Decarbonisation pathways for African cities.

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CHAPTER 9

To Opt-in or to Cop Out: COP26 and the Policy Dynamics of Decarbonising African Cities

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Abstract The COP26 Glasgow Climate Pact appears to have kept alive the ambition of restricting temperature rises to 1.5 °C above pre-industrial levels. However, developing countries must translate the agreements into specific policies and change instruments in their home countries. Carbon

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abatement agreements and the responsibility for financing climate change actions may be inimical to Africa's fragile economies which are often dependent on natural resources and carbon-emitting activities. The Advocacy Coalition Framework (ACF) helps to evaluate the policy subsystem to explain how coalitions' beliefs and resources can be channelled towards policymaking for the decarbonisation of African cities. Specifically, we use the ACF to review international cities coalitions and the Africa Adaptation Acceleration Program (AAAP) to explore the interactions and institutional settings needed to negotiate, agree and implement the Glasgow Climate Pact for decarbonising African cities.

Keywords Decarbonisation • African cities • COP26 Glasgow Climate Pact • Advocacy coalition framework • Policy • Governance • Stakeholders

9.1 Introduction

There has been renewed optimism that talks at the 26th Conference of Parties to the UN Framework Convention on Climate Change (UNFCCC), also known as COP26, have kept alive the ambition of restricting temperature rises to 1.5 °C above pre-industrial levels. Negotiations to complete the Paris Rulebook, originally proposed at COP21, continued for an extra day. The Paris Rulebook is intended to achieve a global agreement to accelerate climate action during the current decade (2020–2029). Its completion at COP26 is seen as real progress. However, the actual test of the outcomes is expected to arise from the follow-on action by delegates and Parties in their respective countries in translating the agreements to action (Obergassel et al. 2021). Specifically, delegates and governments of developing countries have their work cut out to operationalise the COP26 Glasgow Climate Pact (COP26 2021) as specific policy and change instruments in their home countries. This is because the most contentious issues at COP26 relate to the responsibility for the financing of climate change action and a lack of commitment to the kind of fossil fuel (particularly coal) abatement that would be required to maintain 1.5 °C.

We assess the Glasgow Climate Pact and the complexity of the choices before African cities in seeking to decarbonise, especially in determining how the agreements reached can be translated into changes in policies affecting cities. The nature of the talks and their implications may add to or distract from a decarbonisation agenda for African cities whereby the

Parties could either actively seek ways for opting into the measures or copping out from them given the burden that they may impose on their countries and economies. One of the contentious issues at COP26 was the shortfall in the funds that will be required to initiate and sustain a decarbonisation agenda for developing countries, and by extension, African cities. Developed countries have not fulfilled pledges agreed at the 21st Conference in Paris (COP21) to jointly provide mitigation and adaptation finance of USD100 billion annually by 2020 (Timperley 2021; Depledge et al. 2022). The pledge entailed offering relevant support through technology and capacity-building, which have also not been fully realised. This shortfall means that developing countries will struggle to implement climate change actions and they may not commit fully to or be capable of realising their nationally determined contributions (NDCs) to reduce emissions and manage climate change. Climate-vulnerable countries, especially given their dependence on natural resources whose extraction contributes to or worsens carbon emission, need developed countries to increase their level of climate financing (Timperley 2021).

When extrapolated to the development requirement of African cities, the funding constraints are further exacerbated by years of infrastructural and structural deficits and an unbroken trend of rural-urban migration (Mubangizi 2021; Selod and Shilpi 2021). African cities would require substantial new infrastructure financing, policy, and governance changes, and adoption of technology-related decarbonisation measures to help African countries meet NDCs. Cities in developed countries have structural advantages that are favourable or provide a basis for innovation and transformation (e.g., UK cities—Sait et al. 2018; Asekomeh et al. 2021). The approach to decarbonisation in African cities needs to be carefully framed to consider this important difference. Specifically, the systemic failings, structural and infrastructural gaps, and policy mismatch at the city level mean that climate adaptation and mitigation measures are needed, with the former previously often prioritised over the latter (Lwasa et al. 2018).

The dual pressures of limited funding and worsening infrastructural gaps mean that African cities are often struggling to break away from a vicious cycle that starts with improper planning and poor infrastructure funding and is reinforced by inadequate and insufficient access to grid and off-grid power sources and dysfunctional social structures that promote economic inequality and hinder social mobility and cohesion (Corfee-Morlot et al. 2019). Against this backdrop, developing countries must

decide how they approach the subject of climate change action through seeking alternative funding arrangements, changes in policies, modification of their economic models, and adoption of new governance structures, with these measures being implemented from the city or settlement level. We employ elements of the Advocacy Coalition Framework (ACF) to analyse the different economic, financial, and governance challenges confronting developing countries that are the focus of policy making. We examine the changes that will be needed and issues that must be addressed if a shared view of the role of African cities in the attainment of climate objectives through decarbonisation is to be met through the coalescing of stakeholder advocacy efforts towards policy formulation.

Our use of the ACF involves an analysis of the so-called 'achievements' of the Glasgow Climate Pact, contextualised to the requirements for positioning African cities at the forefront of the decarbonisation agenda. The framework is used to explore coalitions involved in the policy landscape, especially for resource-rich developing countries where resource-based economies have created cities servicing the resource in question (e.g., Petro-cities like Port Harcourt and Luanda). The analysis considers the different coalition standpoints/beliefs that must be brokered in line with five ACF hypotheses if such countries are to opt in to the COP26 agreements. To this end, the framework offers insights for understanding how the peculiar attributes of coalitions in cities and their agendas can be coalesced into a common set of interests or policy positions to address carbon and emission challenges. Specifically, we use the ACF to review the policy subsystem to examine the sources of policy gaps due to coalitions' differing expectations for the role or place of African cities in the Glasgow Climate Pact. We also consider the institutional setting or options for negotiating, agreeing, and implementing measures for decarbonising African cities. We review funding, governance, economic and policy arrangements through the lenses of the Africa Adaptation Acceleration Program (AAAP) and international city alliances as examples of coalitions that would help the African cities' decarbonisation agenda. Based on this we highlight the specific resources these coalitions possess in furtherance of their policy-making agenda.

9.2 Contextual Review and Theoretical Framework

9.2.1 The Decarbonisation Challenge

The main takeaways from COP26 have been summarised as relating to increasing the drive for adaptation, mitigation, increased funding, and transparency in the disclosure of national actions (COP26 2021). From an African perspective, funding shortfalls remain a major constraint given the extent of the infrastructural deficit following decades of improper planning and disjointed approach to developing decarbonised cities. Adoption and implementation of adaptation measures (a more pertinent discussion than mitigation measures in this context) remains the focus. The perceived unfairness or unjustness of developing countries being at the receiving end of extreme climatic events attributable to climate change despite being minimal contributors to the problem adds to the funding conundrum (Okonjo-Iweala 2020). Figures 9.1 and 9.2 illustrate Africa's minuscule contribution to CO2 emissions from fossil fuel in absolute terms and per

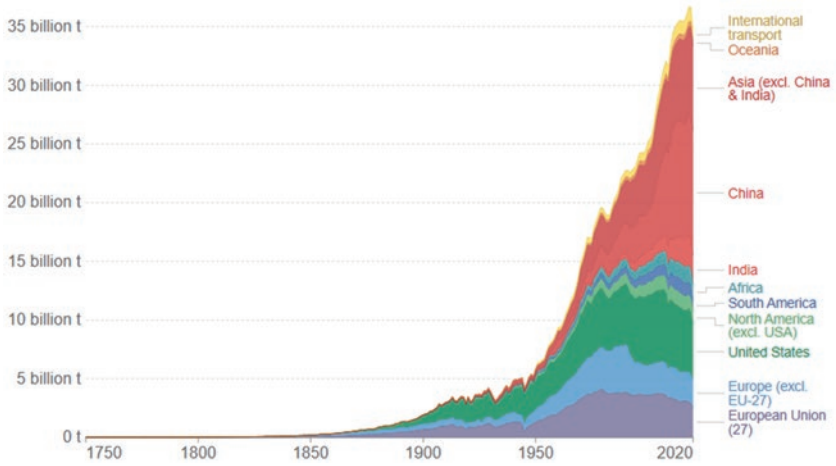

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Fig. 9.1 Annual CO2 emissions from fossil fuels, by world region [Carbon dioxide (CO2) emissions from the burning of fossil fuels for energy and cement production. Land use change is not included] (Source: Global Carbon Project Our—World in Data [https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions] CC BY)

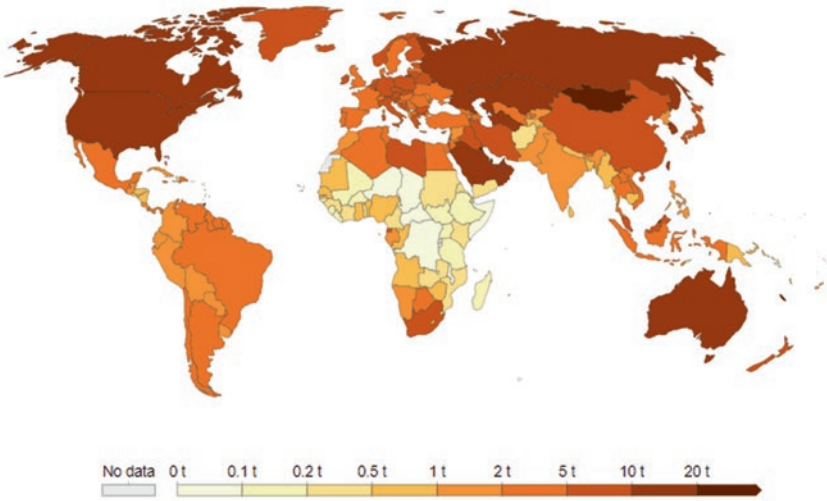

Fig. 9.2 Per capita CO2 emissions, 2020 [Carbon dioxide (CO2) emissions from the burning of fossil fuels for energy and cement production. Land use change is not included] (Source: Global Carbon Project—Our World in Data [https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions] CC BY)

capita CO2 emissions, respectively. The implication of this is that the kind of fossil fuel (particularly coal) abatement that would be required to maintain 1.5 °C may not necessarily come from Africa, but the decarbonisation agenda for Africa through adaptation measures would mean that such countries can pursue a development and growth path that avoids the shortcomings of that followed by the developed world and increasingly by China and India, based on the burning of fossil fuels.

In this discourse, we explore decarbonisation gains to be had from focusing on the carbon emissions challenges of African cities. Support by developed countries will be crucial to helping developing countries to outline a clear strategy, particularly in relation to providing mitigation and adaptation finance, offering relevant support through technology and capacity-building, and through other indirect means (COP26 2021). This kind of support will make it possible to target specific aspects of need, particularly for cities where a host of coalitions have different expectations of what is required, but more importantly, the scale of intervention can be such that the burden and extent of the challenge can be broken down into

smaller city-related needs. This will allow the use of intervention mechanisms which help to overcome "deep core beliefs" and "policy core beliefs" that are often rigidly held on to by coalitions thereby hindering the attainment of consensus for policy formulation (Sabatier and Weible 2007).

9.2.2 Translating the COP26 Glasgow Climate Pact to Policy for Cities

Four key *achievements* are now associated with COP26 (2021). First, the NDCs to reduce emissions from 153 countries and commitment to strengthening mitigation measures means that over 90% of world GDP now comes under the net zero commitments, with relevant guidelines and systems agreed. The finalised Paris Rulebook includes commitments to transition from coal power, accelerated move towards electric vehicles, the halting/reversing of deforestation, and reduction of methane emissions. Second, there is renewed commitment to dealing with climate impacts (i.e., minimising loss and damage) through adaptation action, with about 80 countries primed to address climate risks by either Adaptation Communications or National Adaptation.

Third, clear progress has been made towards the $100 billion climate finance goal by 2023 with 34 countries and five public institutions pledging to stop support for fossil fuels. It is envisaged that there will be a doubling of 2019 adaptation finance levels by 2025. The establishment of the Least Developed Countries Fund adds to arrangements by financial institutions and central banks to secure financing towards net zero. Fourth, COP26 has fostered collaboration between various stakeholders like governments, businesses, and civil society to rapidly deliver climate goals. The finalised Paris Rulebook provides a framework for transparent collaboration which could manifest in conversations about energy, electric vehicles, shipping, and commodities or in agreeing on standards for international carbon markets and common timeframes for emissions reduction targets.

Translating these preliminary agreements ('achievements') into specific action would require that multiple stakeholders or coalitions work towards the consensus that is needed to drive policy agendas at national levels. Ultimately, these should translate into specific measures for cities and settlements. The converse of this is also true, that is, the measures put in place at the city level will enhance the attainment of national contributions to carbon abatement targets at the national level. The ACF is a useful

framework for explaining how such consensus can be brokered towards relevant policy formulation.

9.2.3 The Advocacy Coalition Framework and Catalysing Action for Decarbonisation of African Cities

The Advocacy Coalition Framework (ACF) proposed by Sabatier (1987), Sabatier and Jenkins-Smith (1999), and Sabatier and Weible (2007) offers different perspectives for understanding the policy process, perhaps only rivalled by the Institutional Analysis and Development Framework (IAD) (Sotirov and Memmler 2012). According to Cairney (2015, p.484), the ACF's eclecticism means that it is suitable for explicating complex policy-making systems characterised by decision-making under information constraints and high levels of uncertainty and ambiguity, especially where the time from decisions to outcomes could be up to a decade or more. In the case of climate change, net zero carbon emission targets are being agreed for mid-century, which is just about three decades away. Cairney also advocates ACF for systems involving multiple stakeholders and governmental levels and in which policy processing could range from highly politicised, publicly visible issues to specialist issues routinely handled by specialists outside the public domain. Adapting the Glasgow Climate Pact for African cities' decarbonisation fits this bill.

Figure 9.3 is a flow diagram depicting the main components of the ACF, which is typically used to hypothesise about the policymaking process. Public policymaking is construed as occurring within a 'policy subsystem' bounded by discernible and geographical attributes. We equate this to the national climate change policy subsystem where several advocacy coalitions could be competing for prioritisation of their views or beliefs to, for example, influence decisions by governmental authorities in relation to approaches to managing the climate change situation.

Based on Sabatier (1988), Sabatier and Jenkins-Smith (1993, 1999), and Sabatier and Weible (2007), coalitions may comprise disparate actors or stakeholders, with each coalition coalescing and coordinating actions around a common belief (the coalition "glue"—Cairney (2015, p.486)). Beliefs inform a coalition's actions and could be (1) deep core beliefs (underlying personal philosophy), (2) policy core beliefs (fundamental policy positions), or (3) secondary aspects (e.g., funding mechanisms, and specific information and institutions for delivering on and implementing policy goals). These three beliefs are of increasing changeability or

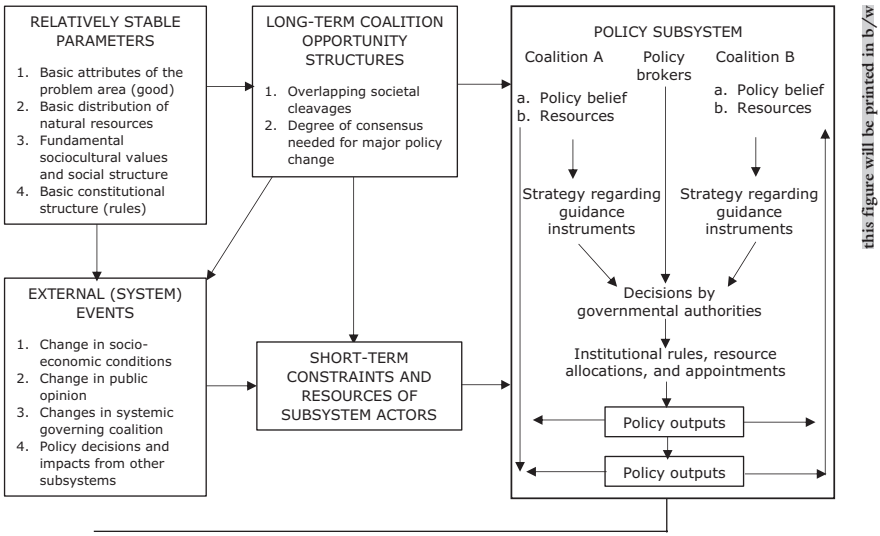

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Fig. 9.3 The Advocacy Coalition Framework (Source: Sabatier and Weible 2007, p.202)

flexibility in the order of listing. Thus, normative and ontological deep core beliefs and policy core beliefs are the most difficult to change. In contrast, secondary aspects are more malleable (Sabatier and Jenkins-Smith 1999; Sabatier and Weible 2007). We explore the implications of this later.

Interactions of advocacy coalitions and facilitation of policy formulation (i.e., by policy brokers) in the policy subsystem take place within a wider system made up of three elements which impose short-term constraints on and determine the resources available to subsystem actors (Sabatier and Jenkins-Smith 1999; Sabatier and Weible 2007). The first element represents factors that are relatively stable over a decade or more like social values and constitutional structure. The second relates to long-term coalition opportunity structures which define the political system like the degree of consensus needed for policy change. The third consists of external (system) events, including changes in socio-economic conditions, government and public opinion, and policy decisions and impacts from other subsystems, which trigger behavioural responses in the policy subsystem.

The ACF is useful for explaining policy change deriving from changing the beliefs or views of the most influential coalitions. Major policy changes may require shifts in policy core values and minor changes, that is, in the secondary aspects of policy, may simply require modification of secondary aspects of beliefs (Sabatier and Jenkins-Smith 1999). Typically, deep core and policy core beliefs may change in response to extreme external shocks ("external perturbations") that alter the relative negotiating positions of coalitions while secondary aspect changes could arise through learning ("policy-oriented learning") involving the use of experience and new information to achieve enduring alternation of thought and behavioural intentions by revising existing or formulating new policies (Sabatier and Jenkins-Smith 1999, p.123; Sabatier and Weible 2007, p.198–199). Internal shocks (i.e., occurring within the policy subsystem) could also lead to a re-assessment and re-alignment of policy core beliefs and better intra- and inter-coalition understanding of the policy issues, which could result in "negotiated agreements" (Sabatier and Weible 2007, p.204–205). Policy changes from these consensual collaborative processes arise when coalitions are dissatisfied with the prevailing policies and cannot explore other avenues but are able to commit to independently mediated decision-making (Sabatier and Weible 2007, pp. 205–207).

9.2.4 Application of the Framework to the Glasgow Climate Pact

The ACF has been used severally in the environmental and energy policy space, especially in relation to developed countries or economies. We employ the ACF as a conceptual model to theorise about the relationships that are required to achieve a consensus of ideas, beliefs, and policy agendas to drive climate adaptation in African cities, where the policy subsystem relates to outlining institutional rules, resource allocations, and appointments within cities to promote adaptation and/or mitigation measures. We translate the Glasgow Climate Pact (COP26 2021) into considerations for the different coalitions likely to impact on the policy landscape for decarbonising African cities. Coalitions in this space could be varied, ranging from groups promoting the industry (usually that being serviced by the city) and the preservation of its place as a commerce or industrial centre and those looking to combat issues associated with modernisation of infrastructure and energy conservation, or countering the negative impacts of the industry's activities on the environment.

In this respect, the wider discourse in relation to climate change equates to external (system) events, with changes in public opinion about the impact of anthropogenic activities on the physical environment and climatic conditions. The need for sustainable socio-economic development in some of the world's poorest societies has seen Africa pursue changes in the systemic governing coalition through the African Union, the African Continental Free Trade Area (AfCFTA) agreement, and subtle arrangements like having a dedicated pavilion at COP26. Asekomeh et al. (2022) argue that a US or EU green deal type of intervention would be needed for a green post-COVID recovery in Africa. Dependence on natural resource rent and the expectation that such rent will continue to be accessible has informed the development of constitutional, regulatory and governmental structures (Mohamed 2020). These structures were previously mostly a top-down process, but are now entrenched in the democratic processes allowing grassroots (e.g., city council, representation). The central government usually manages and allocates the resource rent to units within the system, with the intention that these will be used, for instance, in city planning, transportation, waste management, and other subsystems. In some cases, the responsibilities could be categorised as centralised or devolved responsibilities, with city councils having control over specific city planning and development decisions (Natural Resource Governance Institute 2016; Asekomeh et al. 2021).

The intractability of the arrangements (often encapsulated in the constitution or legal framework) means that it represents a relatively stable parameter for policy making, along with fundamental socio-cultural values and social structures which create glaring divides between the affluent in urban neighbourhoods and the extremely poor slum dwellers within cities (Dang 2013). Finally, the protracted nature of the negotiations towards the Glasgow Climate Pact indicates that finding consensus for major policy change would remain a vital consideration for creating opportunities for long-term coalitions towards successful decarbonisation.

9.2.4.1 African City Coalitions and Competing Interests

Following Sotirov and Memmler (2012), we envision the African cities' policy subsystem as being made up of three advocacy coalitions. First, the "traditional city council management" paradigm would typically provide the basic city management framework, usually driven by the need to deliver city services guided by the value for money principle. Second, the "environmental and economic development oriented" coalitions typically

challenge the traditional paradigm by seeking mainstream discussions about concerns for the environment and living conditions within cities, as well as the requirements for sustaining economic activities and opportunities for city dwellers. The third category is the "social concern" coalition, which is primarily interested in the place of cities in safeguarding the social well-being and livelihoods of city dwellers. For Petro-cities, these three advocacy coalitions often struggle to achieve consensus given that the central economic activity could directly be responsible for worsening both the environmental and social conditions. The role of policy brokers in helping cities adopt the COP26 Climate Pact will be in bringing these disparate coalitions to some form of compromise on pertinent policy matters.

The three coalitions identified above for cities represent groups that would need to adopt or be receptive to the Glasgow Climate Pact and would need to modify their policy core beliefs, at the very least, to make it possible for policy changes to be made to achieve the targets agreed. Accordingly, we turn our attention to how the policy subsystem can be construed and interpreted for the decarbonisation discourse in African cities. The ways the advocacy coalitions identified above would alter their beliefs or positions are usually framed as hypotheses by the ACF. We see the possibility of examining these relationships from five out of 15 commonly tested hypotheses listed by Weible et al. (2009, p.129):

Hypothesis 1: Actors within an advocacy coalition will show substantial consensus on issues pertaining to the policy core, although less so on secondary aspects.

Hypothesis 2: An actor (or coalition) will give up secondary aspects of the actor's belief system before acknowledging weaknesses in the policy core.

Hypothesis 3: Even when the accumulation of technical information does not change the views of the opposing coalition, it can have important impacts on policy—at least in the short run—by altering the views of policy brokers.

Hypothesis 4: Actors who share policy core beliefs are more likely to engage in short-term coordination if they view their opponents as (i) very powerful and (ii) very likely to impose substantial costs upon them if victorious.

Hypothesis 5: Actors who share (policy core) beliefs are more likely to engage in short-term coordination if they: (i) interact repeatedly; (ii) experience relatively low information costs; and (iii) believe that there

are policies that, while not affecting each actor in similar ways, at least treat each fairly.

We provide discussions of how the COP26 Climate Pact provides insights for likely advocacy coalition interaction in relation to choices for African cities, especially in relation to issues which represent differences in beliefs or policy gaps.

9.2.5 Coalition Differences or Gaps and Policy-making Constraints

9.2.5.1 Weak Institutional Capacities, Governance, and Regulatory Gaps

One of the major challenges for policy making and implementation in relation to development of low-carbon cities and communities is weak institutional capacities. Although the Paris Agreement of 2015, the subsequent Rulebook agreed at COP26 and the United Nations Framework Convention on Climate Change (UNFCCC) aim to strengthen global responses to the threat of climate change, the differences in national capacities leave states in Africa with limited options for mainstreaming strategies to reduce greenhouse gas (GHG) emissions in the continent. To expedite action towards these responses, regulatory, policy, and institutional frameworks must set the stage to provide leadership and direction for a low-carbon economy. Governance and regulatory structures must be advanced above short-term political expediency and rent-seeking behaviour (Akinola 2018). Robust institutional and regulatory frameworks are required to effectively stimulate and facilitate the process of decarbonisation of African cities. Governance arrangements need strengthening, especially in promoting the participation of the private sector and promoting collaborative funding arrangements to build up carbon finance mechanisms and opportunities (Michaelowa et al. 2021).

While coalitions may have shared core beliefs on the need for these structures and capacities, the specific details or secondary aspects of the arrangements would be more contentious. This is in line with hypotheses 1 and 2. The need for climate action in cities is clearly a pursuit that the "traditional city council management", "environmental and economic development oriented", and "social concern" coalitions identified previously can rally around. However, the specific mechanisms for achieving

this and responsibilities for key decisions would prove more difficult. For example, financing mechanisms may contravene value for money expectations for city council management even if the sustainability projects would be favourably received by environmental campaigners.

9.2.5.2 Planning Gap

For African cities, there is a vicious cycle of infrastructural deficit due to pressures created by rural-urban migration whereby the meagre development projects undertaken by city councils and authorities are immediately swamped by growth in city populations. This means that there is always a structural and infrastructural deficit when it comes to development. With the cities' carbon problem being exacerbated by migration from rural communities, it follows that the decarbonisation challenge in cities cannot be addressed in exclusion of the rural carbon and energy poverty challenge. The need to manage the influx of the rural community dwellers into cities pits different coalitions against one another. For instance, the "social concern" coalition may be interested in promoting inclusiveness and opportunities for upward social migration, but the burden on infrastructure like schools and housing may mean "traditional city council management" struggles to keep up. Breaking that economic vicious cycle through the ACF requires that parties or stakeholders make a commitment to changing their outlook and policy core beliefs.

In line with hypothesis 3, the data and technical information on distortionary impact of migration on city planning will be one that policy brokers need to consider even if the coalitions continue to hold different core beliefs.

9.2.5.3 Funding and Economic Gaps

A critical consideration, especially in cities, is the means and method of financing climate mitigation and resilience measures such as climate-smart systems for buildings and eco-friendly transport systems. Similarly, waste management and other green interventions are necessary for both decarbonisation and achieving the 2063 sustainable development agenda in Africa (African Union 2015). The financing challenge relates to incentivising investment in the decarbonisation of Africa's cities from the private sector (Michaelowa et al. 2021) given that public (city council) funding is more likely to be inadequate. This could be by means of grants and fiscal concessions leading to tax rebates for specific types of investments. These

must reconcile explicitly with the economics and governance aspects of decarbonisation for climate resilience in Africa.

In the short run due to the potential stranding of assets, decarbonisation may put at risk Africa's economies that are overly dependent on natural resources (Ansari and Holz 2020). The challenge is to ensure that long-term economic and climate resilience is not ignored for short-term gains, with the knock-on effects on the infrastructural development of cities and communities. Since decarbonisation may mean less dependence on fossil-fuel sources and their revenue, it may be difficult for African resource-rich countries to secure resource-backed loans for development purposes (Landry 2018) and other forms of financing will be required.

The COP26 negotiations have shown that several actors hold the view that agreeing to carbon cuts will mean loss of resource rents. They opine that this will put the burden of climate mitigation on developing countries or countries whose stage of development means that fossil fuels are critical to their revenues and/or energy mix. This has seen Parties from these countries engaging in short-term coordination and working together to prevail on developed countries to commit to funding climate action (in line with hypotheses 4 and 5).

9.3 COP26 Opt-in Policy Formulation Mechanisms for African Cities

9.3.1 Coalitions, Coalition Resources, and Policy Brokers for Decarbonisation of African Cities

In addition to the discourses about the beliefs of coalitions that provide the basis for the formation of coalitions, the ACF also highlights the need for coalitions to possess and be able to deploy specific resources in support of their beliefs and towards influencing the policymaking process. We posit that to translate the COP26 Glasgow Climate Pact 'achievements' from the discussion table to specific policy instruments for cities in Africa, coalitions in the policy subsystem must possess the resources to engage with policy brokers in support of their policy core beliefs. These resources will determine whether they are able to address the previously identified policy gaps for decarbonising cities. To illustrate the deployment of these resources, in this concluding section, we examine a couple of coalitions or coalition structures that represent the possibility of deploying relevant

462 resources towards promoting policy learning, and intra- and inter-coalition
463 understanding of the policy issues and negotiation towards decarbonising
464 African cities.

465 *9.3.1.1 Alliance of Cities*
466 Several coalitions and alliances based on cities have emerged to fill the gaps
467 identified above. These include the United States' Clean Cities Coalition
468 Network (https://cleancities.energy.gov/), the International Council for
469 Local Environmental Initiatives—Local Governments for Sustainability
470 (ICLEI) (https://www.iclei.org/), C40 Cities (https://www.c40.org/)
471 and the Global Covenant of Mayors for Climate and Energy (https://
472 www.globalcovenantofmayors.org/). Given their widespread membership
473 (for instance, the C40 cities is a network of about 100 cities, including 13
474 African cities, collaborating on GHG emissions and currently make up
475 more than 25% of the global economy with over 700 million people),
476 these entities represent coalitions, and vitally, they also play an active role
477 in facilitating policy brokering in recognition of the significance of cities in
478 implementing climate action. They often provide mechanisms for produc-
479 ing and exemplifying innovative solutions and technologies for climate
480 adaptation and mitigation. In this light, cities can be seen as providing the
481 supporting mechanisms (institutions, private sector funding, etc.) that will
482 foster innovation of mitigation and adaptation techniques that can be the
483 basis for national action. These alliances clearly support the view of coali-
484 tion interactions and coordination implied in hypotheses 4 and 5.
485 The benefits of membership of such alliances for African cities include
486 providing a basis for designing and trialling innovative solutions in relation
487 to transportation (e.g., mass transit networks), waste management, and
488 water use efficiency. Innovations include efficient transport (including
489 green buses and dedicated lanes) and traffic systems to alleviate traffic
490 congestion and pollution from transport-related CO2 emissions, as well as
491 provision of nudges by way of incentives for city dwellers to imbibe sus-
492 tainable lifestyles (including reducing/recycling or reusing products) and
493 use of city cleaning technologies. Membership provides a basis for knowl-
494 edge and technology transfer to other cities and such cities could then set
495 aspirational goals to provide benchmarks that exceed the COP26 targets
496 for emissions abatement. Membership, involving representation by may-
497 ors and decision makers of network cities, also means that cities could
498 provide a fulcrum for national climate initiatives starting with city initia-
499 tives. City representatives could also provide a governance basis by

working with government agencies and parastatals at the national level and in international negotiations like the COP26 Climate Pact. This would ensure backward and forward feedback mechanisms for identifying and promoting climate mitigation and adaptation practices.

City alliances or networks offer further benefits in relation to bridging the finance and planning/infrastructural gaps identified previously. This is through mechanisms like providing access to climate-related infrastructure financing and equipping city representatives with the knowledge and skills for project finance budgeting and funds management. Finance facilities are accessible which offer competitive rates and flexibilities that would otherwise be difficult to secure, and which would otherwise mean that projects adding to climate resilience for cities are forfeited. In addition, infrastructural development and planning are often constrained by limited access to relevant data. Data from member cities offer a basis for comparison and benchmarking to measure progress and improve planning decisions. Requisite datasets could range from population and migration statistics to information about operational aspects like waste management that are relevant for building climate resilience.

Thus, coalitions of cities could facilitate the attainment of COP26 targets where such cities achieve an aspirational status for other cities in a country, ensuring that they all contribute to the NDCs for building national resilience and achieving carbon abatement in the national development agenda.

9.3.1.2 Africa Adaptation Acceleration Program

The Africa Adaptation Acceleration Program (AAAP), launched at the Climate Adaptation Summit in 2021, was jointly developed by the African Development Bank (ADB) and the Global Centre on Adaptation (GCA), with the latter specifically designated a global solutions broker, providing advocacy support for accelerating adaptation action. The AAAP operationalised the Africa Adaptation Initiative to raise about $25 billion in poverty alleviation, youth empowerment through entrepreneurship skills and job creation, and invest up to $7 billion towards climate-resilient infrastructure development working with/through "Multilateral Development Banks and other leading implementation organisations, stakeholders, and political and technical bodies" (AAAP 2021, p.2). These objectives are structured along four pillars which prioritise opportunities for climate adaptation and resilience.

The first pillar (Pillar 1) relates to the use of climate-smart digital technologies for agriculture and food security. In recognition of the dependence of most African economies on agriculture for food and employment, this pillar addresses the need to manage the sector's vulnerability to climate change by employing the right technologies to boost productivity. This will entail improving access (in terms of availability and affordability) and applicability of data-driven digital solutions to promote agricultural productivity, especially through the private sector. The second pillar (Pillar 2) is the Africa infrastructure resilience accelerator, which is intended to bridge the infrastructure deficit of about $130 billion–$170 billion a year, with an estimated additional investment of only 3% to total costs to make such infrastructure resilient and capable of delivering on a significant number of the sustainable development goals (SDGs), the Paris Agreement (and by extension the COP26 Climate Pact) and the Sendai Framework (AAAP 2021).

Pillar 3 relates to empowering youth for entrepreneurship and job creation in climate adaptation and resilience, to leverage Africa's young population (expected to double to over 830 million by 2050) through creation of economic activities, and "drive resilience through their innovativeness, energy, and entrepreneurship" (AAAP 2021, p.5). The fourth pillar (Pillar 4) provides the crucial backing for achieving the objectives of the AAAP through innovative finance initiatives. Global climate finance received by Africa is only a microcosm (4%) of the average annual finance of $30 billion per annum as of 2017–2018, with an even smaller fraction devoted to adaptation and resilience initiatives and funding has been severely curtailed by the global response to the COVID-19 pandemic.

Collectively, these pillars are primed to help African countries, and by extension, cities achieve decarbonisation as they address the specific gaps identified previously. They therefore represent policy brokers or coalition enablers with the policy subsystem in the ACF. The AAAP thus provides a basis for coalitions' formation and coordination through the policy core beliefs outlined, in line with hypotheses 4 and 5. The AAAP provides rich development-related data that will inform the decisions/choices of policy brokers in line with hypothesis 3.

9.3.2 Discernible Coalition Resources

From the example of the coalitions identified above, clear coalition resources itemised by Sabatier and Weible (2007, p.201–202) can be

articulated based on the ACF. The city alliances and the AAAP are backed by relevant agreements that confer (a) *formal legal authority to make policy decisions.* For instance, mayors of cities bring needed credibility, financial clout from their budgets, and potential for international networking. The city alliances and AAAP have also been useful in shaping (b) *public opinion* on matters of climate change and decarbonisation. They are also sources of veritable (c) *information* regarding the severity and the urgency of the problem. Their standing also means that they are capable of commissioning research or studies that offer credible and free-of-bias perspectives to support policy arguments based on their beliefs.

In addition, city alliances and the AAAP are resourced by (d) *mobilizable troops* to promote the beliefs and activities of these coalitions and to bring their policy arguments to the consciousness of the wider public. The vast pooling of (e) *financial resources* and access to funds provided by membership of city alliances and by instruments created by the AAAP means that the capability for organising other resources, conducting research, producing information, and shaping public opinion has increased several folds. Most importantly, city alliances and AAAP provide (f) *skilful leadership* or offer a good basis for building such leaders and shaping thought leadership regarding the beliefs of the coalition, which would go a long way to influencing policy making.

Operationalising the Glasgow Climate Pact would need the dominant coalitions to use these resources, guided by policy brokers, towards securing the best outcomes for African cities, striking a balance between achieving decarbonisation objectives and doing so in ways that do not severely impact on the economic and social situations of cities. This will be the basis on which the Climate Pact can be truly judged to be just and equitable for the parties involved.

9.4 Summary and Conclusion

The ACF approach provides a perspective for understanding how various coalitions or stakeholders can make choices in African cities and communities to align with global climate action. The messages from COP26 would need to be communicated to relevant coalitions to attempt to achieve consensus of beliefs (from policy core beliefs to secondary beliefs or specific aspects) and approaches to assist Africa in creating decarbonised cities by limiting carbon-emitting sources and eliminating practices that contribute to GHG emissions within cities. This goal should be pursued

alongside providing mechanisms for much-needed development to help city dwellers escape the poverty trap that is birthing several slums around resource-exploiting cities. The ACF approach to adopting the COP26 agreements and decarbonisation intervention as described here align with the Sustainable Development Goals' (SDGs) pursuit of affordable and clean energy (SDG 7) and the development of sustainable cities and communities (SDG 11).

Buildings, waste disposal systems, and commercial activities within cities are not carbon neutral. Some of these practices or activities are ignored in Africa's low-carbon and climate action discourse. A well-thought-out strategy and policy direction are crucial in achieving the much-needed decarbonisation in Africa's settlements. It is crucial to be able to catalyse action by getting disparate coalitions or groups to coalesce in support of the requisite policy instruments and choices that need to be made. We identified specific elements of the ACF that would provide African cities the basis for building or leveraging on coalitions to achieve consensus that are required to translate the Glasgow Climate Pact into specific policies to achieve decarbonisation. Policymaking for decarbonising African cities through the ACF involves understanding coalitions' beliefs and resources at their disposal. It explicates how beliefs and resources can be combined to reinforce the process through policy-oriented learning and negotiations, possibly in response to external shocks or perturbations.

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