



## Adding Local Value to African Countries' Critical Raw Materials Trade

### Introduction and Definitions

The demand for critical raw materials has seen a sharp rise in the global shift towards renewable energy and low emission technologies, indispensable for the transition to net zero economies. Many African countries are rich in critical raw materials

and have been extracting them for a long time. Currently, 30% of the proven critical mineral reserves (by volume) are located in sub-Saharan Africa. 70% of global cobalt supply is sourced in the Democratic Republic of the Congo (DRC). The manganese production from Ghana, Gabon, and South Africa amounts to 60% of global production.<sup>1</sup>

Adding value to resources through further processing and manufacturing diversifies local economies, creates jobs, and establishes upstream and downstream industrial branches, fostering industrialisation.<sup>2</sup> However, African countries rarely refine and process resources before exporting them. This has disadvantaged them in global value chains.

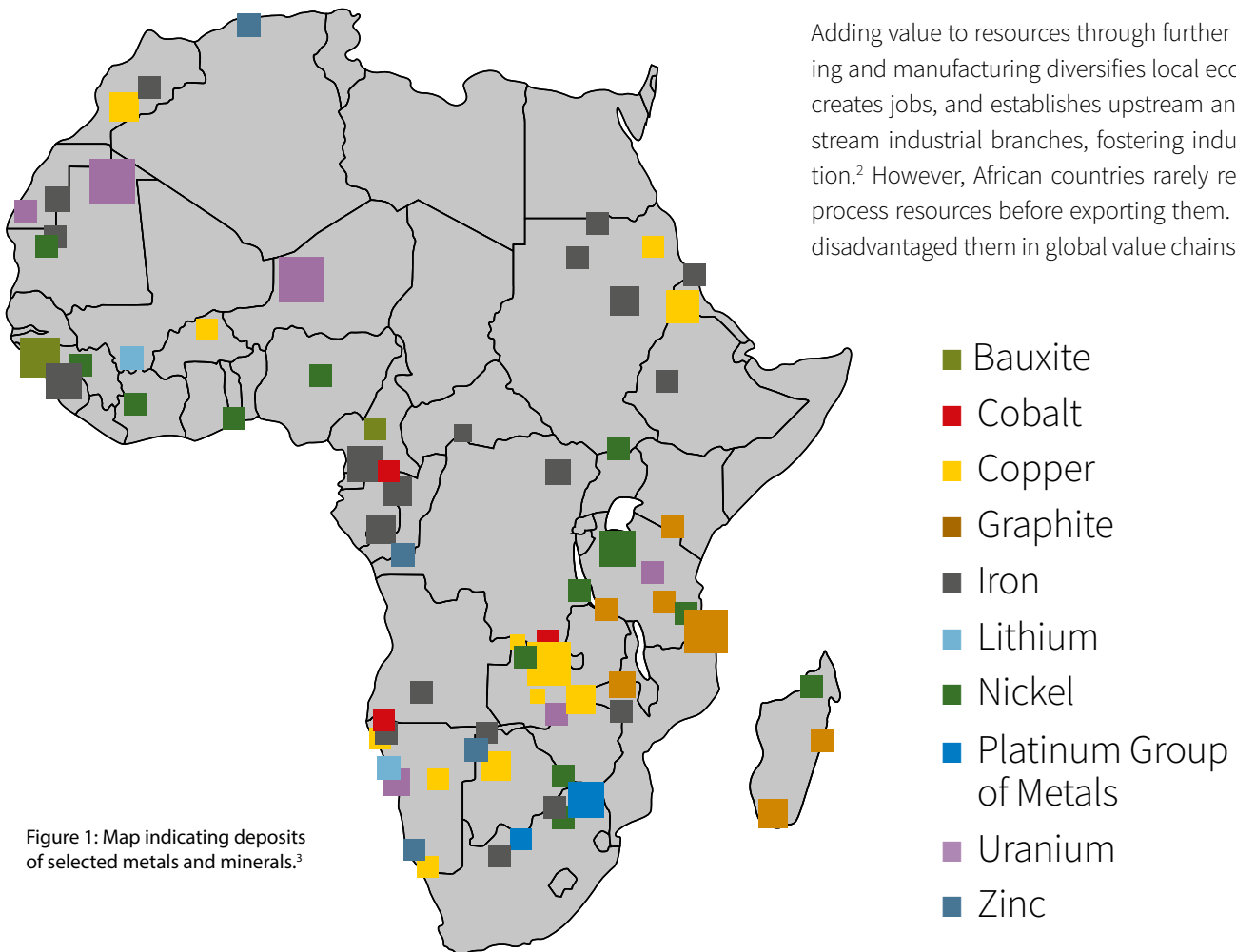


Figure 1: Map indicating deposits of selected metals and minerals.<sup>3</sup>



## What is ‘local value creation’ or ‘adding value locally’?

Both refer to activities that preserve the socioeconomic value of a resource in the country of its origin, i.e. where the resource is mined, grown, or sourced by local industries, creating new training and job opportunities. Currently, value is mostly added by and in industrialised countries that import resources from African partners. A key aim is to build up extraction industries in the countries of origin to distribute benefits fairly.

## Critical raw materials in transition technologies

Mineral	Solar PV	Hydrogen and Fuel Cells	Energy Storage	EVs
Aluminium	X		X	
Chromium				X
Cobalt		X	X	
Copper	X		X	X
Graphite			X	X
Iron	X		X	
Lithium		X	X	X
Manganese			X	
Nickel	X		X	X
Platinum group metals		X		X
Rare earth elements		X		
Vanadium			X	X
Zinc	X			

Table 1: List of raw materials required for selected technologies, such as solar photovoltaics (PV), hydrogen and fuel cells, energy storage, and electric vehicles (EVs).<sup>4</sup>

## Initiatives in Africa to create value through resource extraction and trade

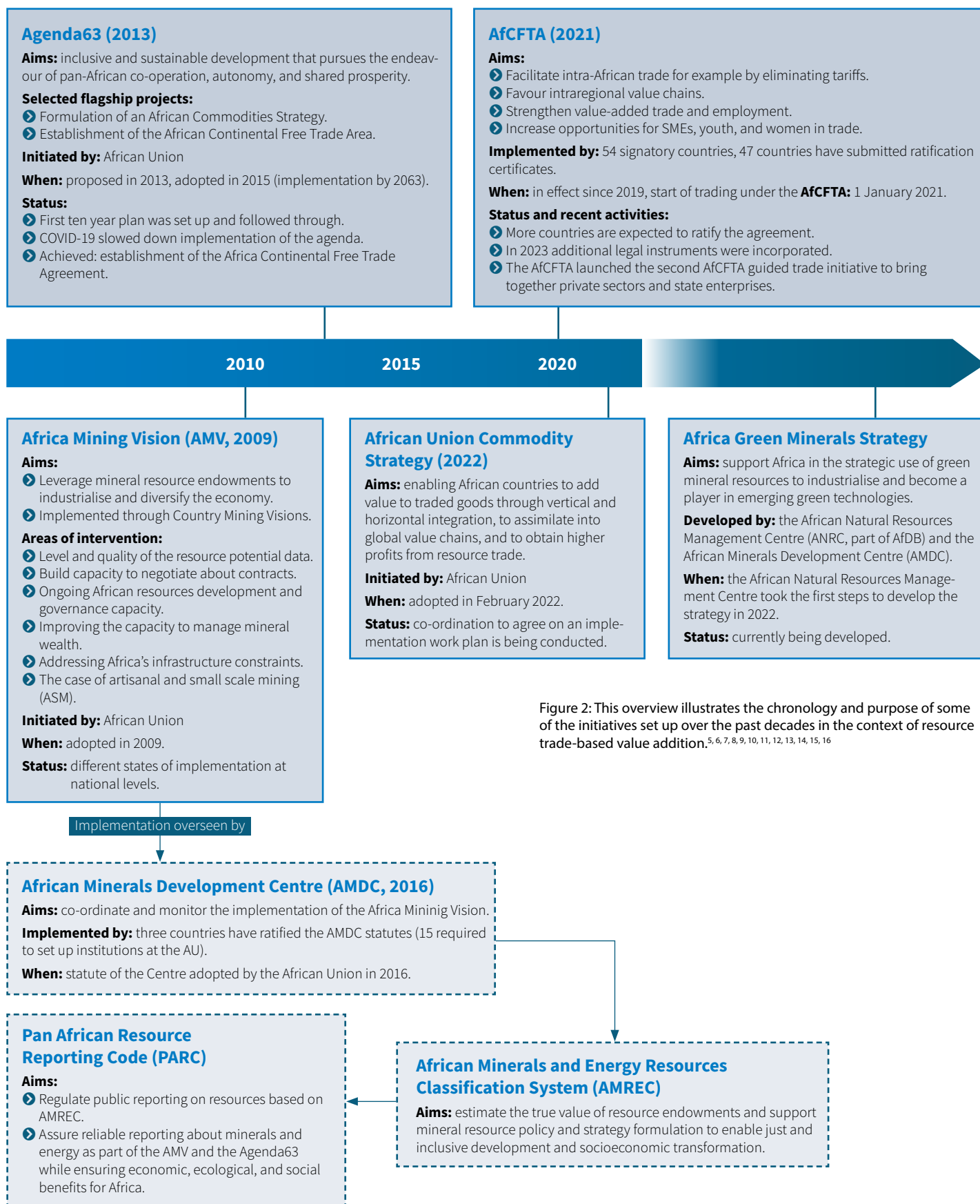


Figure 2: This overview illustrates the chronology and purpose of some of the initiatives set up over the past decades in the context of resource trade-based value addition.<sup>5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16</sup>

## Case study

### The Lobito Corridor<sup>17</sup> – Promoting pan-African trade and creating entry points to global value chains

- Train tracks spreading over a distance of 1,300 km from the Atlantic coast in Angola through the DRC to the main mining area of Zambia.
- Planning for the corridor started in 2009.
- Main aim: transport critical and strategic raw materials, and products of the EV battery value chain from the DRC and Zambia to the EU and the US.
- Parallel plans: MoUs include direct development support for the corridor and indirect development support for domestic and cross-border trade along the corridor and for participation of small and medium-sized enterprises in value chains.
- Political relevance:<sup>18</sup>  
The demand for nickel, cobalt, and lithium is projected to increase twofold, threefold, and tenfold by 2050, respectively. ➔ All three raw materials are found in the DRC and Zambia.

<p><b>MoU partners:</b> EU – US – DRC – Angola – Zambia – AfDB – Africa Finance Corporation (AFC)</p> <p><i>Aim: Development of the Lobito Corridor</i></p>
<p><b>Lobito Corridor Transit Transport Facilitation Agency Agreement:</b></p> <p>Angola – DRC – Zambia</p> <p><i>Aim: Trade and Development</i></p>
<p><b>MoU partners:</b> EU – DRC</p> <p><i>Aim: Support Critical Minerals and Value Chain Development</i></p>
<p><b>MoU partners:</b> EU – Zambia</p> <p><i>Aim: Support Strategic Minerals and Value Chain Development</i></p>
<p><b>MoU Partners:</b> US – DRC – Zambia</p> <p><i>Aim: Support Establishment of an EV Battery Value Chain</i></p>
<p><b>Bilateral Agreement:</b> DRC – Zambia</p> <p><i>Aim: Strengthen Cooperation towards an EV Battery Value Chain</i></p>
<p><b>Concession Agreement:</b> Angola – Trafigura (commodity trader 49.5%) – Mota-Engil (construction 49.5%) – Vecturis (railway operations 1%)</p>

Figure 3: Memoranda of understanding (MoUs) and agreements in the context of the Lobito Corridor.<sup>19</sup>



Figure 4: Map of the development plan for the Lobito Corridor.<sup>20</sup>

## Challenges and opportunities

### Identified challenges to value creation in the Africa Mining Vision and its implementation:<sup>21 22</sup>

Despite the important signal that the vision sends, progress has been insufficient:

- Implementation at national level has been slow and too state-centred.
- The voluntary implementation leads to a reliance on national policy actors for regulation and enforcement of principles.
- Cross-border trade has failed to reach sufficient levels for investments in manufacturing and consumables.
- The missing coherence in local content and state procurement policies effectively favours demand from within member states rather than from regional economic communities.

### A possible key to success for value creation through resource trade?

Closer regional collaboration to form country blocks that share value chains and interact with global players. ➔ Leverage regional economic communities (see Figure 5).

#### Why?<sup>23</sup>

- ⊕ Strengthens countries' negotiation hand with global players and their position in global markets, as opposed to countries acting on their own.
- ⊕ Allows for more flexibility and agility than trying to act jointly as a continental union.
- ⊕ Shares risks and responsibilities of co-operation in value chains.
- ⊕ Enables intraregional manufacturing of technologies that require various raw materials from different countries.
- ⊕ Creates synergies for policy making that enables investment and business environments.
- ⊕ Leverages and bolsters existing frameworks such as the Africa Mining Vision or the African Continental Free Trade Area.

### Regional Economic Communities (RECs)

Africa is moving toward regional integration. There are eight Regional Economic Communities approved by the African Union (AU)

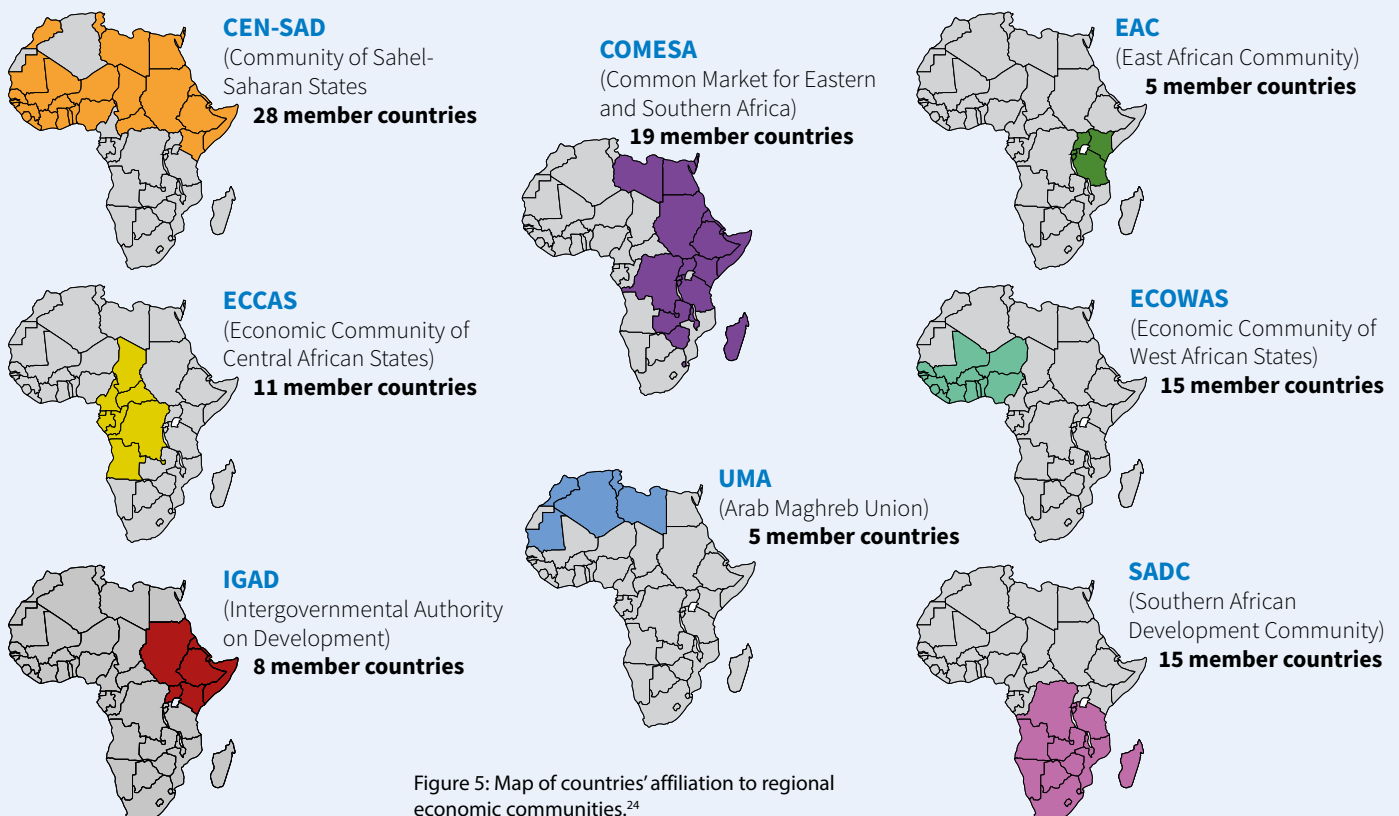


Figure 5: Map of countries' affiliation to regional economic communities.<sup>24</sup>

## Footnotes:

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The project **‘Ensuring a People-Centered Energy Transition in Africa through Civil Society Engagement’** aims at strengthening the engagement of civil society in energy system transformation processes in five African countries: Morocco, Nigeria, Cameroon, Botswana, and Kenya. The project promotes an approach to implementing energy initiatives focused on transformational change in the energy sector through more appropriate policy frameworks and enabling environments at national, regional, and continental level. Thereby, the project contributes to an effective acceleration of the renewable energy transition, which not only results in significant short- and long-term emissions reductions but also in well-designed renewable energy systems that meet the energy needs of the population and are more resilient to extreme weather events, droughts, and supply shortages.

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