Southern African Development Community (SADC)

Climate Finance Mobilization and Access Strategy

Climate Finance Needs

Quantitative needs of selected SADC countries (NDCs)

Angola (by 2030):

Mitigation (+ REDD+): 14.7 bn

Adaptation: 1 bn

Botswana: 18.4 bn (by 2030)

DRC: 21.62 bn (up to 2030)

Adaptation: 9.082 bn

Mitigation: 12.54 bn

Seychelles (by 2030):

- Mitigation: 309 mn
- Electricity generation: USD 191.7 mn
- Waste Management : USD 20.8 mn
- Land Transport: USD 96.5 mn
- Adaptation: 295 mn
- Critical Infrastructure: 70 mn
- Tourism and Coastal Management: 45 mn
- Food Security: 35 mn
- Biodiversity: 15 mn
- Water Security: 85 mn
- Health: 30 mn
- Blue Economy: 15 mn

Source: Nationally Determined Contributions (NDCs).

Quantitative needs of selected SADC countries (NDCs) cont.

Madagascar (2015 – 2030):

Adaptation: 28.713 bn

Mitigation: 6.37 bn

Capacity Building: 1.754 bn

Technology Transfer: 5.262 bn

Zambia:

Adaptation & Mitigation: 50 bn by 2030

(35 bn from external sources, 15 bn from domestic sources)

Lesotho:

- Energy: 15 bn (2020) – 20 bn (2030)
- Waste Management: 108 mn
- Forestry: 24 mn

Mauritius: 5.5 bn (Mitigation and Adaptation) to 2030

Tanzania:

Mitigation: USD 30 bn until 2030

Adaptation: USD 500 mn annually till 2030, 1 bn from 2030

Total Adaptation and Mitigation:

197.755 bn – 202.755 bn USD by 2030.

** All amounts in USD*

Source: Nationally Determined Contributions (NDCs).

Mitigation

- Renewable energy (wind, solar, bio thermal, hydro) – all countries
- Energy efficiency (Namibia, Madagascar, Lesotho, Mauritius, South Africa, Seychelles, Tanzania, Zambia, Zimbabwe)
- Transport (all countries but DRC)
- Industry (South Africa, Namibia, Lesotho, Madagascar, Mauritius
- LULUCF: (all but Seychelles)
- Waste (all but Angola, DRC)

Adaptation

- Water resources (all countries)
- Agriculture (all countries)
- Livestock (all countries but Angola, Seychelles and South Africa)
- DRM (South Africa and Seychelles specifically mention preparedness)
- Drought, Flood and Tropical Cyclone Risks
- Forestry (all but South Africa and Seychelles)
- Biodiversity (all but Botswana, Malawi)
- Tourism (Namibia, Lesotho, Seychelles, Tanzania, Zambia, Zimbabwe)
- Health (all but Zimbabwe, Mozambique)
- Coastal zone (all but Botswana, Lesotho, Malawi, South Africa, Zambia, and Zimbabwe)

Source: Nationally Determined Contributions (NDCs), UNFCCC Country Profiles, Technology Need Assessments, Biennial Update Reports of SADC countries.

Case Study: Renewable Energy in SADC

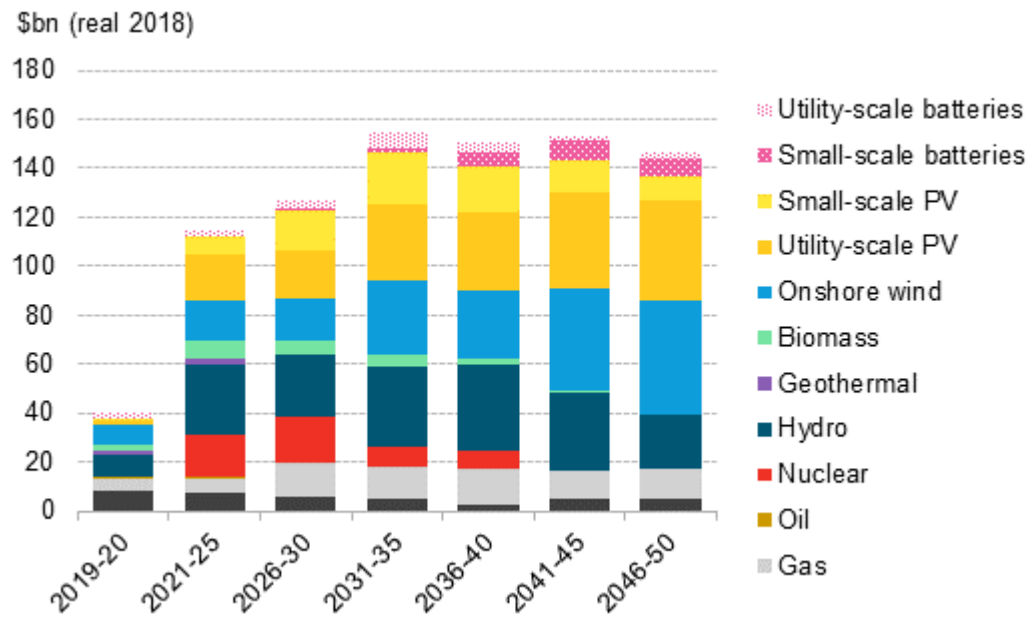

Figure 1: Projected cumulative investments in new capacity by technology for Sub-Saharan Africa

	Technology						
	Small-scale hydro (<100 MW)	Large-scale hydro (≥100 MW)	Wind (MW)	Solar (MW)	Geothermal (MW)	Biomass (MW)	Total (MW)
Angola	65	1,470	78				1,613
Botswana				100			100
DRC		4,950		20			4,970
Eswatini	34.45	140		35		37	246
Lesotho	10	1,200	50	20			1,280
Madagascar	51	300		35		5	391
Malawi	60	460	200	303			1,023
Mauritius			29	97			126
Mozambique	39	236	330	585		10	1,200
Namibia		300		232		20	552
Seychelles				15			15
South Africa	4.7		1,363	913		42	2,323
Tanzania	293	3,135	450	209	5,000		9,087
Zambia	214.65	3,868		500			4,583
Zimbabwe	33.3	1,200		303			1,536
SADC	**805**	**17,259**	**2,500**	**3,367**	**5,000**	**114**	**29,045**

Figure 2: Pipeline of Renewable Energy Projects Approved But Still Requiring Financing in SADC Member States, as of Mid-2018

- Figure 1 demonstrates that there is some level of investment into renewable energy within several SADC countries.
- The pipeline of RE projects requiring financing demonstrates that this continues to be a bottleneck in the region (Figure 2).

Source: SACREEE (2017). SADC Renewable energy and energy efficiency Status Report. https://www.sacreee.org/sites/default/files/documents/files/SADC_EN_%28web%29.pdf

BNEF (2018).

Case Study: Renewable Energy Investment Needs

	Global	Africa	Asia	Latin America	Middle East	Others*	SIDS
Estimated public finance needed	**65-580**	10-75	40-370	5-75	1-10	5-50	0.5-5
• for unconditional targets	**45-410**	5-35	30-280	5-70	0.5-10	1-25	0.1-1.5
• for conditional targets	**20-170**	5-45	10-70	0.5-5	0.5-5	1-30	0.5-5

Figure 3: Estimated public finance needed by 2030 for the implementation of renewable energy targets in NDCs (USD billion)

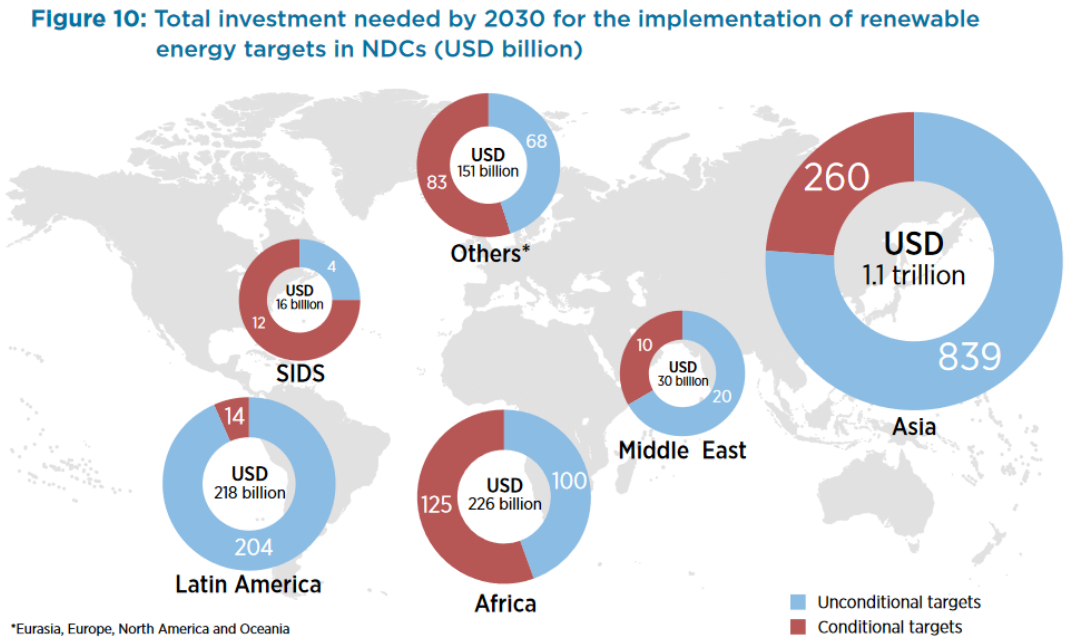

Figure 4: Total investment needed by 2030 for the implementation of renewable energy targets in NDCs (USD billion)

- When considering the RE investment needs for the unconditional and conditional NDC implementation, there is still a significant public and private financing gap in Africa (Figure 3 and 4).
- According the financial flows assessment, approximately 5 bn USD of clean energy investment was realized in 2018, this demonstrates the scale of increase needed to meet the estimated total investment needed by 2030.

Source: IRENA (2017). Untapped Potential For Climate Action Renewable Energy In Nationally Determined Contributions. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2017/Nov/IRENA_Untapped_potential_NDCs_2017.pdf

Mitigation - Climate Investment Needs for selected African Countries

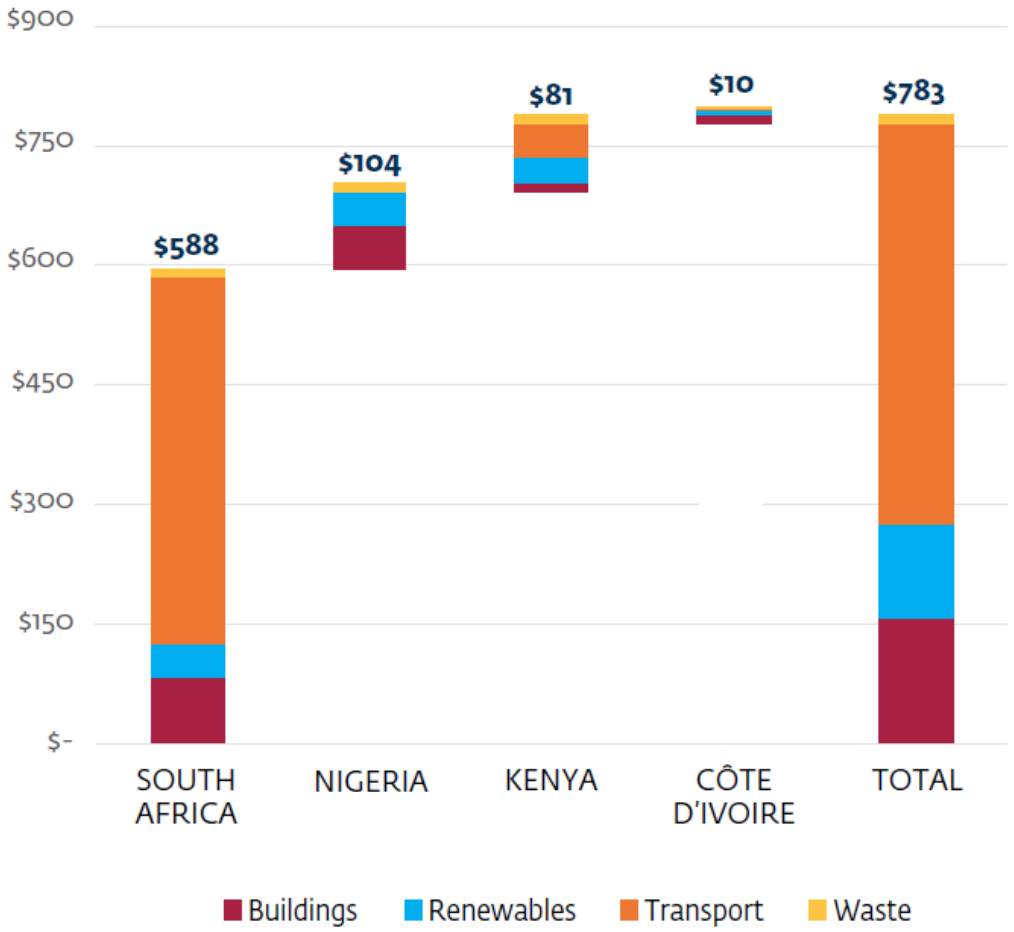

Figure 5: Climate-Smart Investment Potential 2016 - 2030 ($ billion)

- The estimated total investment potential for the climate-smart needs of Côte d'Ivoire, Kenya, Nigeria, and South Africa is $783 billion by 2030.
- 16% of this potential is for renewable energy generation ($123 billion), while well over half ($499 billion) is for the transportation sector.
- By 2030, the commercial investment potential in the construction of low-carbon buildings is estimated at nearly $153 billion.

Source: IFC (2017). Climate Investment Opportunities in Emerging Markets. https://www.ifc.org/wps/wcm/connect/59260145-ec2e-40de-97e6-3aa78b82b3c9/3503-IFC-Climate_Investment_Opportunity-Report-Dec-FINAL.pdf?MOD=AJPERES&CVID=lBLd6Xq

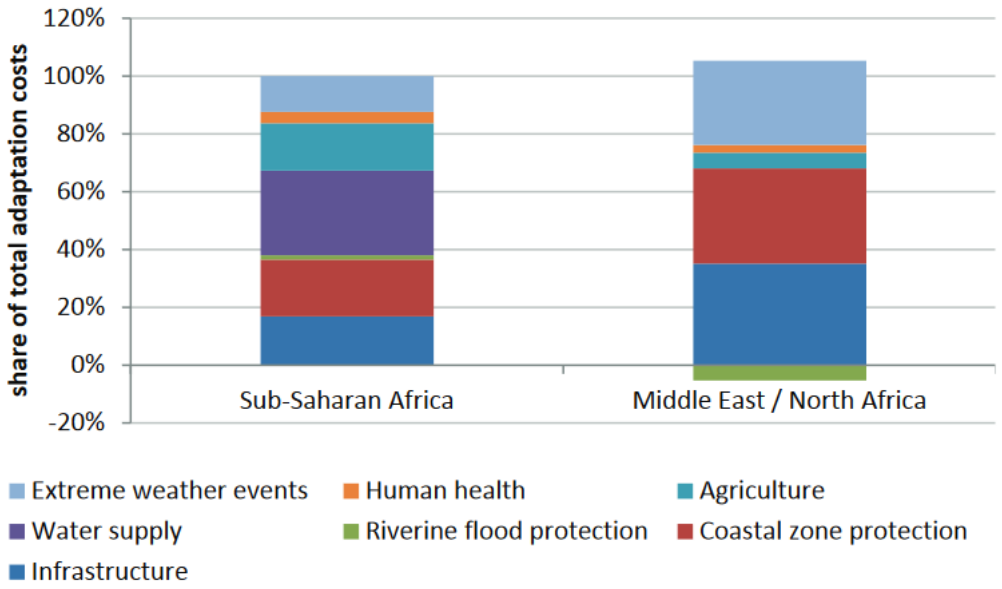

Figure 6: Share of total average annual costs between 2010 and 2050 of adapting to 2°C warming globally by sector. (UNEP, 2013)

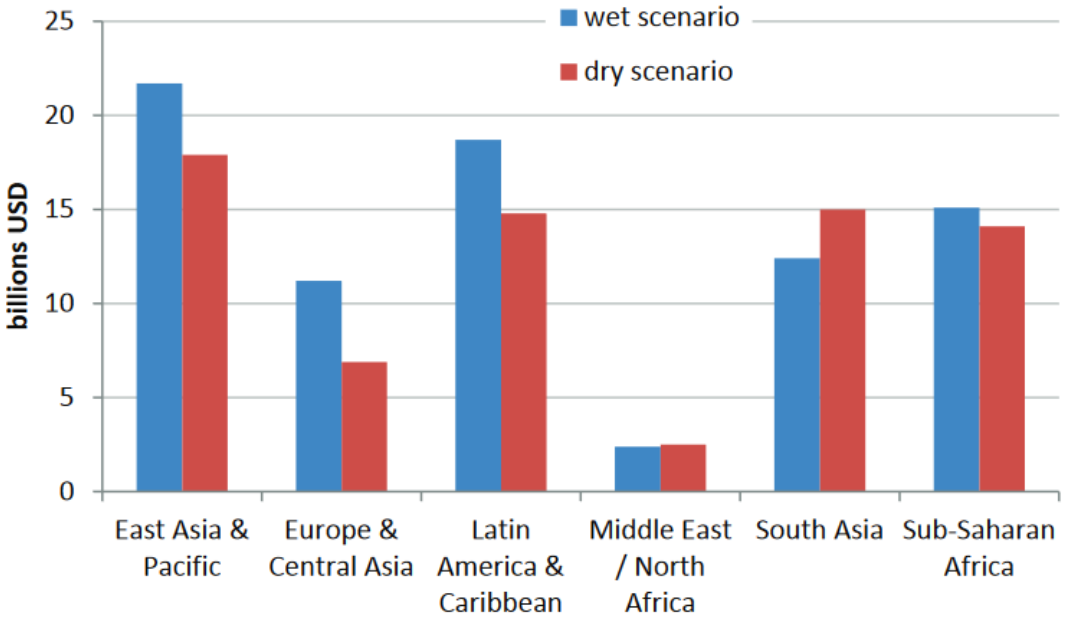

Figure 7: Average annual costs between 2010 and 2050 of adapting to 2°C warming globally by 2050, by world region. (UNEP, 2017)

- Of the SADC countries who have disclosed quantitative adaptation needs, estimates suggest that 1.2 bn USD is required annually (8 countries).
- The UNEP Adaptation Gap estimates that US$7 to 15 billion is needed annually for all African countries.
- According to the OECD, in 2017, adaptation finance inflows were estimated to be approximately 1.7 bn USD to the SADC region.

Source: AFDB (2018). Analysis of Adaptation Components of Africa's National Determined Contributions. . https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Analysis_of_Adaptation_Components_in_African_NDCs_2019.pdf

UNEP (2013). Africa's Adaptation Gap. https://climateanalytics.org/media/schaeffer_et_al__2013__africao__s_a_daptation_gap_technical_report.pdf

Overall perspective

- Total public climate finance to SADC region, 2013-2017: USD 13,399,837, 788 (13 bn USD) (OECD DAC).
- Yearly average: 2,679,967,557 USD (2.7 billion USD)
- Africa's commitments to the Paris Agreement presents a US $3 trillion investment opportunity by 2030 (AFDB and AFAC, 2018).
- For both mitigation and adaptation, a significant financial gap exists between flows and needs.

Source: AFDB and AFAC,(2018). African Financial Alliance on Climate Change.

https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/AFAC_Brochure_2018.pdf