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# To opt-in or to cop out: COP26 and the policy dynamics of decarbonising African cities.

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# To Opt-in or to Cop Out: COP26 <sup>2</sup> and the Policy Dynamics of Decarbonising <sup>3</sup> African Cities <sup>4</sup>

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and Smith I. Azubuike	6

Abstract The COP26 Glasgow Climate Pact appears to have kept alive 7 the ambition of restricting temperature rises to 1.5 °C above pre-industrial 8 levels. However, developing countries must translate the agreements into 9 specific policies and change instruments in their home countries. Carbon 10

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abatement agreements and the responsibility for financing climate change 11 actions may be inimical to Africa's fragile economies which are often 12 dependent on natural resources and carbon-emitting activities. The 13 Advocacy Coalition Framework (ACF) helps to evaluate the policy subsys-14 tem to explain how coalitions' beliefs and resources can be channelled 15 towards policymaking for the decarbonisation of African cities. Specifically, 16 we use the ACF to review international cities coalitions and the Africa 17 Adaptation Acceleration Program (AAAP) to explore the interactions and 18 institutional settings needed to negotiate, agree and implement the 19 Glasgow Climate Pact for decarbonising African cities. 20

21 Keywords Decarbonisation • African cities • COP26 Glasgow Climate

22 Pact • Advocacy coalition framework • Policy • Governance •

23 Stakeholders

24

# 9.1 INTRODUCTION

There has been renewed optimism that talks at the 26th Conference of 25 Parties to the UN Framework Convention on Climate Change (UNFCCC), 26 also known as COP26, have kept alive the ambition of restricting tempera-27 ture rises to 1.5 °C above pre-industrial levels. Negotiations to complete 28 the Paris Rulebook, originally proposed at COP21, continued for an extra 29 day. The Paris Rulebook is intended to achieve a global agreement to 30 accelerate climate action during the current decade (2020-2029). Its 31 completion at COP26 is seen as real progress. However, the actual test of 32 the outcomes is expected to arise from the follow-on action by delegates 33 and Parties in their respective countries in translating the agreements to 34 action (Obergassel et al. 2021). Specifically, delegates and governments of 35 developing countries have their work cut out to operationalise the COP26 36 Glasgow Climate Pact (COP26 2021) as specific policy and change instru-37 ments in their home countries. This is because the most contentious issues 38 at COP26 relate to the responsibility for the financing of climate change 39 action and a lack of commitment to the kind of fossil fuel (particularly 40 coal) abatement that would be required to maintain 1.5 °C. 41

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 cop-47 ping out from them given the burden that they may impose on their coun-48 tries and economies. One of the contentious issues at COP26 was the 49 shortfall in the funds that will be required to initiate and sustain a decar-50 bonisation agenda for developing countries, and by extension, African cit-51 ies. Developed countries have not fulfilled pledges agreed at the 21st 52 Conference in Paris (COP21) to jointly provide mitigation and adaptation 53 finance of USD100 billion annually by 2020 (Timperley 2021; Depledge 54 et al. 2022). The pledge entailed offering relevant support through tech-55 nology and capacity-building, which have also not been fully realised. This 56 shortfall means that developing countries will struggle to implement cli-57 mate change actions and they may not commit fully to or be capable of 58 realising their nationally determined contributions (NDCs) to reduce 59 emissions and manage climate change. Climate-vulnerable countries, 60 especially given their dependence on natural resources whose extraction 61 contributes to or worsens carbon emission, need developed countries to 62 increase their level of climate financing (Timperley 2021). 63

When extrapolated to the development requirement of African cities, 64 the funding constraints are further exacerbated by years of infrastructural 65 and structural deficits and an unbroken trend of rural-urban migration 66 (Mubangizi 2021; Selod and Shilpi 2021). African cities would require 67 substantial new infrastructure financing, policy, and governance changes, 68 and adoption of technology-related decarbonisation measures to help 69 African countries meet NDCs. Cities in developed countries have struc-70 tural advantages that are favourable or provide a basis for innovation and 71 transformation (e.g., UK cities—Sait et al. 2018; Asekomeh et al. 2021). 72 The approach to decarbonisation in African cities needs to be carefully 73 framed to consider this important difference. Specifically, the systemic fail-74 ings, structural and infrastructural gaps, and policy mismatch at the city 75 level mean that climate adaptation and mitigation measures are needed, 76 with the former previously often prioritised over the latter (Lwasa 77 et al. 2018). 78

The dual pressures of limited funding and worsening infrastructural 79 gaps mean that African cities are often struggling to break away from a 80 vicious cycle that starts with improper planning and poor infrastructure 81 funding and is reinforced by inadequate and insufficient access to grid and 82 off-grid power sources and dysfunctional social structures that promote 83 economic inequality and hinder social mobility and cohesion (Corfee-Morlot et al. 2019). Against this backdrop, developing countries must 85

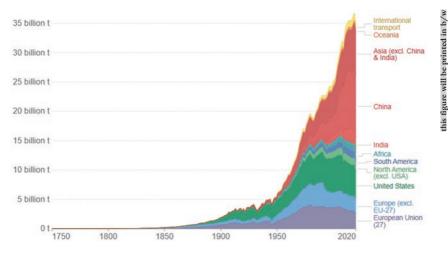
decide how they approach the subject of climate change action through 86 seeking alternative funding arrangements, changes in policies, modifica-87 tion of their economic models, and adoption of new governance struc-88 tures, with these measures being implemented from the city or settlement 89 level. We employ elements of the Advocacy Coalition Framework (ACF) 90 to analyse the different economic, financial, and governance challenges 91 confronting developing countries that are the focus of policy making. We 92 examine the changes that will be needed and issues that must be addressed 93 if a shared view of the role of African cities in the attainment of climate 94 objectives through decarbonisation is to be met through the coalescing of 95 stakeholder advocacy efforts towards policy formulation. 96

Our use of the ACF involves an analysis of the so-called 'achievements' 97 of the Glasgow Climate Pact, contextualised to the requirements for posi-98 tioning African cities at the forefront of the decarbonisation agenda. The 99 framework is used to explore coalitions involved in the policy landscape, 100 especially for resource-rich developing countries where resource-based 101 economies have created cities servicing the resource in question (e.g., 102 Petro-cities like Port Harcourt and Luanda). The analysis considers the 103 different coalition standpoints/beliefs that must be brokered in line with 104 five ACF hypotheses if such countries are to opt in to the COP26 agree-105 ments. To this end, the framework offers insights for understanding how 106 the peculiar attributes of coalitions in cities and their agendas can be 107 coalesced into a common set of interests or policy positions to address 108 carbon and emission challenges. Specifically, we use the ACF to review the 109 policy subsystem to examine the sources of policy gaps due to coalitions' 110 differing expectations for the role or place of African cities in the Glasgow 111 Climate Pact. We also consider the institutional setting or options for 112 negotiating, agreeing, and implementing measures for decarbonising 113 African cities. We review funding, governance, economic and policy 114 arrangements through the lenses of the Africa Adaptation Acceleration 115 Program (AAAP) and international city alliances as examples of coalitions 116 that would help the African cities' decarbonisation agenda. Based on this 117 we highlight the specific resources these coalitions possess in furtherance 118 of their policy-making agenda. 119

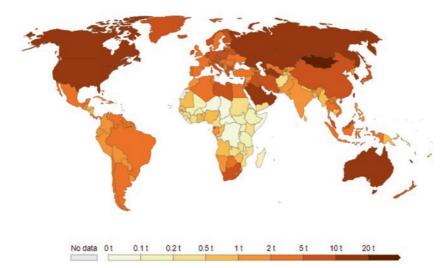
# 9.2 CONTEXTUAL REVIEW 120 AND THEORETICAL FRAMEWORK 121

#### 9.2.1 The Decarbonisation Challenge 122

The main takeaways from COP26 have been summarised as relating to 123 increasing the drive for adaptation, mitigation, increased funding, and 124 transparency in the disclosure of national actions (COP26 2021). From an 125 African perspective, funding shortfalls remain a major constraint given the 126 extent of the infrastructural deficit following decades of improper plan-127 ning and disjointed approach to developing decarbonised cities. Adoption 128 and implementation of adaptation measures (a more pertinent discussion 129 than mitigation measures in this context) remains the focus. The perceived 130 unfairness or unjustness of developing countries being at the receiving end 131 of extreme climatic events attributable to climate change despite being 132 minimal contributors to the problem adds to the funding conundrum 133 (Okonjo-Iweala 2020). Figures 9.1 and 9.2 illustrate Africa's minuscule 134 contribution to CO2 emissions from fossil fuel in absolute terms and per 135



**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-greenhousegas-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 143 focusing on the carbon emissions challenges of African cities. Support by 144 developed countries will be crucial to helping developing countries to out-145 line a clear strategy, particularly in relation to providing mitigation and 146 adaptation finance, offering relevant support through technology and 147 capacity-building, and through other indirect means (COP26 2021). This 148 kind of support will make it possible to target specific aspects of need, 149 particularly for cities where a host of coalitions have different expectations 150 of what is required, but more importantly, the scale of intervention can be 151 such that the burden and extent of the challenge can be broken down into 152

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 157 for Cities 158

Four key achievements are now associated with COP26 (2021). First, the 159 NDCs to reduce emissions from 153 countries and commitment to 160 strengthening mitigation measures means that over 90% of world GDP 161 now comes under the net zero commitments, with relevant guidelines and 162 systems agreed. The finalised Paris Rulebook includes commitments to 163 transition from coal power, accelerated move towards electric vehicles, the 164 halting/reversing of deforestation, and reduction of methane emissions. 165 Second, there is renewed commitment to dealing with climate impacts 166 (i.e., minimising loss and damage) through adaptation action, with about 167 80 countries primed to address climate risks by either Adaptation 168 Communications or National Adaptation. 169

Third, clear progress has been made towards the \$100 billion climate 170 finance goal by 2023 with 34 countries and five public institutions pledg-171 ing to stop support for fossil fuels. It is envisaged that there will be a dou-172 bling of 2019 adaptation finance levels by 2025. The establishment of the 173 Least Developed Countries Fund adds to arrangements by financial insti-174 tutions and central banks to secure financing towards net zero. Fourth, 175 COP26 has fostered collaboration between various stakeholders like gov-176 ernments, businesses, and civil society to rapidly deliver climate goals. The 177 finalised Paris Rulebook provides a framework for transparent collabora-178 tion which could manifest in conversations about energy, electric vehicles, 179 shipping, and commodities or in agreeing on standards for international 180 carbon markets and common timeframes for emissions reduction targets. 181

Translating these preliminary agreements ('achievements') into specific 182 action would require that multiple stakeholders or coalitions work towards 183 the consensus that is needed to drive policy agendas at national levels. 184 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 187 to carbon abatement targets at the national level. The ACF is a useful 188

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

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

The Advocacy Coalition Framework (ACF) proposed by Sabatier (1987), 193 Sabatier and Jenkins-Smith (1999), and Sabatier and Weible (2007) offers 194 different perspectives for understanding the policy process, perhaps only 195 rivalled by the Institutional Analysis and Development Framework (IAD) 196 (Sotirov and Memmler 2012). According to Cairney (2015, p.484), the 197 ACF's eclecticism means that it is suitable for explicating complex policy-198 making systems characterised by decision-making under information con-199 straints and high levels of uncertainty and ambiguity, especially where the 200 time from decisions to outcomes could be up to a decade or more. In the 201 case of climate change, net zero carbon emission targets are being agreed 202 for mid-century, which is just about three decades away. Cairney also 203 advocates ACF for systems involving multiple stakeholders and govern-204 mental levels and in which policy processing could range from highly 205 politicised, publicly visible issues to specialist issues routinely handled by 206 specialists outside the public domain. Adapting the Glasgow Climate Pact 207 for African cities' decarbonisation fits this bill. 208

Figure 9.3 is a flow diagram depicting the main components of the 209 ACF, which is typically used to hypothesise about the policymaking pro-210 cess. Public policymaking is construed as occurring within a 'policy sub-211 system' bounded by discernible and geographical attributes. We equate 212 this to the national climate change policy subsystem where several advo-213 cacy coalitions could be competing for prioritisation of their views or 214 beliefs to, for example, influence decisions by governmental authorities in 215 relation to approaches to managing the climate change situation. 216

Based on Sabatier (1988), Sabatier and Jenkins-Smith (1993, 1999), 217 and Sabatier and Weible (2007), coalitions may comprise disparate actors 218 or stakeholders, with each coalition coalescing and coordinating actions 219 around a common belief (the coalition "glue"—Cairney (2015, p.486)). 220 Beliefs inform a coalition's actions and could be (1) deep core beliefs 221 (underlying personal philosophy), (2) policy core beliefs (fundamental 222 policy positions), or (3) secondary aspects (e.g., funding mechanisms, and 223 specific information and institutions for delivering on and implementing 224 policy goals). These three beliefs are of increasing changeability or 225

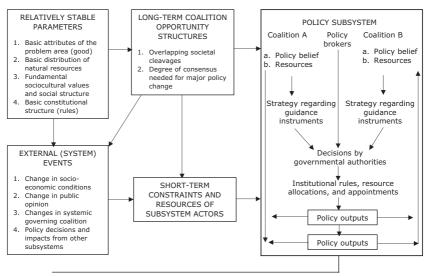


Fig. 9.3 The Advocacy Coalition Framework (Source: Sabatier and Weible 2007, p.202)

flexibility in the order of listing. Thus, normative and ontological deep 226 core beliefs and policy core beliefs are the most difficult to change. In 227 contrast, secondary aspects are more malleable (Sabatier and Jenkins-228 Smith 1999; Sabatier and Weible 2007). We explore the implications of 229 this later. 230

Interactions of advocacy coalitions and facilitation of policy formula-231 tion (i.e., by policy brokers) in the policy subsystem take place within a 232 wider system made up of three elements which impose short-term con-233 straints on and determine the resources available to subsystem actors 234 (Sabatier and Jenkins-Smith 1999; Sabatier and Weible 2007). The first 235 element represents factors that are relatively stable over a decade or more 236 like social values and constitutional structure. The second relates to long-237 term coalition opportunity structures which define the political system like 238 the degree of consensus needed for policy change. The third consists of 239 external (system) events, including changes in socio-economic conditions, 240 government and public opinion, and policy decisions and impacts from 241 other subsystems, which trigger behavioural responses in the policy 242 subsystem. 243

244 The ACF is useful for explaining policy change deriving from changing the beliefs or views of the most influential coalitions. Major policy changes 245 may require shifts in policy core values and minor changes, that is, in the 246 secondary aspects of policy, may simply require modification of secondary 247 aspects of beliefs (Sabatier and Jenkins-Smith 1999). Typically, deep core 248 and policy core beliefs may change in response to extreme external shocks 249 ("external perturbations") that alter the relative negotiating positions of 250 coalitions while secondary aspect changes could arise through learning 251 ("policy-oriented learning") involving the use of experience and new 252 information to achieve enduring alternation of thought and behavioural 253 intentions by revising existing or formulating new policies (Sabatier and 254 Jenkins-Smith 1999, p.123; Sabatier and Weible 2007, p.198-199). 255 Internal shocks (i.e., occurring within the policy subsystem) could also 256 lead to a re-assessment and re-alignment of policy core beliefs and better 257 intra- and inter-coalition understanding of the policy issues, which could 258 result in "negotiated agreements" (Sabatier and Weible 2007, p.204–205). 259 Policy changes from these consensual collaborative processes arise when 260 coalitions are dissatisfied with the prevailing policies and cannot explore 261 other avenues but are able to commit to independently mediated decision-262 making (Sabatier and Weible 2007, pp. 205–207). 263

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# 9.2.4 Application of the Framework to the Glasgow Climate Pact

The ACF has been used severally in the environmental and energy policy 266 space, especially in relation to developed countries or economies. We 267 employ the ACF as a conceptual model to theorise about the relationships 268 that are required to achieve a consensus of ideas, beliefs, and policy agen-269 das to drive climate adaptation in African cities, where the policy subsys-270 tem relates to outlining institutional rules, resource allocations, and 271 appointments within cities to promote adaptation and/or mitigation mea-272 sures. We translate the Glasgow Climate Pact (COP26 2021) into consid-273 erations for the different coalitions likely to impact on the policy landscape 274 for decarbonising African cities. Coalitions in this space could be varied, 275 ranging from groups promoting the industry (usually that being serviced 276 by the city) and the preservation of its place as a commerce or industrial 277 centre and those looking to combat issues associated with modernisation 278 of infrastructure and energy conservation, or countering the negative 279 impacts of the industry's activities on the environment. 280

In this respect, the wider discourse in relation to climate change equates 281 to external (system) events, with changes in public opinion about the 282 impact of anthropogenic activities on the physical environment and cli-283 matic conditions. The need for sustainable socio-economic development 284 in some of the world's poorest societies has seen Africa pursue changes in 285 the systemic governing coalition through the African Union, the African 286 Continental Free Trade Area (AfCFTA) agreement, and subtle arrange-287 ments like having a dedicated pavilion at COP26. Asekomeh et al. (2022) 288 argue that a US or EU green deal type of intervention would be needed 289 for a green post-COVID recovery in Africa. Dependence on natural 290 resource rent and the expectation that such rent will continue to be acces-291 sible has informed the development of constitutional, regulatory and gov-292 ernmental structures (Mohamed 2020). These structures were previously 293 mostly a top-down process, but are now entrenched in the democratic 294 processes allowing grassroots (e.g., city council, representation). The cen-295 tral government usually manages and allocates the resource rent to units 296 within the system, with the intention that these will be used, for instance, 297 in city planning, transportation, waste management, and other subsys-298 tems. In some cases, the responsibilities could be categorised as centralised 299 or devolved responsibilities, with city councils having control over specific 300 city planning and development decisions (Natural Resource Governance 301 Institute 2016; Asekomeh et al. 2021). 302

The intractability of the arrangements (often encapsulated in the con-303 stitution or legal framework) means that it represents a relatively stable 304 parameter for policy making, along with fundamental socio-cultural values 305 and social structures which create glaring divides between the affluent in 306 urban neighbourhoods and the extremely poor slum dwellers within cities 307 (Dang 2013). Finally, the protracted nature of the negotiations towards 308 the Glasgow Climate Pact indicates that finding consensus for major pol-309 icy change would remain a vital consideration for creating opportunities 310 for long-term coalitions towards successful decarbonisation. 311

### 9.2.4.1 African City Coalitions and Competing Interests

Following Sotirov and Memmler (2012), we envision the African cities' 313 policy subsystem as being made up of three advocacy coalitions. First, the 314 "traditional city council management" paradigm would typically provide 315 the basic city management framework, usually driven by the need to 316 deliver city services guided by the value for money principle. Second, the 317 "environmental and economic development oriented" coalitions typically 318

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challenge the traditional paradigm by seeking mainstream discussions 319 about concerns for the environment and living conditions within cities, as 320 well as the requirements for sustaining economic activities and opportuni-321 ties for city dwellers. The third category is the "social concern" coalition, 322 which is primarily interested in the place of cities in safeguarding the social 323 well-being and livelihoods of city dwellers. For Petro-cities, these three 324 advocacy coalitions often struggle to achieve consensus given that the cen-325 tral economic activity could directly be responsible for worsening both the 326 environmental and social conditions. The role of policy brokers in helping 327 cities adopt the COP26 Climate Pact will be in bringing these disparate 328 coalitions to some form of compromise on pertinent policy matters. 329

The three coalitions identified above for cities represent groups that 330 would need to adopt or be receptive to the Glasgow Climate Pact and 331 would need to modify their policy core beliefs, at the very least, to make it 332 possible for policy changes to be made to achieve the targets agreed. 333 Accordingly, we turn our attention to how the policy subsystem can be 334 construed and interpreted for the decarbonisation discourse in African cit-335 ies. The ways the advocacy coalitions identified above would alter their 336 beliefs or positions are usually framed as hypotheses by the ACF. We see 337 the possibility of examining these relationships from five out of 15 com-338 monly tested hypotheses listed by Weible et al. (2009, p.129): 339

*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.
- 349 *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 356 treat each fairly. 357

We provide discussions of how the COP26 Climate Pact provides 358 insights for likely advocacy coalition interaction in relation to choices for 359 African cities, especially in relation to issues which represent differences in 360 beliefs or policy gaps. 361

# 9.2.5 Coalition Differences or Gaps 362 and Policy-making Constraints 363

# 9.2.5.1 Weak Institutional Capacities, Governance, 364 and Regulatory Gaps 365

One of the major challenges for policy making and implementation in 366 relation to development of low-carbon cities and communities is weak 367 institutional capacities. Although the Paris Agreement of 2015, the subse-368 quent Rulebook agreed at COP26 and the United Nations Framework 369 Convention on Climate Change (UNFCCC) aim to strengthen global 370 responses to the threat of climate change, the differences in national 371 capacities leave states in Africa with limited options for mainstreaming 372 strategies to reduce greenhouse gas (GHG) emissions in the continent. To 373 expedite action towards these responses, regulatory, policy, and institu-374 tional frameworks must set the stage to provide leadership and direction 375 for a low-carbon economy. Governance and regulatory structures must be 376 advanced above short-term political expediency and rent-seeking behav-377 iour (Akinola 2018). Robust institutional and regulatory frameworks are 378 required to effectively stimulate and facilitate the process of decarbonisa-379 tion of African cities. Governance arrangements need strengthening, espe-380 cially in promoting the participation of the private sector and promoting 381 collaborative funding arrangements to build up carbon finance mecha-382 nisms and opportunities (Michaelowa et al. 2021). 383

While coalitions may have shared core beliefs on the need for these 384 structures and capacities, the specific details or secondary aspects of the 385 arrangements would be more contentious. This is in line with hypotheses 386 1 and 2. The need for climate action in cities is clearly a pursuit that the 387 "traditional city council management", "environmental and economic 388 development oriented", and "social concern" coalitions identified previ-389 ously can rally around. However, the specific mechanisms for achieving 390

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.

# 395 9.2.5.2 Planning Gap

For African cities, there is a vicious cycle of infrastructural deficit due to 396 pressures created by rural-urban migration whereby the meagre develop-397 ment projects undertaken by city councils and authorities are immediately 398 swamped by growth in city populations. This means that there is always a 399 structural and infrastructural deficit when it comes to development. With 400 the cities' carbon problem being exacerbated by migration from rural 401 communities, it follows that the decarbonisation challenge in cities cannot 402 be addressed in exclusion of the rural carbon and energy poverty chal-403 lenge. The need to manage the influx of the rural community dwellers into 404 cities pits different coalitions against one another. For instance, the "social 405 concern" coalition may be interested in promoting inclusiveness and 406 opportunities for upward social migration, but the burden on infrastruc-407 ture like schools and housing may mean "traditional city council manage-408 ment" struggles to keep up. Breaking that economic vicious cycle through 409 the ACF requires that parties or stakeholders make a commitment to 410 changing their outlook and policy core beliefs. 411

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.

# 416 9.2.5.3 Funding and Economic Gaps

A critical consideration, especially in cities, is the means and method of 417 financing climate mitigation and resilience measures such as climate-smart 418 systems for buildings and eco-friendly transport systems. Similarly, waste 419 management and other green interventions are necessary for both decar-420 bonisation and achieving the 2063 sustainable development agenda in 421 Africa (African Union 2015). The financing challenge relates to incentivis-422 ing investment in the decarbonisation of Africa's cities from the private 423 sector (Michaelowa et al. 2021) given that public (city council) funding is 424 more likely to be inadequate. This could be by means of grants and fiscal 425 concessions leading to tax rebates for specific types of investments. These 426

must reconcile explicitly with the economics and governance aspects of 427 decarbonisation for climate resilience in Africa. 428

In the short run due to the potential stranding of assets, decarbonisa-429 tion may put at risk Africa's economies that are overly dependent on natu-430 ral resources (Ansari and Holz 2020). The challenge is to ensure that 431 long-term economic and climate resilience is not ignored for short-term 432 gains, with the knock-on effects on the infrastructural development of cit-433 ies and communities. Since decarbonisation may mean less dependence on 434 fossil-fuel sources and their revenue, it may be difficult for African 435 resource-rich countries to secure resource-backed loans for development 436 purposes (Landry 2018) and other forms of financing will be required. 437

The COP26 negotiations have shown that several actors hold the view 438 that agreeing to carbon cuts will mean loss of resource rents. They opine 439 that this will put the burden of climate mitigation on developing countries 440 or countries whose stage of development means that fossil fuels are critical 441 to their revenues and/or energy mix. This has seen Parties from these 442 countries engaging in short-term coordination and working together to 443 prevail on developed countries to commit to funding climate action (in 444 line with hypotheses 4 and 5). 445

# 9.3 COP26 Opt-in Policy Formulation 446 Mechanisms for African Cities 447

# 9.3.1 Coalitions, Coalition Resources, and Policy Brokers for Decarbonisation of African Cities 449

In addition to the discourses about the beliefs of coalitions that provide 450 the basis for the formation of coalitions, the ACF also highlights the need 451 for coalitions to possess and be able to deploy specific resources in support 452 of their beliefs and towards influencing the policymaking process. We 453 posit that to translate the COP26 Glasgow Climate Pact 'achievements' 454 from the discussion table to specific policy instruments for cities in Africa, 455 coalitions in the policy subsystem must possess the resources to engage 456 with policy brokers in support of their policy core beliefs. These resources 457 will determine whether they are able to address the previously identified 458 policy gaps for decarbonising cities. To illustrate the deployment of these 459 resources, in this concluding section, we examine a couple of coalitions or 460 coalition structures that represent the possibility of deploying relevant 461

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

# 465 9.3.1.1 Alliance of Cities

Several coalitions and alliances based on cities have emerged to fill the gaps 466 identified above. These include the United States' Clean Cities Coalition 467 Network (https://cleancities.energy.gov/), the International Council for 468 Local Environmental Initiatives-Local Governments for Sustainability 469 (ICLEI) (https://www.iclei.org/), C40 Cities (https://www.c40.org/) 470 and the Global Covenant of Mayors for Climate and Energy (https:// 471 www.globalcovenantofmayors.org/). Given their widespread membership 472 (for instance, the C40 cities is a network of about 100 cities, including 13 473 African cities, collaborating on GHG emissions and currently make up 474 more than 25% of the global economy with over 700 million people), 475 these entities represent coalitions, and vitally, they also play an active role 476 in facilitating policy brokering in recognition of the significance of cities in 477 implementing climate action. They often provide mechanisms for produc-478 ing and exemplifying innovative solutions and technologies for climate 479 adaptation and mitigation. In this light, cities can be seen as providing the 480 supporting mechanisms (institutions, private sector funding, etc.) that will 481 foster innovation of mitigation and adaptation techniques that can be the 482 basis for national action. These alliances clearly support the view of coali-483 tion interactions and coordination implied in hypotheses 4 and 5. 484

The benefits of membership of such alliances for African cities include 485 providing a basis for designing and trialling innovative solutions in relation 486 to transportation (e.g., mass transit networks), waste management, and 487 water use efficiency. Innovations include efficient transport (including 488 green buses and dedicated lanes) and traffic systems to alleviate traffic 489 congestion and pollution from transport-related CO2 emissions, as well as 490 provision of nudges by way of incentives for city dwellers to imbibe sus-491 tainable lifestyles (including reducing/recycling or reusing products) and 492 use of city cleaning technologies. Membership provides a basis for knowl-493 edge and technology transfer to other cities and such cities could then set 494 aspirational goals to provide benchmarks that exceed the COP26 targets 495 for emissions abatement. Membership, involving representation by may-496 ors and decision makers of network cities, also means that cities could 497 provide a fulcrum for national climate initiatives starting with city initia-498 tives. City representatives could also provide a governance basis by 499

working with government agencies and parastatals at the national level 500 and in international negotiations like the COP26 Climate Pact. This 501 would ensure backward and forward feedback mechanisms for identifying 502 and promoting climate mitigation and adaptation practices. 503

City alliances or networks offer further benefits in relation to bridging 504 the finance and planning/infrastructural gaps identified previously. This is 505 through mechanisms like providing access to climate-related infrastruc-506 ture financing and equipping city representatives with the knowledge and 507 skills for project finance budgeting and funds management. Finance facili-508 ties are accessible which offer competitive rates and flexibilities that would 509 otherwise be difficult to secure, and which would otherwise mean that 510 projects adding to climate resilience for cities are forfeited. In addition, 511 infrastructural development and planning are often constrained by limited 512 access to relevant data. Data from member cities offer a basis for compari-513 son and benchmarking to measure progress and improve planning deci-514 sions. Requisite datasets could range from population and migration 515 statistics to information about operational aspects like waste management 516 that are relevant for building climate resilience. 517

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. 522

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#### 9.3.1.2 Africa Adaptation Acceleration Program

The Africa Adaptation Acceleration Program (AAAP), launched at the 524 Climate Adaptation Summit in 2021, was jointly developed by the African 525 Development Bank (ADB) and the Global Centre on Adaptation (GCA), 526 with the latter specifically designated a global solutions broker, providing 527 advocacy support for accelerating adaptation action. The AAAP opera-528 tionalised the Africa Adaptation Initiative to raise about \$25 billion in 529 poverty alleviation, youth empowerment through entrepreneurship skills 530 and job creation, and invest up to \$7 billion towards climate-resilient 531 infrastructure development working with/through "Multilateral 532 Development Banks and other leading implementation organisations, 533 stakeholders, and political and technical bodies" (AAAP 2021, p.2). These 534 objectives are structured along four pillars which prioritise opportunities 535 for climate adaptation and resilience. 536

537 The first pillar (Pillar 1) relates to the use of climate-smart digital technologies for agriculture and food security. In recognition of the depen-538 dence of most African economies on agriculture for food and employment, 539 this pillar addresses the need to manage the sector's vulnerability to cli-540 mate change by employing the right technologies to boost productivity. 541 This will entail improving access (in terms of availability and affordability) 542 and applicability of data-driven digital solutions to promote agricultural 543 productivity, especially through the private sector. The second pillar (Pillar 544 2) is the Africa infrastructure resilience accelerator, which is intended to 545 bridge the infrastructure deficit of about \$130 billion-\$170 billion a year, 546 with an estimated additional investment of only 3% to total costs to make 547 such infrastructure resilient and capable of delivering on a significant num-548 ber of the sustainable development goals (SDGs), the Paris Agreement 549 (and by extension the COP26 Climate Pact) and the Sendai Framework 550 (AAAP 2021). 551

552 Pillar 3 relates to empowering youth for entrepreneurship and job creation in climate adaptation and resilience, to leverage Africa's young pop-553 ulation (expected to double to over 830 million by 2050) through creation 554 of economic activities, and "drive resilience through their innovativeness, 555 energy, and entrepreneurship" (AAAP 2021, p.5). The fourth pillar (Pillar 556 4) provides the crucial backing for achieving the objectives of the AAAP 557 through innovative finance initiatives. Global climate finance received by 558 Africa is only a microcosm (4%) of the average annual finance of \$30 bil-559 lion per annum as of 2017–2018, with an even smaller fraction devoted to 560 adaptation and resilience initiatives and funding has been severely cur-561 tailed by the global response to the COVID-19 pandemic. 562

Collectively, these pillars are primed to help African countries, and by 563 extension, cities achieve decarbonisation as they address the specific gaps 564 identified previously. They therefore represent policy brokers or coalition 565 enablers with the policy subsystem in the ACF. The AAAP thus provides a 566 basis for coalitions' formation and coordination through the policy core 567 beliefs outlined, in line with hypotheses 4 and 5. The AAAP provides rich 568 development-related data that will inform the decisions/choices of policy 569 brokers in line with hypothesis 3. 570

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#### 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 574 by relevant agreements that confer (a) formal legal authority to make policy 575 decisions. For instance, mayors of cities bring needed credibility, financial 576 clout from their budgets, and potential for international networking. The 577 city alliances and AAAP have also been useful in shaping (b) public opinion 578 on matters of climate change and decarbonisation. They are also sources 579 of veritable (c) *information* regarding the severity and the urgency of the 580 problem. Their standing also means that they are capable of commission-581 ing research or studies that offer credible and free-of-bias perspectives to 582 support policy arguments based on their beliefs. 583

In addition, city alliances and the AAAP are resourced by (d) mobiliz-584 able troops to promote the beliefs and activities of these coalitions and to 585 bring their policy arguments to the consciousness of the wider public. The 586 vast pooling of (e) financial resources and access to funds provided by 587 membership of city alliances and by instruments created by the AAAP 588 means that the capability for organising other resources, conducting 589 research, producing information, and shaping public opinion has increased 590 several folds. Most importantly, city alliances and AAAP provide (f) skilful 591 leadership or offer a good basis for building such leaders and shaping 592 thought leadership regarding the beliefs of the coalition, which would go 593 a long way to influencing policy making. 594

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. 601

### 9.4 SUMMARY AND CONCLUSION 602

The ACF approach provides a perspective for understanding how various 603 coalitions or stakeholders can make choices in African cities and communi-604 ties to align with global climate action. The messages from COP26 would 605 need to be communicated to relevant coalitions to attempt to achieve 606 consensus of beliefs (from policy core beliefs to secondary beliefs or spe-607 cific aspects) and approaches to assist Africa in creating decarbonised cities 608 by limiting carbon-emitting sources and eliminating practices that con-609 tribute to GHG emissions within cities. This goal should be pursued 610

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 cit-618 ies are not carbon neutral. Some of these practices or activities are ignored 619 in Africa's low-carbon and climate action discourse. A well-thought-out 620 strategy and policy direction are crucial in achieving the much-needed 621 decarbonisation in Africa's settlements. It is crucial to be able to catalyse 622 action by getting disparate coalitions or groups to coalesce in support of 623 the requisite policy instruments and choices that need to be made. We 624 identified specific elements of the ACF that would provide African cities 625 the basis for building or leveraging on coalitions to achieve consensus that 626 are required to translate the Glasgow Climate Pact into specific policies to 627 achieve decarbonisation. Policymaking for decarbonising African cities 628 through the ACF involves understanding coalitions' beliefs and resources 629 at their disposal. It explicates how beliefs and resources can be combined 630 to reinforce the process through policy-oriented learning and negotia-631 tions, possibly in response to external shocks or perturbations. 632

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