

Regional and country assessments of climate needs and priorities - Overview of the needs of Arab States

Technical Workshop on Climate Finance in the Arab Region

An inception workshop for the Needs-based Climate Finance Project

InterContinental Hotel Semiramis, Cairo, Egypt

6–7 November 2019



- Needs are identified in the context of sustainable development and addressing key risks and vulnerabilities faced in the region
- Total needs communicated by Arab States amount to **USD 197 billion**¹; of the total amount, USD 123 billion is identified by two countries (Egypt and Morocco)
- Priority areas for **adaptation** and **adaptation with mitigation co-benefits** are **water, agriculture** and **coastal zones**
- Priority areas for **mitigation** and **economic diversification** with **mitigation co-benefits** are **energy, waste** and **transport**
- Key considerations:
 - Varying timeframes (ranging between 2015 to 2020-2040)
 - Limited data set

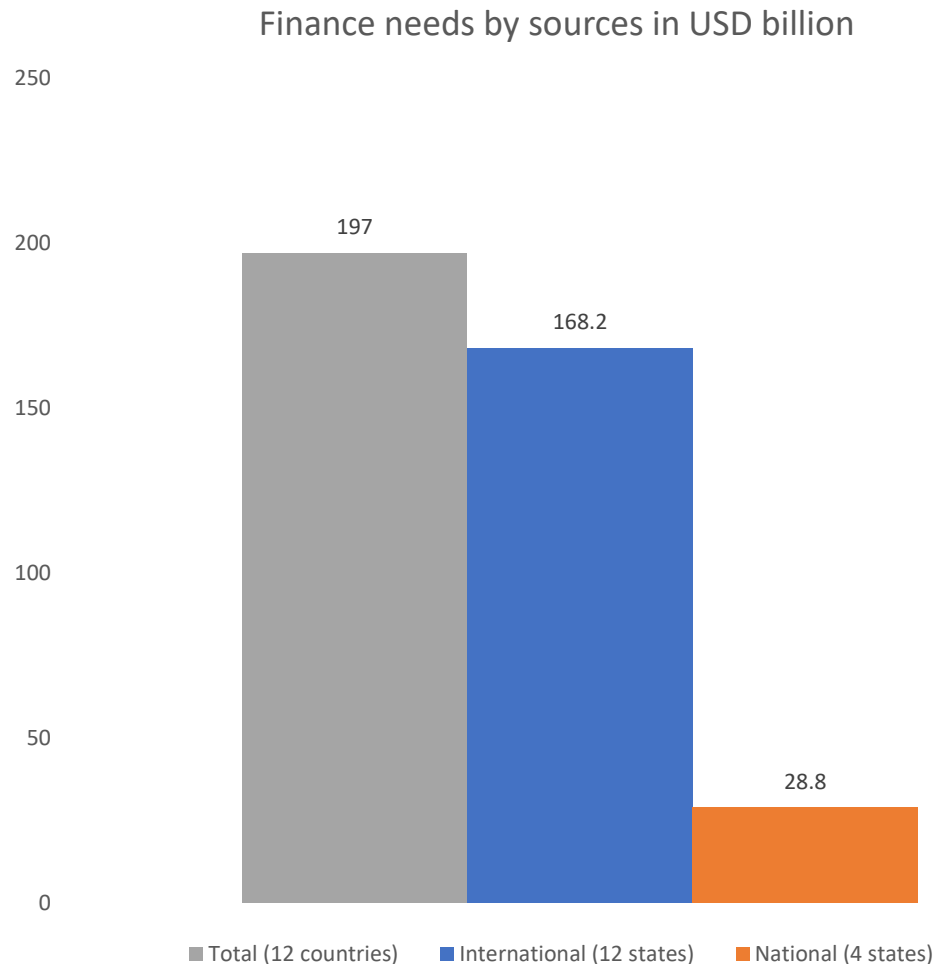
¹ sources: NAPs, NDCs, TNAs



Overview of information analyzed: qualitative (number of countries) and quantitative (USD of needs)

Total needs	Needs	Qualitative	20
		Quantitative	12
Sources	Differentiated between international and national sources	Qualitative	4
		Quantitative	4
Theme	Adaptation and adaptation with mitigation co-benefits	Qualitative	18
		Quantitative	7
	Mitigation and economic diversification with mitigation co-benefits	Qualitative	20
		Quantitative	6
	Technology needs	Qualitative	5
		Quantitative	4
	Technology needs for adaptation and adaptation with mitigation co-benefits	Qualitative	5
		Quantitative	4
	Technology needs for mitigation and economic diversification with mitigation co-benefits	Qualitative	4
		Quantitative	3
Sectors	Adaptation and adaptation with mitigation co-benefits	Qualitative	18
		Quantitative	6
	Mitigation and economic diversification with mitigation co-benefits	Qualitative	19
		Quantitative	4
	Technology needs	Qualitative	5
		Quantitative	4

Total needs of Arab States by sources in USD billion

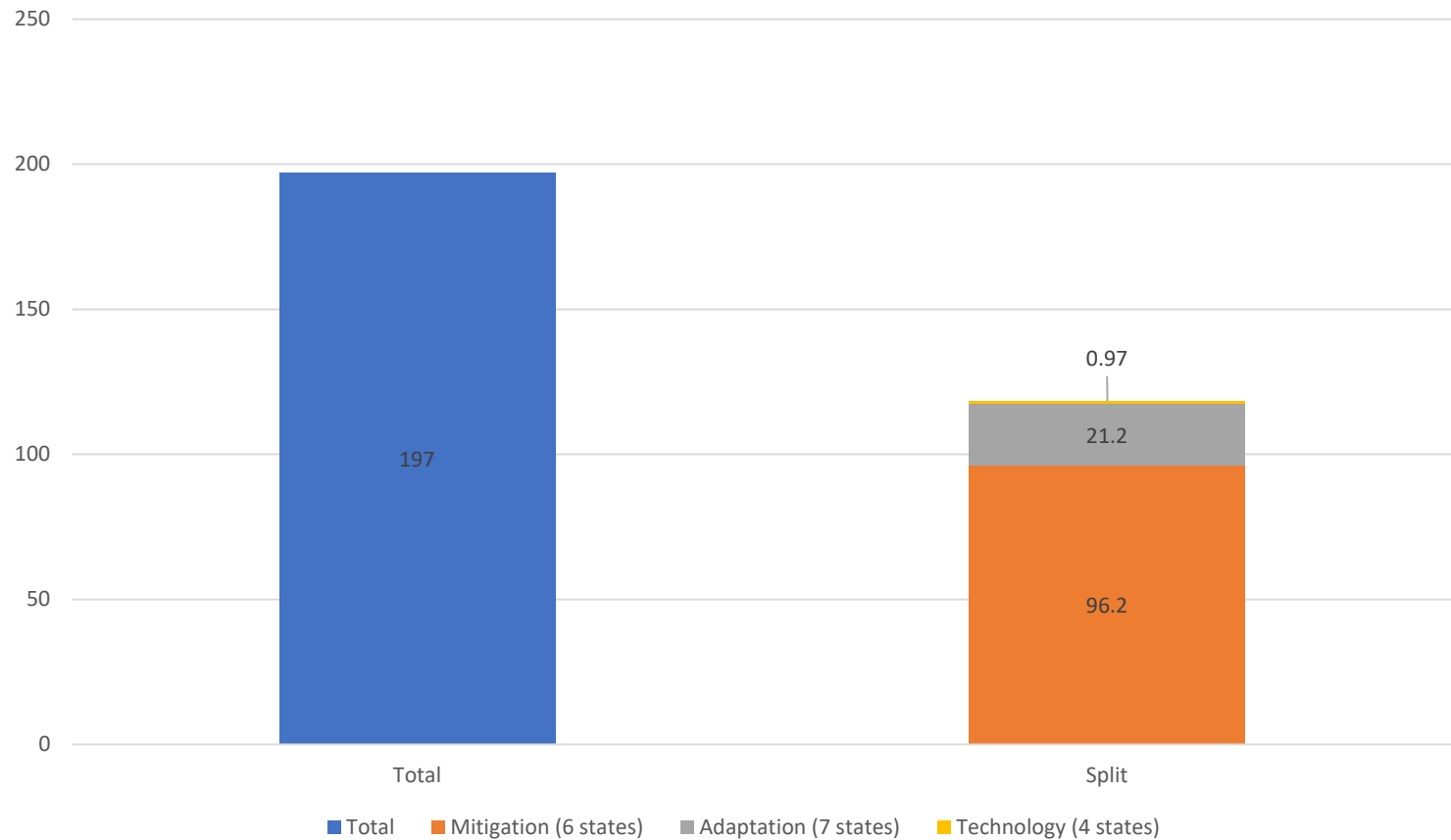


- Of the 12 states, 4 states differentiated between national and international sources to address their needs.
- Of the total USD 197 billion, USD 168.2 billion is expected to come from multilateral and bilateral sources.
- USD 28.8 is envisaged to come from national sources.



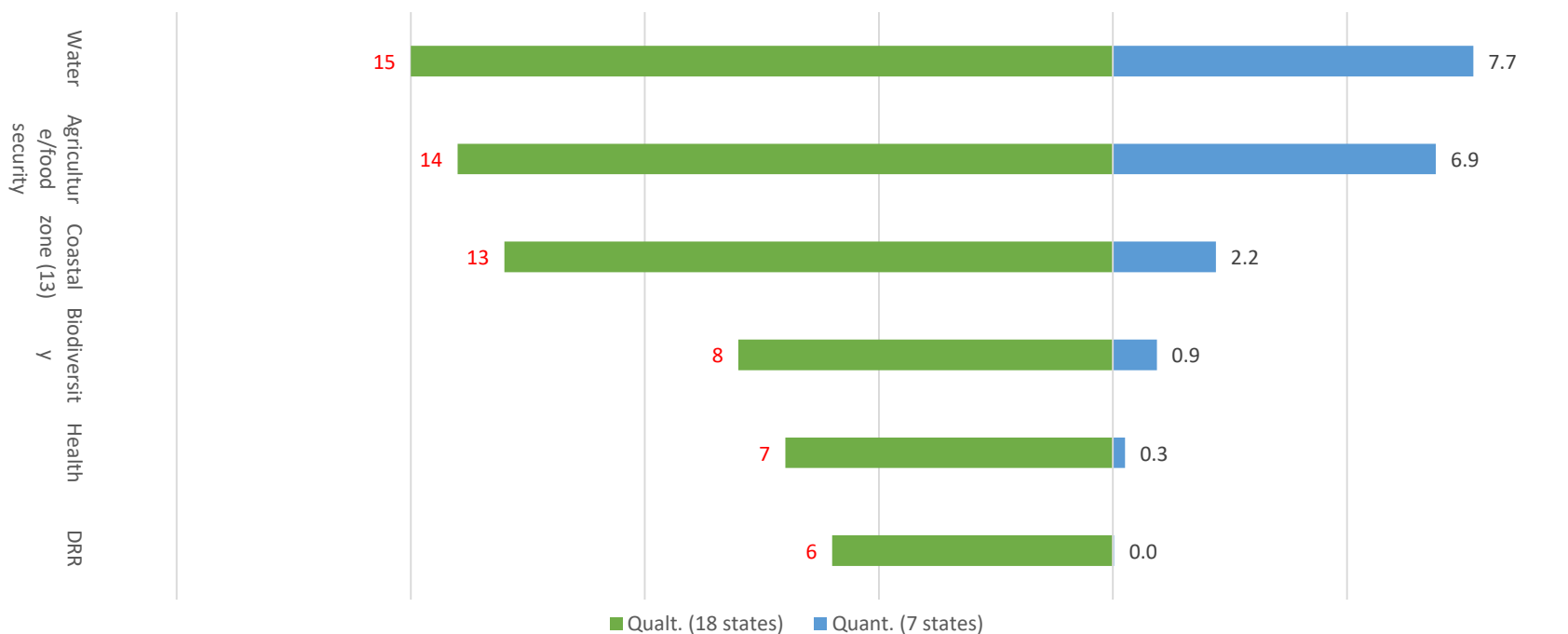
Total needs of Arab States by thematic area in USD billion

Needs for mitigation and economic diversification with mitigation co-benefits amount to highest financial needs of USD 98.2 billion, where USD 50 billion is needed by Morocco alone.

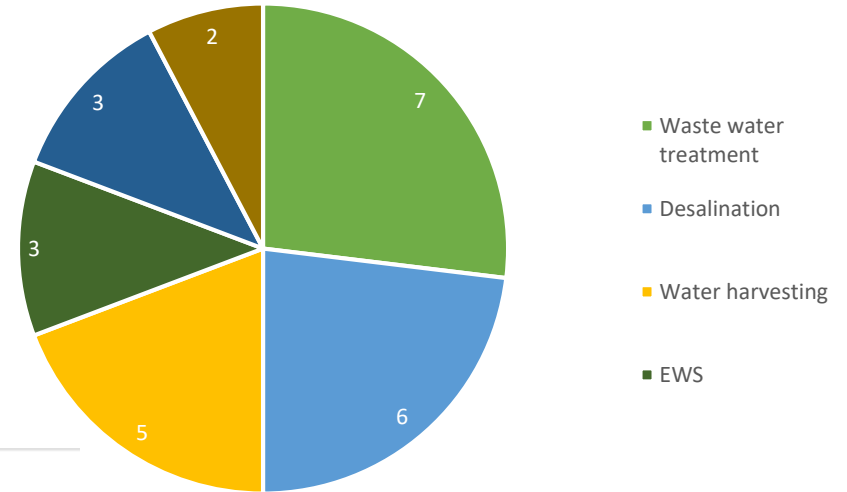


Qualitative and quantitative information on needs for adaptation and adaptation with mitigation co-benefits

- 18 states identified sectoral needs for adaptation and adaptation with mitigation co-benefits; 7 states costed needs for adaptation and adaptation with mitigation co-benefits.
- Water, agriculture/food security and coastal zone were identified as the priority sectors, accounting for USD 7.7, USD 6.9 and USD 2.2 billion, respectively.



11 States identified priorities at the sub-sector level, identifying waste water treatment, desalination and water harvesting as priority sub-sectors for the water sector.

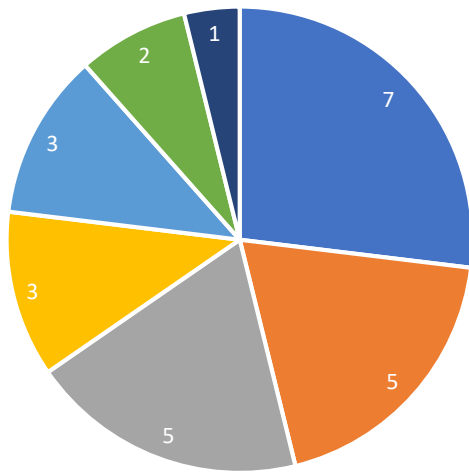


Priority activities for water needs

■ Waste water treatment
 ■ Desalination
 ■ Water harvesting



Priority sub-sectors for agriculture



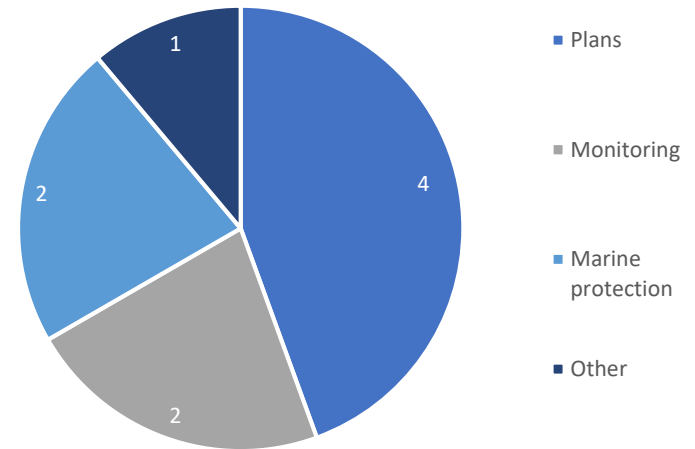
9 States identified crop diversification, early warning systems and water irrigation as priority sub-sectors for the agriculture sector.

■ Cop variety ■ EWS ■ Water irrigation ■ Gender ■ Livestock ■ Fisheries ■ Others

Priority activities for agriculture needs

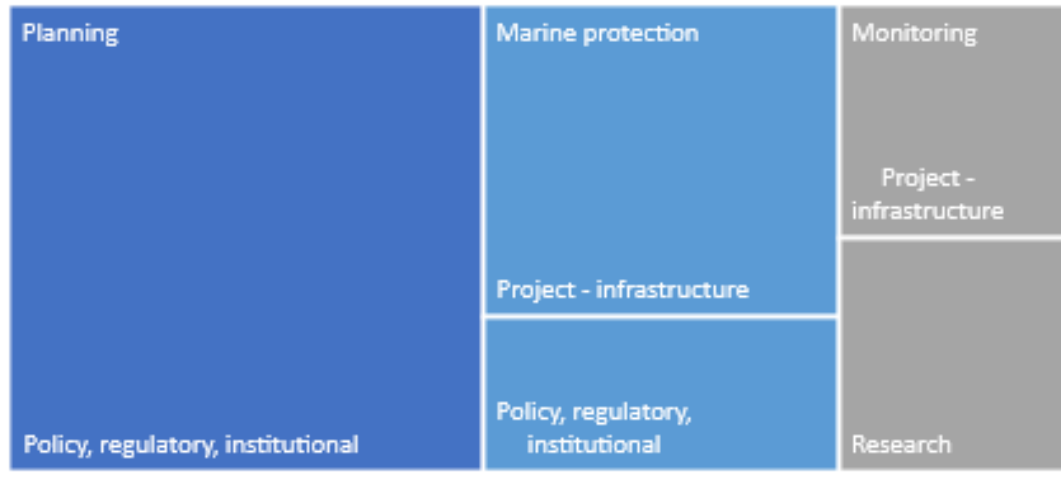


9 States identified coastal zone management plans, monitoring and marine protection as priority sub-sectors for coastal zones.

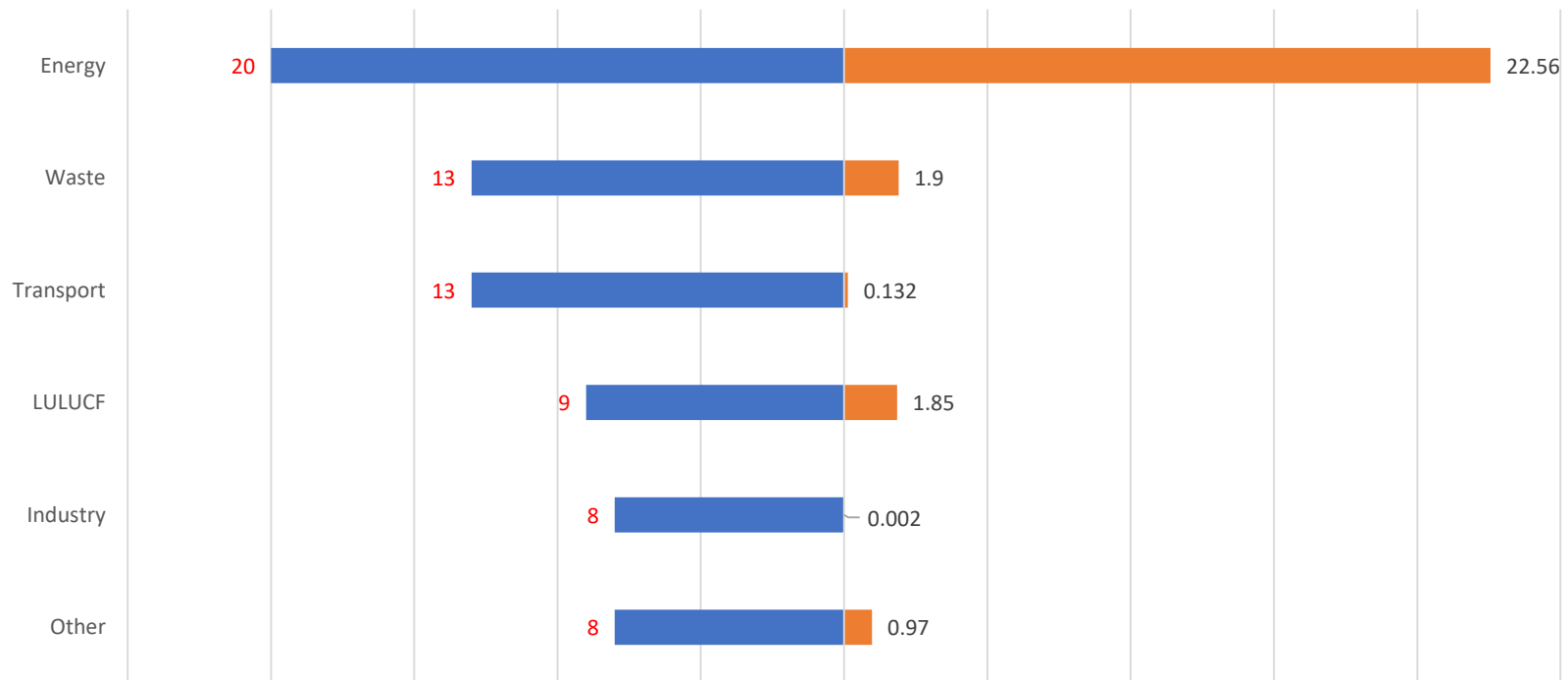


Priority activities for coastal zone needs

■ Planning ■ Monitoring ■ Marine protection



Qualitative and quantitative information on needs for mitigation and economic diversification with mitigation co-benefits

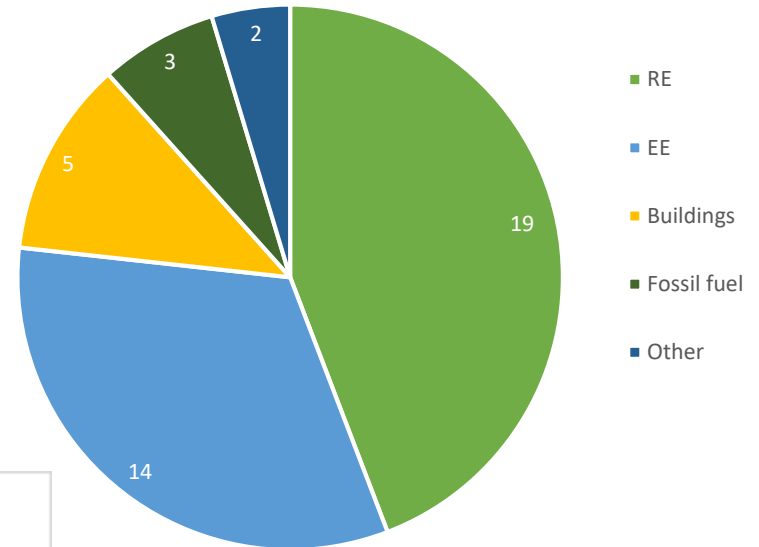


- All 20 States identified energy as priority sector, followed by waste, transport, LULUCF and industry; 6 states costed their needs for mitigation and economic diversification with mitigation co-benefits.
- Energy needs were costed USD 22.6 billion, waste USD 1.9 billion and LULUCF USD 1.85 billion, respectively.

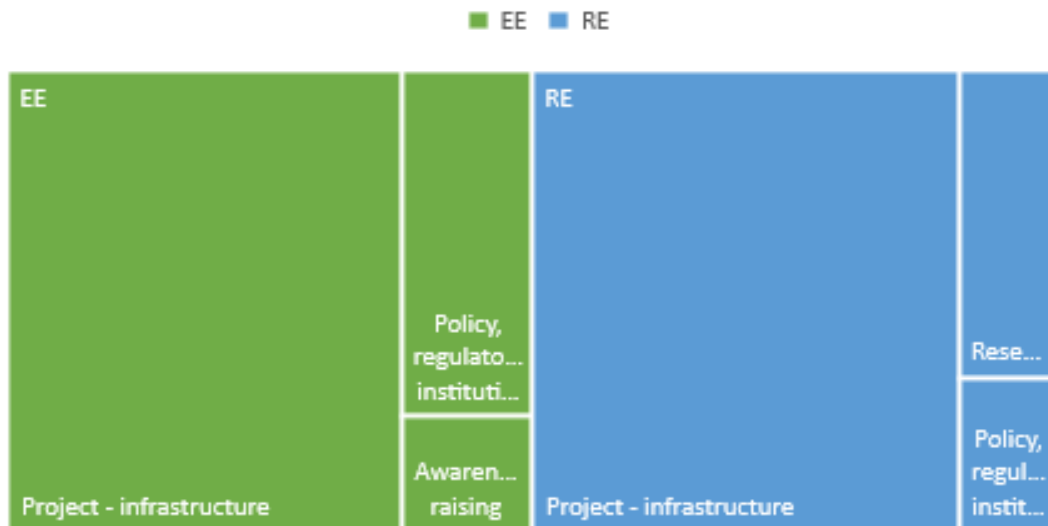


Priority sub-sectors for energy

Of 19 States that provided information at the sub-sector level, all countries identified renewable energies as priority sub-sectors.

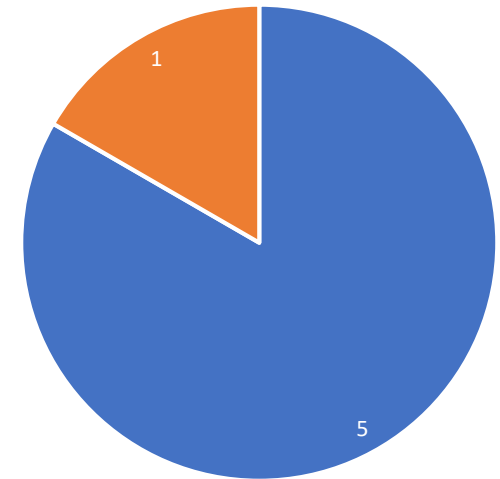


Priority activities for energy needs



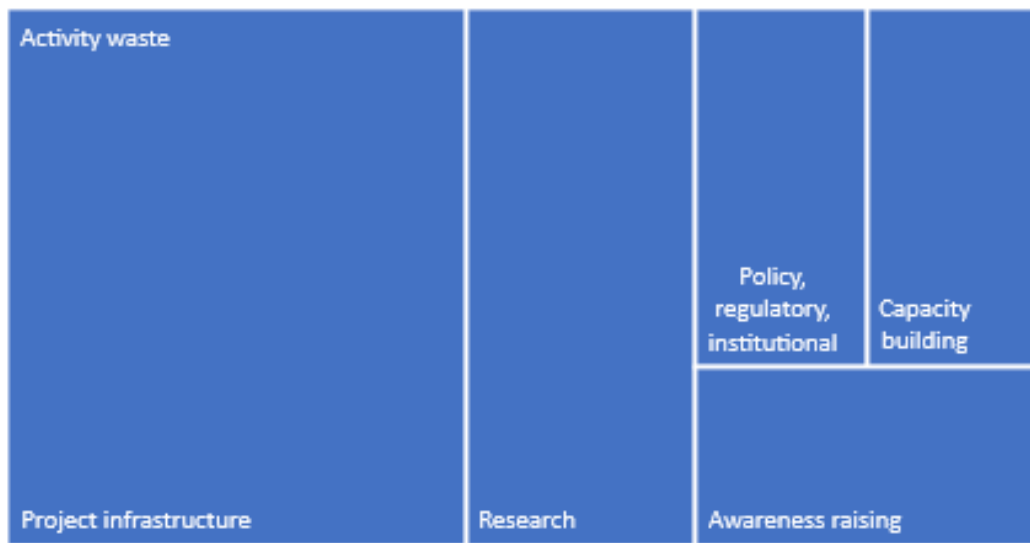
Priority sub-sectors for waste

8 states identified needs at the sub-sectoral level for waste, of which 5 states identified solid waste management as a major need.



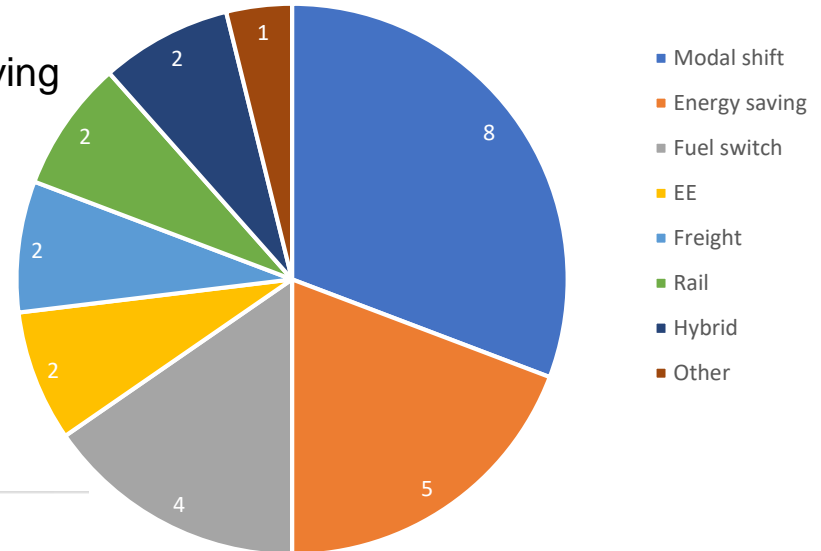
■ Solid waste management ■ Other

Priority activities for waste needs



Priority sub-sectors for transport

11 countries provided information at the sub-sectoral level, identifying modal shift, energy saving and fuel switch as main areas of needs.

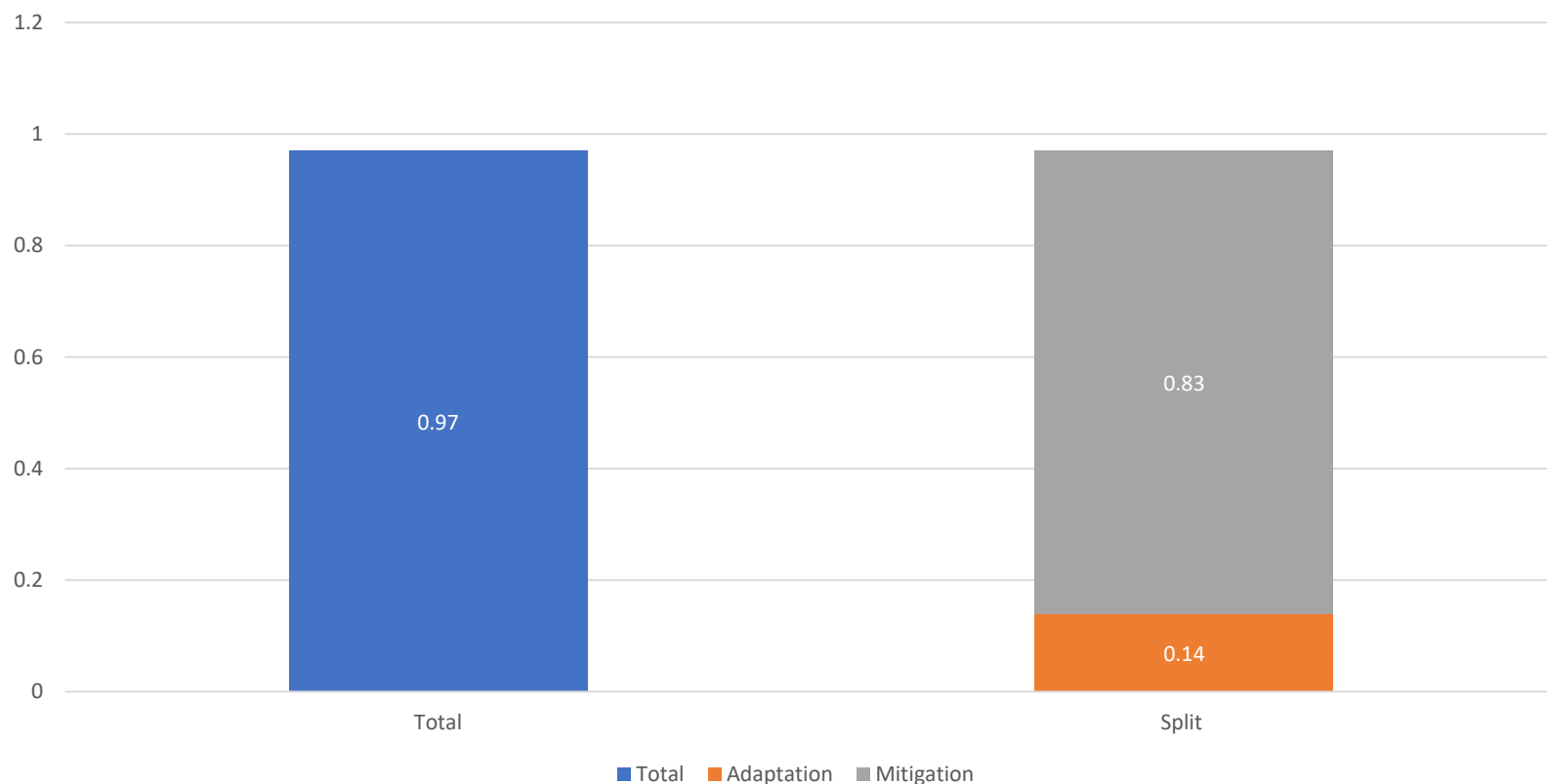


Priority activities for transport needs



Needs for adaptation and adaptation with mitigation co-benefits technology is higher than for mitigation and economic diversification with mitigation co-benefits

Technology needs by thematic area in USD billion

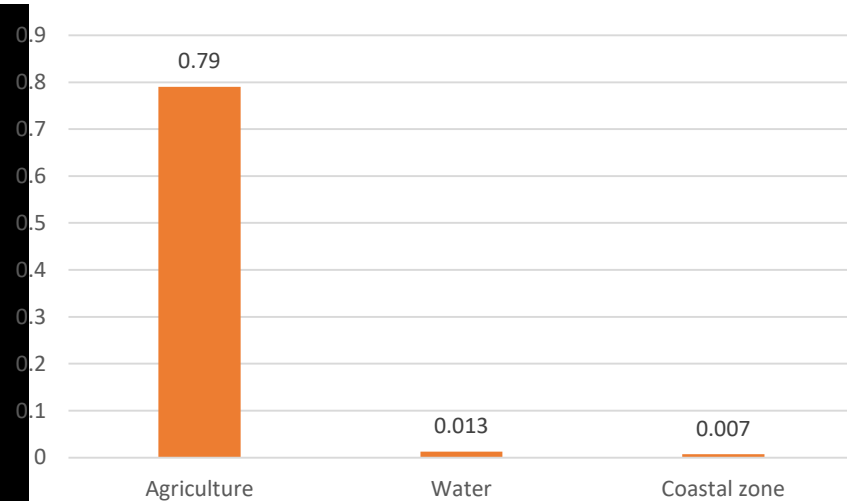


Technology needs were identified and costed in 4 TNAs, amounting to USD 970 million, where USD 800 million are needed for adaptation and USD 140 million for mitigation technologies.



Agriculture amounts for the highest technology needs for adaptation and adaptation with mitigation co-benefits

Technology needs by sector in USD billion



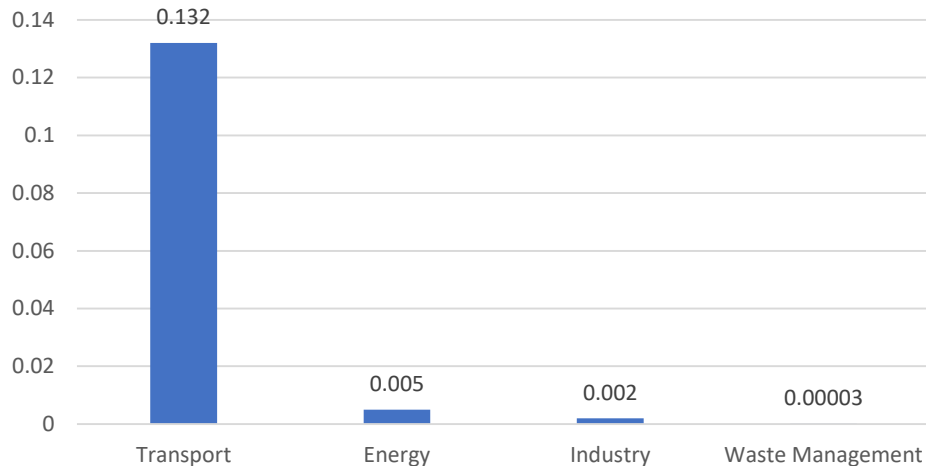
The identified priority sectors for adaptation and adaptation with mitigation co-benefit amount to USD 790 million for agriculture, followed by 13 million for water and USD 7 million for coastal zones.

Agriculture	Crop variety/diversification	Adaptated varieties and rootstocks
		Drought-flood tolerate crop varieties
		Sprinkler and drip irrigation
	livestock	Climate resistant productive livestock breeding
		Sustainable pasture management
		Rangeland improvement
Water	Irrigation	High efficncy irrigation systems
		Community irrigation systems
	EWS	Climate change monitoring and early warning systems
		Seasonal forecasting
	Water harvesting	Rainwater harvesting
		Desalination, brackish water treatment
Coastal zone	Coastal protection	Dune restoration
		Floodgate, tidal barriers



Transport amounts to the highest mitigation and economic diversification with mitigation co-benefits

Technology needs by sector in USD billion



The identified priority sectors for mitigation and economic diversification with mitigation co-benefits are transport (USD 132 million), followed by energy (USD 5 million), industry (USD 2 million) and waste management (USD 300 thousand).

Transport technologies	Modal shift	Mass rapid transit systems Integration of public transport systems Non-motorized transport infrastructure
	Fuel switch	Battery electric vehicles
	Energy saving	Hybrid technology Vehicle add on technologies
Energy	Energy saving	LEDs
	Solar	Solar lanterns Solar PV pump
	Wind	Day lighting and building design Building solar photovoltaics Wind turbines (onshore, offshore)
Industry		High efficient electric motors Composting technology
		Manufacturing technology of manure
Waste		Waste incineration technology



- What other information and data on finance needs are available that can be considered in the analysis?
- Are the presented needs reflective of the needs of the region? Are there other areas of needs that have not been mentioned yet?
- Apart from coastal zone, finance is currently flowing in the other priority sectors (agriculture, water, energy, transport, waste). Are coastal zones an area where increased finance is needed?

