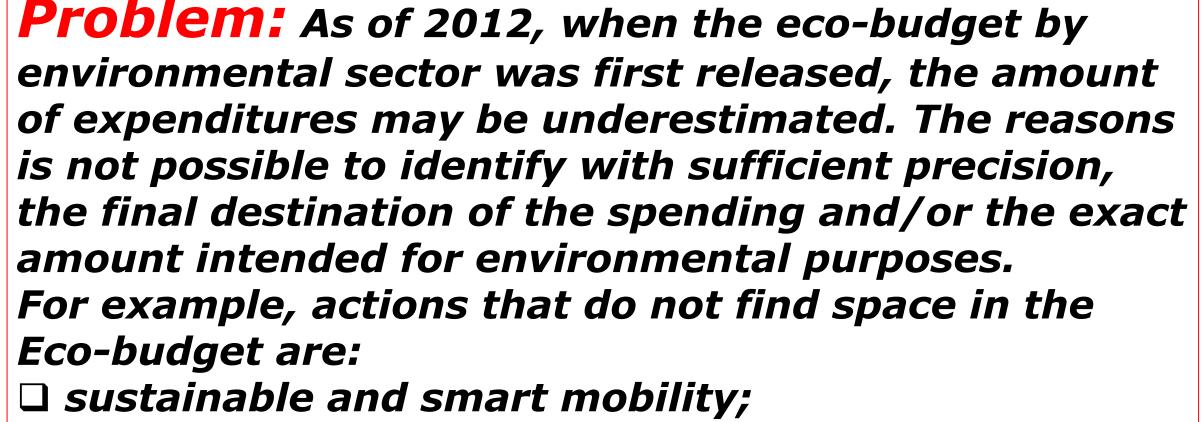
This poster highlights the limitations of Eco-budget in Italy (Law n°196 of 31 December 2009, in Article 36), mainly attributed to the potential underestimation of environmental expenditures in accounting representation. Italy's Plan for Recovery and Resilience represents a unique opportunity to reclassify the state's general budget for environmental expenditure. The ultimate goal is to improve "ECO budgeting" and introduce a new indicator for policy: the impact of general government expenditure on the six environmental objectives as a percentage of GDP. UN's Agenda could be included combat climate change and its impacts by 2030. Not only that, as the focus is, on decreasing the debt-to-GDP ratio, one could suggest annually adjusting the budget balance.

The spending indicator in debt reduction, primary spending should be expressed net of that incurred to achieve the six environmental goals, especially the expenditure incurred on actions for climate change mitigation and adaptation.

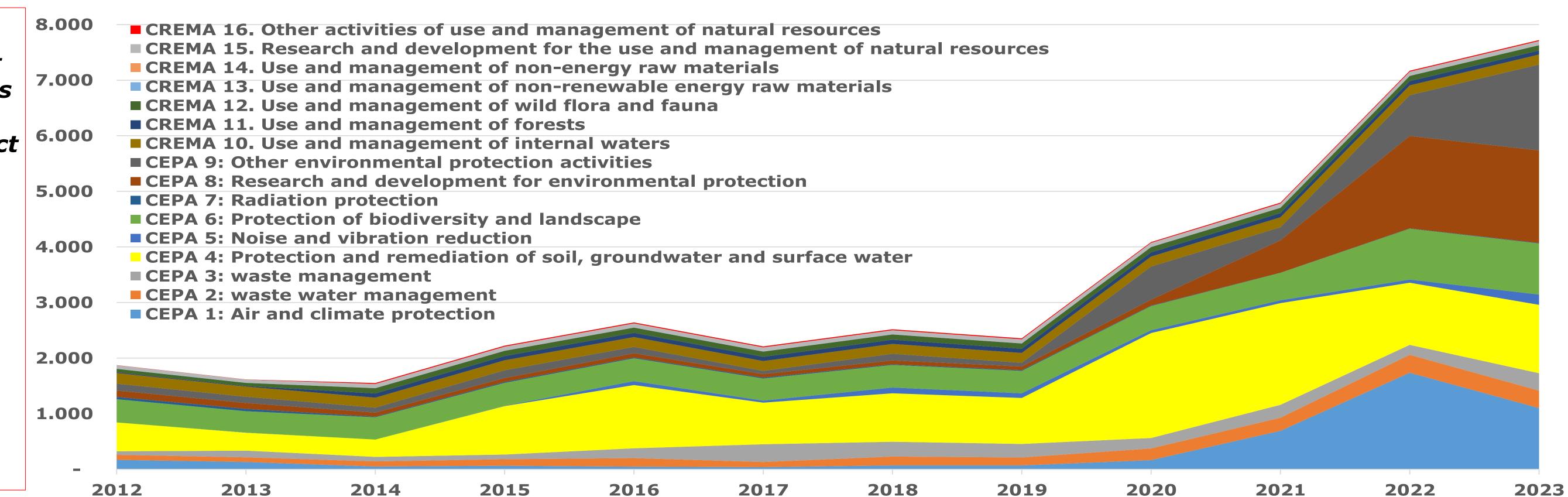
The main purpose of expenditure on environmental protection is the prevention, reduction and elimination of pollution. The national expenditure by general government and NPIH, is 0,7 percentage of GDP for the Year 2020 (Eurostat, Environmental Accounts) in line with the European average. Austria, Poland end Slovenia were the worst in Europe (just 0.2 of GDP).

The information from the Eco-budget, published by the Ministry of Economy and illustrated in Graph 1 provides an overview of environmental spending forecasts for the period 2012 to 2023. Primary expenditure for the environment has increased by 300%, with the growth primarily concentrated in the period 2019-2023, coinciding with the entry into force of the European Green Deal (COM 2019, 640 final). The amount of expenditure could be used to determine the budget balance adjustment.

Graph 1. Italy-Eco-Budget-Environmental Expenditure: initial allocations by environmental sector, years 2012-2023



- □ public resources devoted to achieving the goal of zero pollution for a toxin-free environment; and electro-magnetic fields;
- □ measuring spending on interventions to build renovate in an energy- and resource-efficient manner;
- □ combating soil consumption;
- □ carbon capture and utilization technologies.



Processing the expenditure data classified by action and using the description of the management plan, it was possible to examine the nature of the expenditure to associate the environmental sector (CEPA-CReMA). After selecting accounting items, these are reclassified according to the codifies six environmental objectives of sustainable economic activity (ECO). Greatly absent from environmental expenditure today is climate change mitigation and adaptation.

The table 1 highlights the Italian Eco-Budget approach. It is constructed according to the structure of the French budget, which already uses a classification with the six environmental objectives, corresponding to the six axes of the European taxonomy.

In this work, the French balls, present in the table, have been combined with the Italian classification currently used by the Ministry of Economy (environmental protection activities CEPA, CREMA).

The initial allocations in 2022 by the Italian central government for environmental protection expenditure amount to EUR 7 billion, according to the Eco-budget according to SERIEE classification.

However, the data could be underestimated, as reported in the document released by the Ministry of Economy itself (greenhouse gas emission reduction report <u>MEF</u>, 2023).

Using the French scheme results 20 balls distributed among the six environmental targets. In the next table, the balls become 33 for all actions that do not find a place in the Eco-budget.

Table 1	Italy Eco- Budgets FORECAST				Southie Circulation			TOTAL	
Environmental protection expenditure by sector	2022 (millions of euros)	1 Fighting climate change "Climate Change Mitigation"	2 Adapting to climate change and preventing natural risks "Climate Change Adaptation"	3 Managing water resources	4 Circular economy, waste; preventing technological risks	5 Fighting pollution	6 Conserving biodiversity and protecting natural areas, farmland and forests	BALLS	
CEPA 1: air and climate protection	1.735							1	
CEPA 2: waste water management	322							1	
CEPA 3: waste management	180							1	
CEPA 4: protection and remediation of soil, groundwater and surface water	1.117							1	
CEPA 5: Noise and vibration reduction	58							1	
CEPA 6: protection of biodiversity and landscape	917							1	
CEPA 7: Radiation protection	5							1	
CEPA 8: Research and development for environmental protection	1.661							1	
CEPA 9: Other environmental protection activities	735							2	
CREMA 10: water management	178							1	
CREMA 11: management of forest resources	75							3	
CREMA 12. Use and management of wild flora and fauna	95							1	
CREMA 13. Use and management of non-renewable energy raw materials	3							2	
CREMA 14: management of minerals	0							1	
CREMA 15. Research and development for the use and management of natural resources	73							1	
CREMA 16. Other activities of use and management of natural resources	16							1	
TOT CEPA-CREMA: Environmental protection expenditure	7.170	4	2	4	3	1	6	20	

Table 2		mes six env		atives of susta	mable ceomonn	c activity (Monte	na 2023)			
Environmental sector	1. Climate change mitigation	2. Climate change adaptation	3. The sustainable use and protection of water and marine resources		5. The prevention and reduction of pollution	6. The protection and restoration of biodiversity and ecosystems	Number BALLS CEPA- CREMA	Italy Eco- Budgets- Environmental Expenditure 2022 (millions of euros)	GDP Year2022 (millions of euros)	The impact of environment objectives pub spending on t
CEPA 1: air and climate protection							1	3.012		
CEPA 2: waste water management							1	621		
CEPA 3: waste management							1	472		
CEPA 4: protection and remediation of soil, groundwater and surface water							2	2.241		
CEPA 5: Noise and vibration reduction							2	4		
CEPA 6: protection of biodiversity and landscape							1	1.160		
CEPA 7: Radiation protection							1	8		
CEPA 8: Research and development for environmental protection							1	1.964		
CEPA 9: Other environmental protection activities							2	18.240		
CREMA 10: water management							4	1.022		
CREMA 11: management of forest resources							3	134		
CREMA 12. Use and management of wild flora and fauna							1	131		
CREMA 13. Use and management of non-renewable energy raw materials							4	1.395		
CREMA 14: management of minerals							1	3		
CREMA 15. Research and development for the use and management of natural resources							1	1.051		
CREMA 16. Other activities of use and							1	2.418		
Protection and defense of the soil, protection of the hydrogeological structure, Prevention and reduction of electromagnetic pollution							3			
Sustainable and smart mobility							2			
Measuring spending on interventions aimed at building energy efficiency							1			
Number Balls six environmental objectives	10	2	7	2	6	6	33			
Committed competence 2022 (millions of euros) Source MEF	14.684	11.913	3.314	308	8	3.651		33.879	2.688.994	1

This is the first processing of new data and there is not much literature available on the method of classifying this type of expenditure. Table 2 proposes a new approach to reclassify the NRP's "Eco Budgeting" target (Milestone M1C1-110 to be achieved by the fourth quarter of 2023). We use this approch In order to have a broader and more meaningful set of information on the magnitude of the phenomenon. The starting point is data on environmental expenditure by programs and actions, contained in the Budget 2022 of the Ministry of Economy. The date are selected according to the criterion of uniformity to avoid significant harm to any of the environmental objectives (EU Regulation 2020/852). The classification according to the coding of the Management Plan of the General State Budget with reference to environmental expenditure is reclassified with that of environmentally sustainable economic activities (see WP Montella, 2023) and linked to the CEPA and CREMA

classification used by environmental accounting. sentation of the "Eco-budget" (33,8 billion euros in 2022, 33 balls of Green Budgeting) and, more importantly, to provide policies with a new indicator to track spending on the six environmental objectives (36,8 billion euros in 2022 for all actions). The different between the numbers could be for two reasons, the first is related to the second is due to budget slippages in 2022 that represent the difference between initial appropriations (7 billion euros) and what was committed and paid. The amount is equal to 1.3 % of GDP, which is also important to justify spending in the review of the Stability and Growth Pact. Today, the issue is that we do not know how much the state is spending on climate change mitigation and adaptation in the current climate crisis. * For more information contact montella@istat.it