



# ENERGIZING CITY CLIMATE ACTION

THE 2022 GLOBAL COVENANT OF MAYORS IMPACT REPORT



# EXECUTIVE SUMMARY

The Global Covenant of Mayors for Climate & Energy (GCoM) is the world's largest alliance for city climate leadership with over 12,500 signatories, across 144 countries. Over 1 billion people - one person in every eight - lives in a city that is committed to GCoM.

This report showcases the commitments that GCoM cities and local governments are making to reduce emissions and build resilience to climate change, and the ambitious actions being taken across sectors. In 2022, GCoM cities and local governments - like the rest of the world - have experienced crises relating to escalating inflation, unemployment, disruption to food and other resource supplies, the continuing impact of COVID-19 and more. This report particularly focuses on how GCoM signatories are responding to the interlinked crises of dramatic spikes in energy prices combined with ever more extreme weather events.

With climate mitigation targets that are projected to reduce global emissions by 4.1 GtCO<sub>2</sub>e in 2050, GCoM signatories are already taking action. This year, GCoM cities and local governments have reported hundreds of thousands of practical actions to increase energy savings, invest in renewable energy generation, address energy access, and adapt to the impacts of climate change.

The current energy crisis has the potential to be a catalyst for transformational change. Drawing on the findings, this report calls for cities, national governments, civil society and the private sector to come together to accelerate bold and ambitious climate action by (i) sharing best-practice; (ii) harnessing co-benefits; (iii) increasing collaboration; and (iv) funding energy retrofit.

The GCoM links more and more like-minded city and local government leaders together, building an ever-stronger movement for transformative change. The report concludes by highlighting the forthcoming Energy Access and Poverty Pillar and associated badge which will be launched by the GCoM in January 2023. This launch complements an extensive programme of work to help GCoM signatories develop and strengthen their climate ambition: GCoM, the regional covenants and all our partners continue to energize city climate action.





## CHAPTER 01

# PROGRESS DESPITE GLOBAL AND LOCAL CHALLENGES



# A GROWING ALLIANCE OF CITIES AND LOCAL GOVERNMENTS

*Over 1 billion people – one person in every eight – lives in a city that is committed to GCoM.*

**900** NEW CITIES IN  
THE PAST **12** MONTHS

**12,500+** CITIES

**144** COUNTRIES

**1,000,000,000+** PEOPLE

**243** CITIES  
**98.5** MILLION PEOPLE  
NORTH AMERICA

**6** CITIES  
**1.7** MILLION PEOPLE  
THE CARIBBEAN

**565** CITIES  
**195.4** MILLION PEOPLE  
LATIN AMERICA

**10,402** CITIES  
**258.3** MILLION PEOPLE  
EUROPEAN UNION &  
WESTERN EUROPE

**655** CITIES  
**60.5** MILLION PEOPLE  
EASTERN EUROPE &  
CENTRAL ASIA

**179** CITIES  
**82.3** MILLION PEOPLE  
MIDDLE EAST &  
NORTH AFRICA

**36** CITIES  
**81.6** MILLION PEOPLE  
SOUTH ASIA

**63** CITIES  
**74.4** MILLION PEOPLE  
EAST ASIA

**100** CITIES  
**65.2** MILLION PEOPLE  
SOUTHEAST ASIA

**319** CITIES  
**152.4** MILLION PEOPLE  
SUB-SAHARAN AFRICA

**45** CITIES  
**7.5** MILLION PEOPLE  
OCEANIA

The Global Covenant of Mayors for Climate & Energy (GCoM) is the world's largest alliance for city climate leadership with over 12,500 signatories, across 144 countries. Over the past 12 months, the alliance has attracted over 900 new cities and local governments.



# CITIES TAKING STEPS TO REDUCE EMISSIONS AND INCREASE RESILIENCE

The GCoM cities and local governments show ambition to take action on climate change – both to reduce their greenhouse gas (GHG) emissions in line with the Paris Agreement goals, and to increase their resilience to future climate hazards.

Our latest data show that over three quarters of GCoM signatories have earned their mitigation badge, and one fifth have earned their adaptation badge. These badges recognise the effort and progress made by cities throughout their GCoM journey.

GCoM cities and local governments continue to take steps through their acknowledgement about the urgency of climate action, independently of other challenges or agendas.

## 12,613 COMMITTED CITIES



**Committed cities** and local governments pledge to implement policy and undertake measures to reduce greenhouse gas emissions, prepare for climate impacts, increase sustainable energy access and track progress towards these objectives.

Almost 78% of the GCoM signatories have taken concrete steps to reduce emissions, increase resilience or both.

### 9,693 CITIES



#### MITIGATION

Three steps

Inventory 5,576 cities  
Target 9,515 cities  
Plan 5,596 cities

### 2,315 CITIES



#### ADAPTATION

Three steps

Assessment 774 cities  
Goal 2,161 cities  
Plan 638 cities



#### ENERGY ACCESS & POVERTY

Available in 2023



# GROWTH AND PROGRESS DESPITE GLOBAL AND LOCAL CHALLENGES

While COVID-19, escalating inflation, unemployment and resource scarcity – among other factors – continue to affect cities globally, rising energy prices and more extreme weather events have particularly cast light on the need for a clean energy transition and enhanced climate resilience for critical infrastructure.

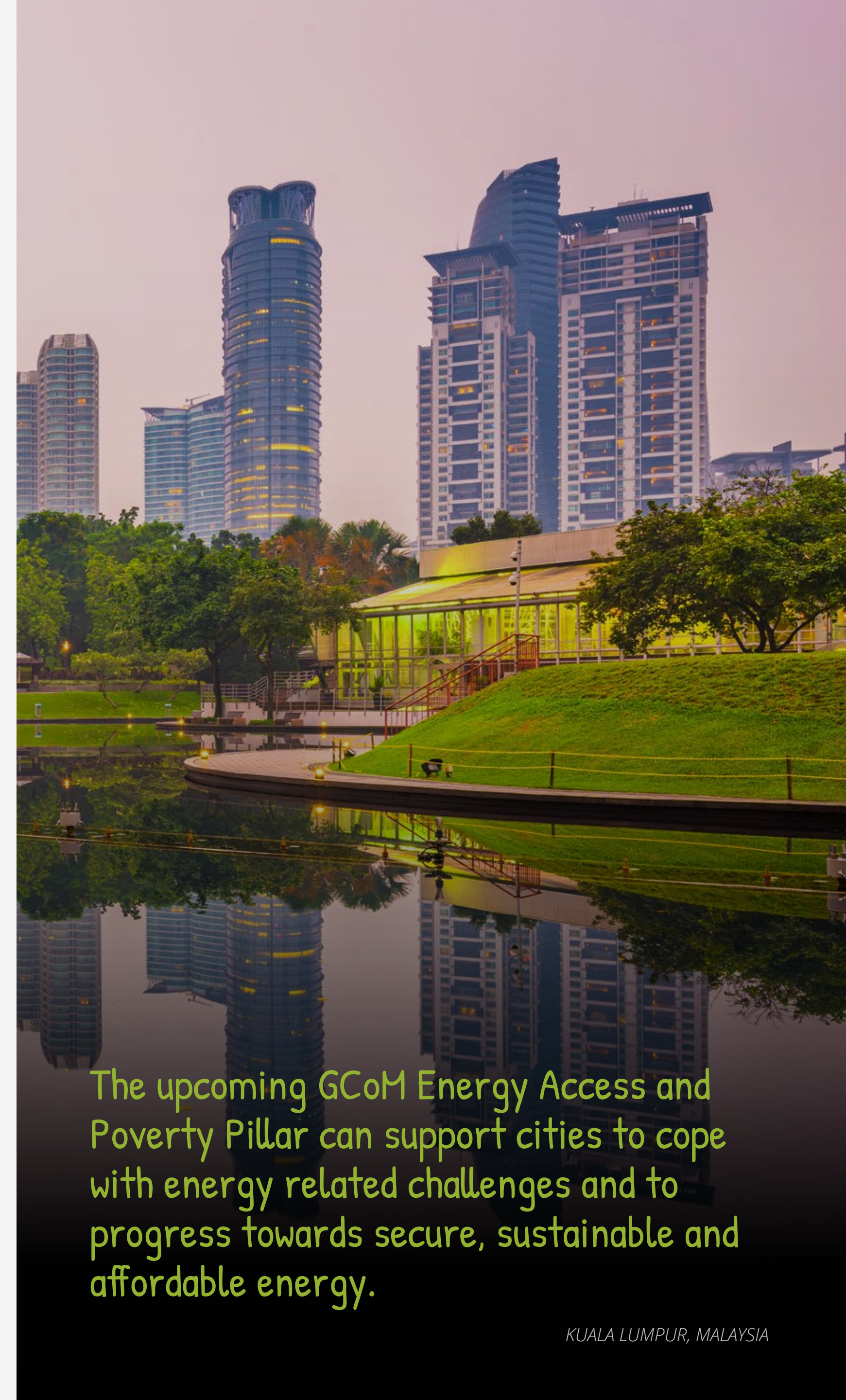
Spot prices for most energy inputs have increased dramatically over the past year, with natural gas increasing by 65%, oil by 21% and coal by 126% from the start of 2022 to the time of writing. While the epicentres of this shock have been in Europe and China, the crisis has rippled around the world. Petrol stations ran dry in Yaoundé, Cameroon [1], fuel prices jumped by 50% in Bangladesh affecting food and other supplies into Dhaka from surrounding regions [2], and a government attempt to remove energy subsidies resulted in two weeks of protests in cities across Ecuador [3].

The single biggest factor is the conflict in Ukraine and its impact on the natural gas market in Europe. Yet a series of diverse emergencies have fed into this larger crisis, including output problems at French nuclear power plants, and droughts in Brazil and China which reduced hydroelectric output.

This energy crisis has been further exacerbated by extreme weather, directly linked to climate change. Europe and North America baked in extreme heat and suffered from severe droughts. Hurricanes battered the Caribbean, the USA and Canada, and the monsoon left much of Pakistan underwater. The repercussions were widespread. In September, the Governor of California ordered emergency warnings to be sent to 27 million people in cities across the state, urging them to avoid non-essential power use to protect against energy supply outages as temperatures soared and energy demand sky-rocketed [4]. Rolling power outages of 6-8 hours per day affected Islamabad and Rawalpindi in March due to extreme heat [5], while heavy rains and floods later in the year disrupted supplies once again due to damage at more than 20 power stations [6].

These intertwined crises only reinforce the need to end our reliance on fossil fuels, and instead opt for secure, sustainable and affordable energy generated locally; an objective that the GCoM alliance has long supported. This would largely eliminate cities' exposure to volatile oil and gas prices in the global market. Indeed, the price of fossil fuels increased at a much faster rate than the price of renewables in the last quarter of 2021 [7]. At the same time, the need to invest in resilient infrastructure has been made shockingly clear in 2022; local energy generation and district scale solutions offer one way to guard against impacts across the wider network.

Cities and local governments are best placed to lead on addressing the energy crisis, providing relief to residents and accelerating the green transition through local action. In this report, we draw on data provided by GCoM signatories to showcase the ambitious commitments and actions being taken across sectors, and particularly in relation to the energy crisis. Climate and energy action can propel GCoM signatories towards low emission and resilient cities - with secure, affordable and sustainable energy.



**The upcoming GCoM Energy Access and Poverty Pillar can support cities to cope with energy related challenges and to progress towards secure, sustainable and affordable energy.**





CHAPTER 02

# TRANSITION TO A LOW CARBON FUTURE



# THE ENERGY CRISIS REINFORCES THE NEED TO ACT NOW

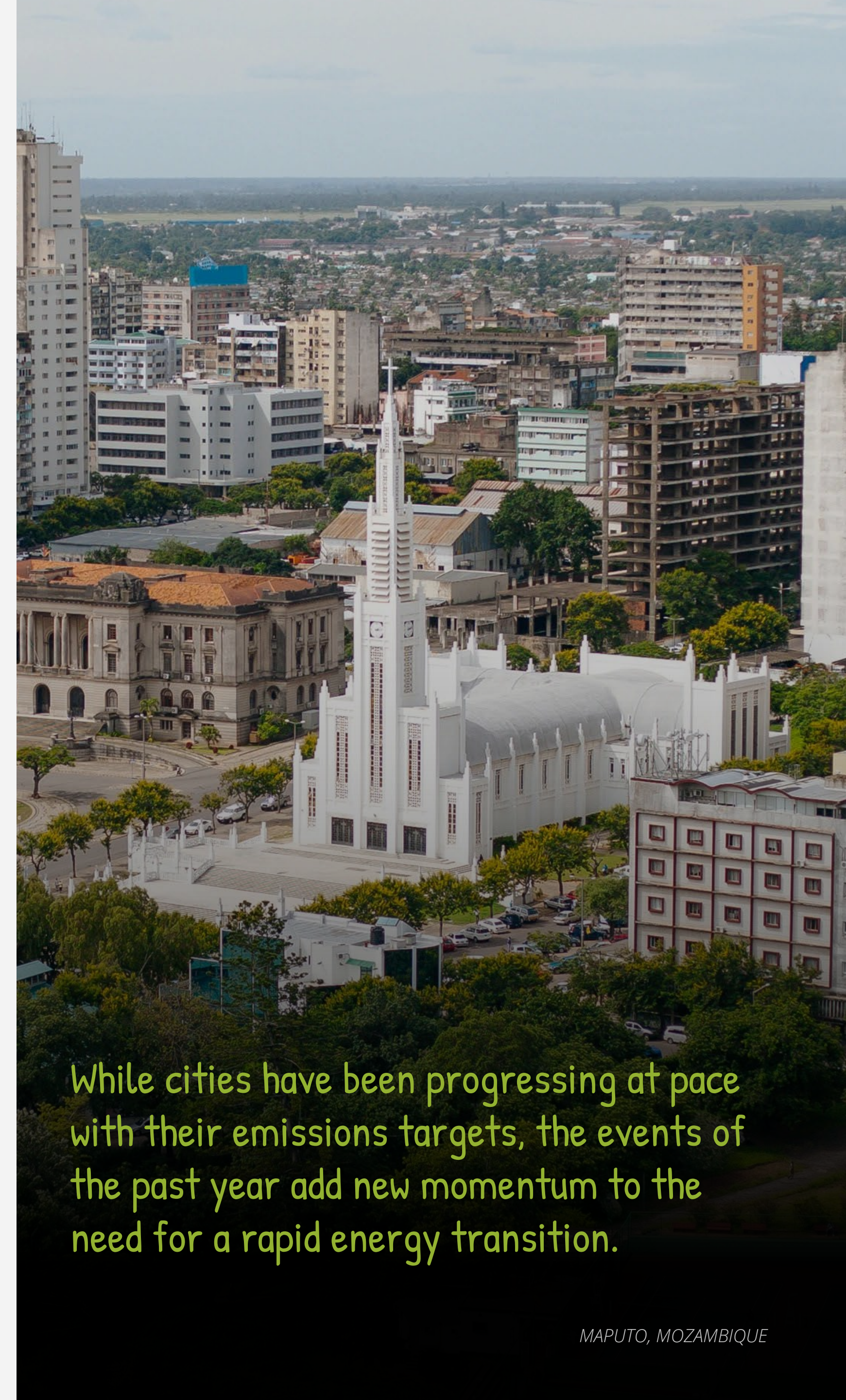
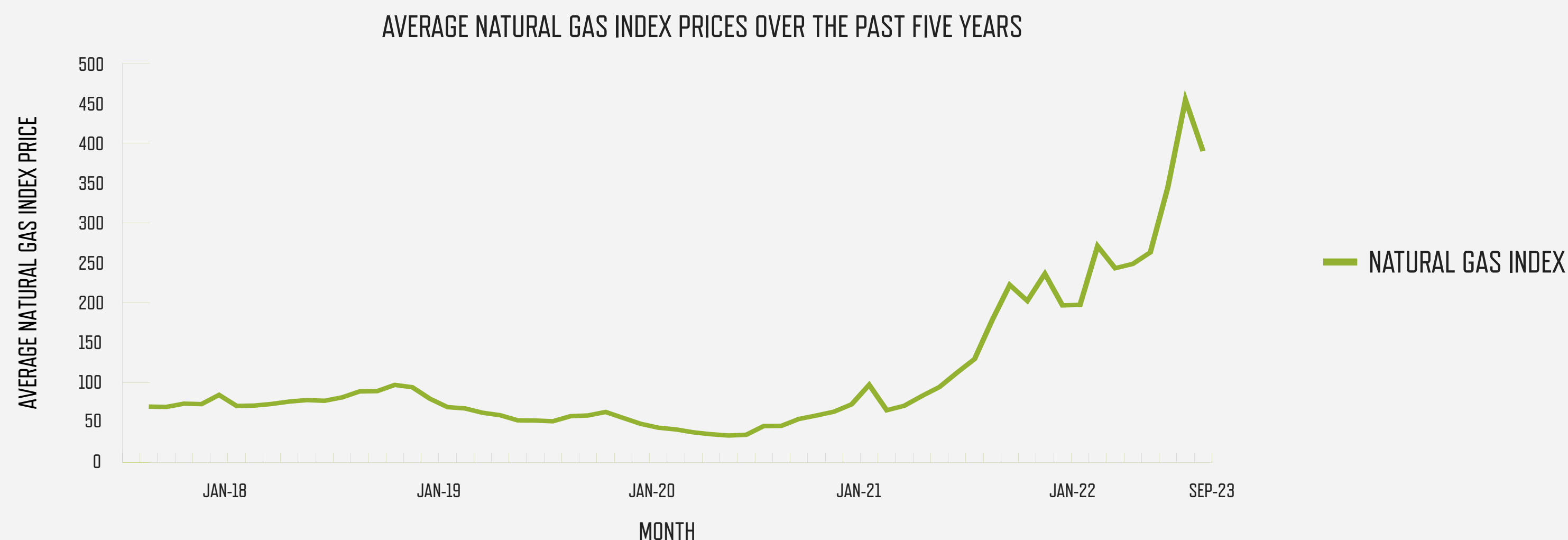
The GCoM cities and local governments are acting to increase energy efficiency in homes, workplaces and infrastructure networks, while also pursuing a transition to secure, sustainable and affordable energy sources. This will not only help to lower energy bills and reduce emissions, but localising and diversifying energy supplies will also help to insulate urban dwellers from fluctuations in global energy prices, stabilising prices while also building resilience.

Global renewable power generation has grown by more than 10% in 2022. Despite a 3% decline in nuclear generation, low carbon sources are set to rise by 7%, resulting in a 1% drop in total fossil fuel-based generation [8]. While the price of renewables is influenced by the background price of fossil fuels, prices have risen more moderately over the past 12 months.

At present 38% of the GCoM population lives in cities where less than half of the electricity is generated by fossil fuels [9].

While cities and local governments have been progressing at pace with their emissions targets, the events of the past year add new impetus to the need for a rapid energy transition. Rising energy prices and increasing climate risk have placed unprecedented strain on governments, public services, and city residents – all seeking to absorb the escalating costs.

As Figure 1 shows, the average natural gas index price has been stable for three years. However, the data for the last year shows the index price quadrupling [10].



While cities have been progressing at pace with their emissions targets, the events of the past year add new momentum to the need for a rapid energy transition.

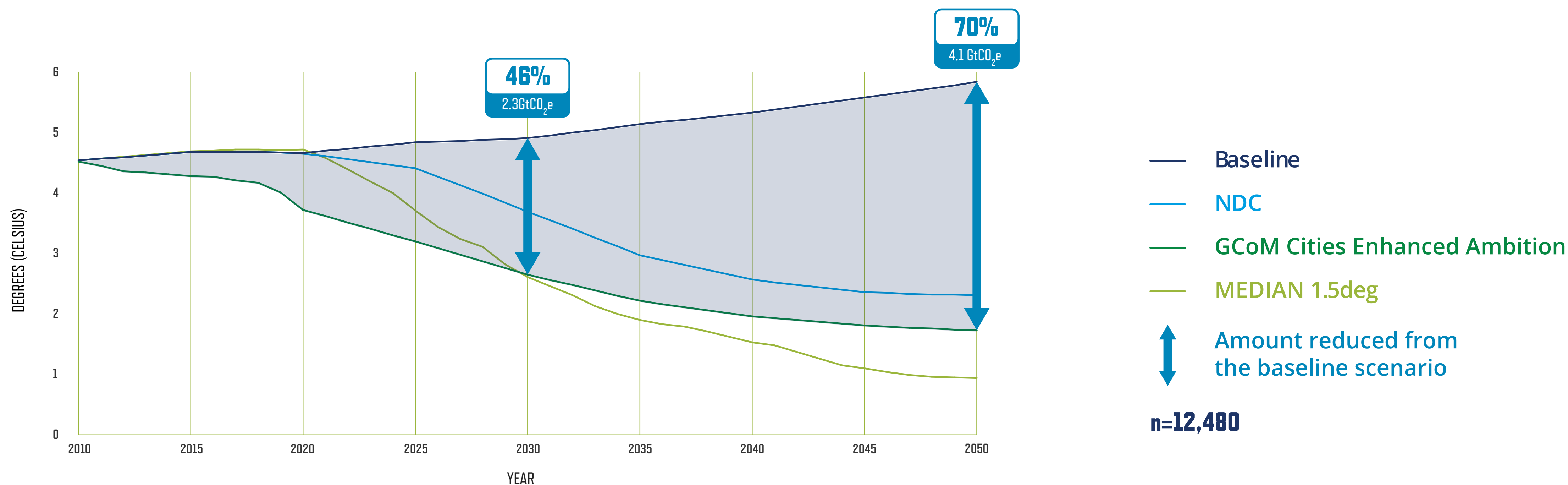


# CITIES RECOGNIZE THE URGENCY OF TRANSITION TO A LOW CARBON FUTURE

The GCoM signatories recognise the urgency of transitioning to a net zero future. Over 9,500 cities in the GCoM Alliance have set a climate mitigation target that is in line with the Common Reporting Framework (CRF) [11]. CRF alignment ensures signatory mitigation targets that are at least as ambitious as their country's Nationally Determined Contribution (NDC) under the Paris Agreement.

Based on current targets and actions, the GCoM cities could collectively reduce global emissions by 4.1 GtCO<sub>2</sub>e in 2050 compared to a business-as-usual (BAU) trajectory [12]. This is equivalent to 80 percent of USA's yearly GtCO<sub>2</sub> emissions.

Based on current targets and actions, the GCoM cities could collectively reduce global emissions by 2.3 GtCO<sub>2</sub>e annually in 2030 compared to a business-as-usual (BAU) trajectory.







## CHAPTER 03

# MORE CITIES REPORT ON CLIMATE IMPACT



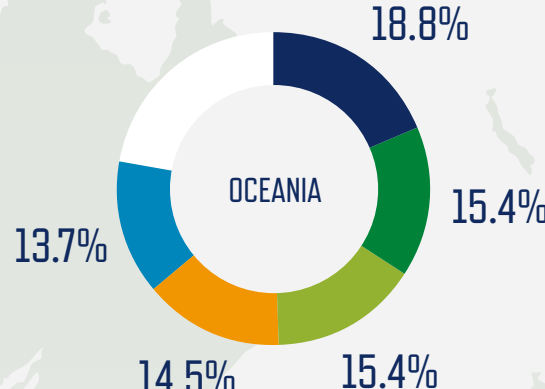
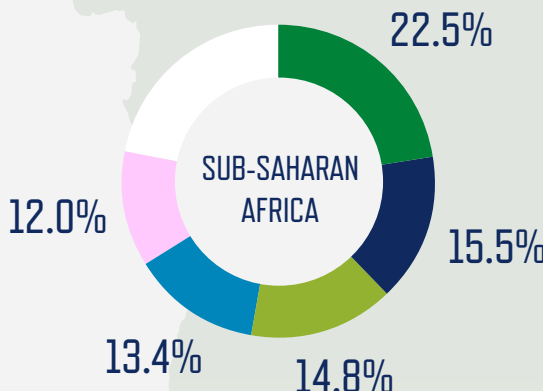
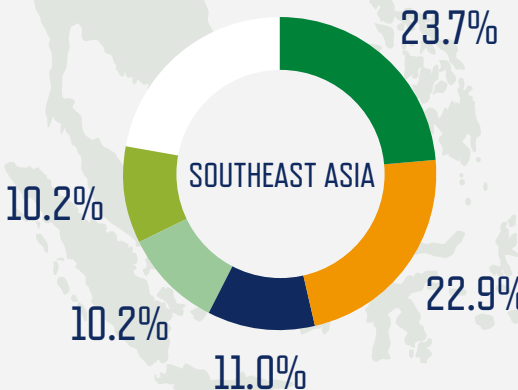
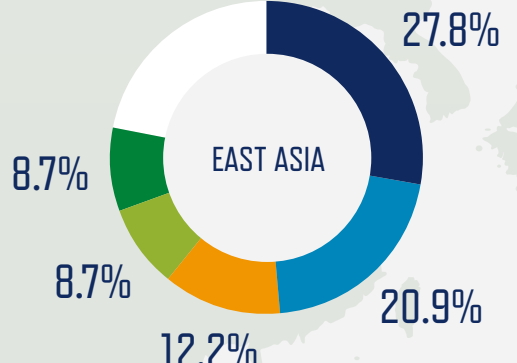
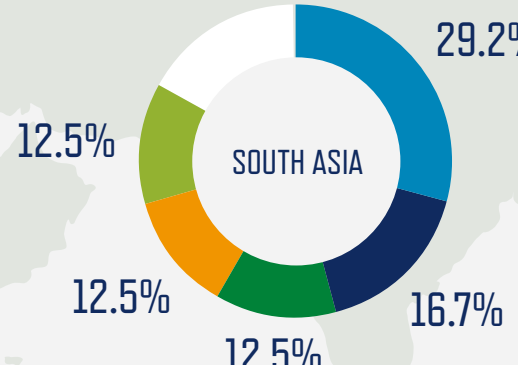
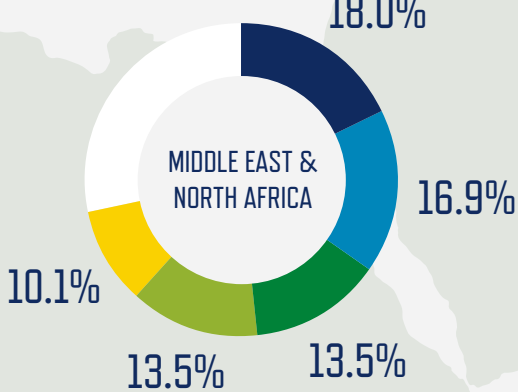
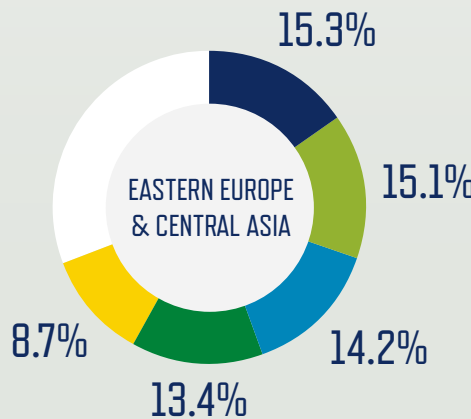
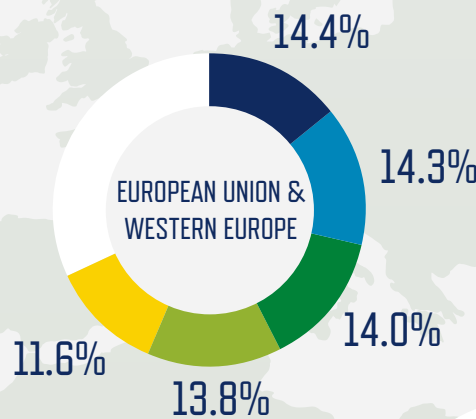
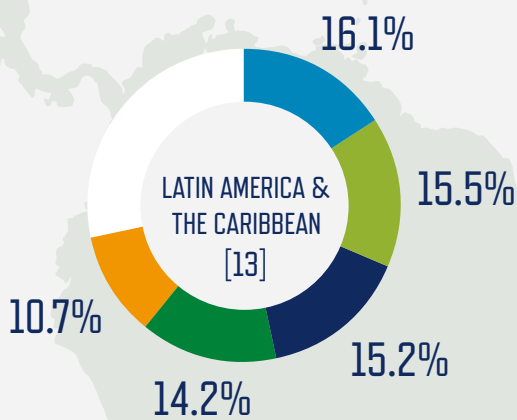
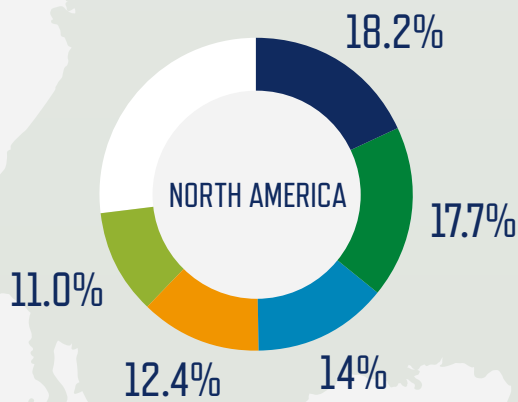
# EACH REGION (AND CITY) FACES ITS OWN RISK & VULNERABILITIES

Extreme hot temperature is a top risk across all regions

14,153  
HAZARDS  
REPORTED

2,021 CITIES  
REPORTING HAZARDS

- Extreme hot temperature
- Extreme precipitation
- Flood and sea level rise
- Drought
- Wild fire
- Storm and wind
- Mass movement
- Biological hazards
- OUTSIDE TOP 5

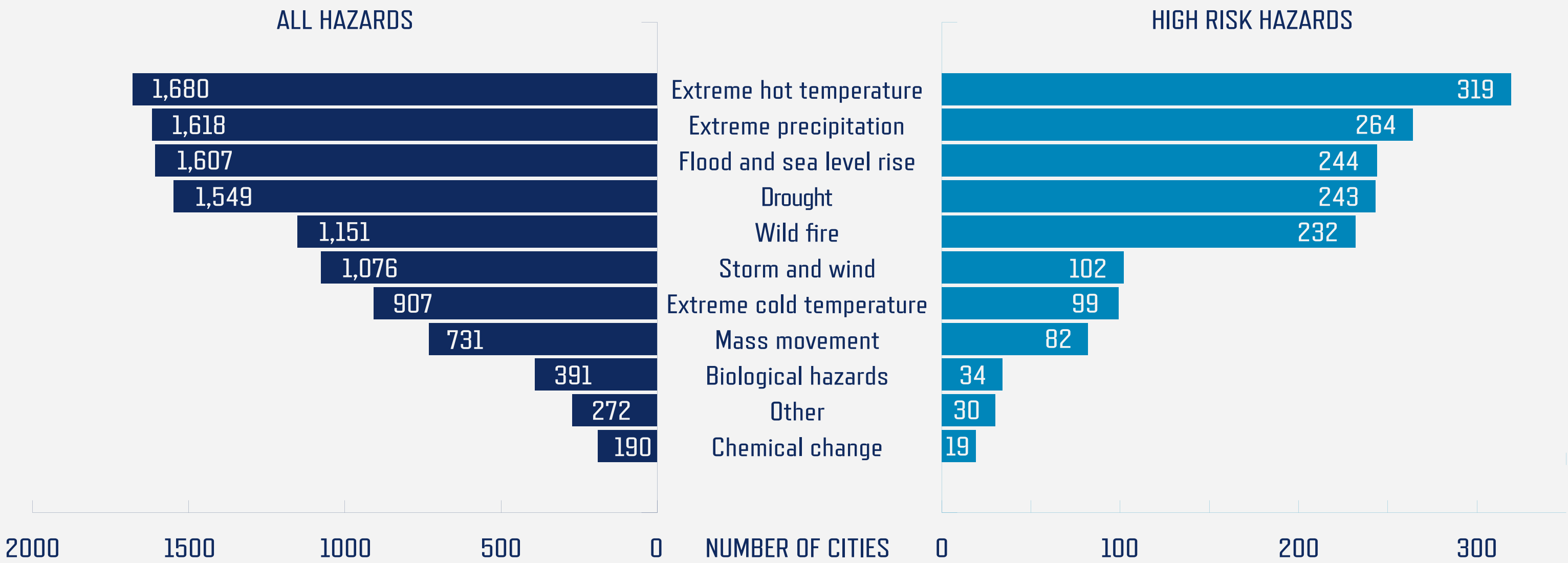


In recent years, the effects of climate change have become ever clearer, with more extreme weather events being reported in more places. These events impact on cities and local governments in multiple ways, both directly (floods, storms, extreme heat) and indirectly (food and water shortages, energy disruption, damage to transport infrastructure). More widely, climate change also threatens citizens' health and wellbeing, jobs, and the economy.



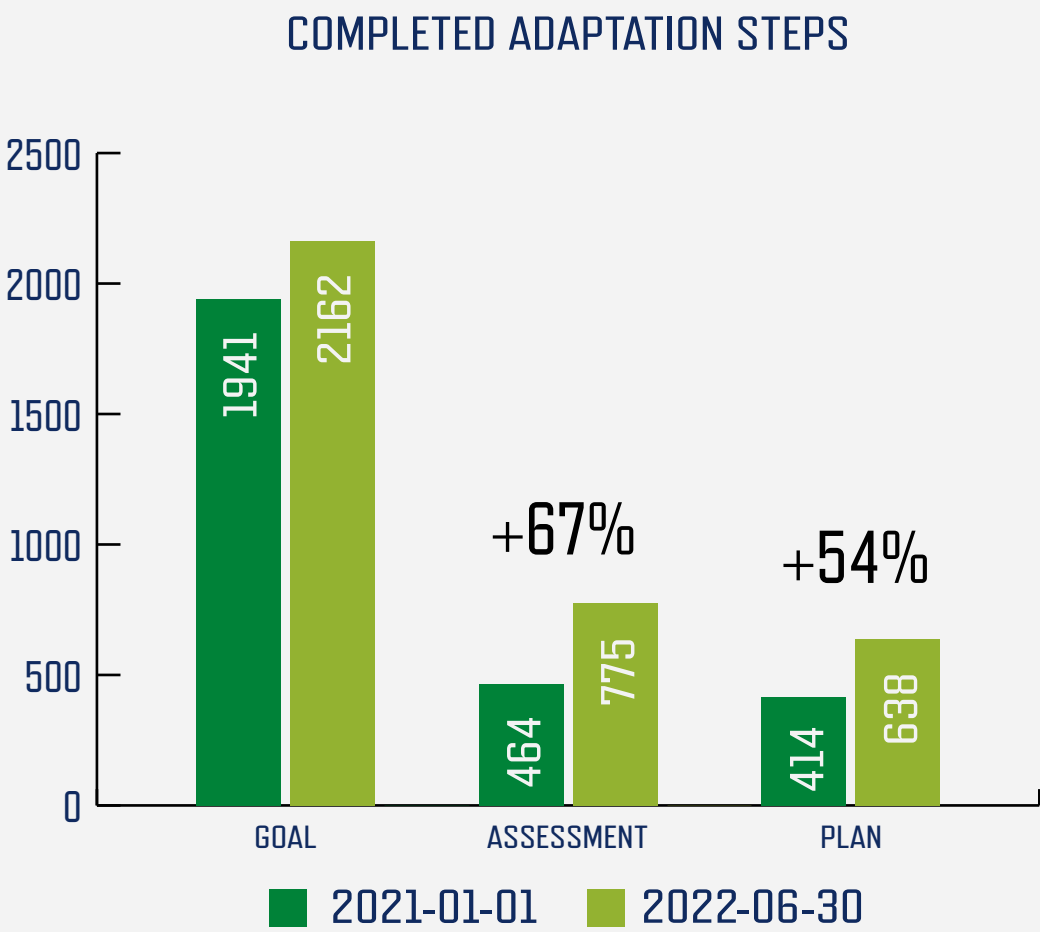
# MORE CITIES REPORT CLIMATE HAZARDS

In 2022, GCoM cities and local governments reported their experience or anticipation of eleven key climate hazard groups. 2,021 cities and local governments reported 14,153 unique hazards, and 823 cities reported 2,075 high-risk [14] hazards. This is a marked increase from the 609 cities that reported hazards last year. The number of completed assessment, goal and plan steps for earning the adaptation badge increased by more than 37% from 2,605 to 3,573. This demonstrates that there is an ever-growing awareness of the risks and vulnerabilities posed by climate change.



More than 2,000 cities reported more than 14,000 hazards.  
Each city reports on average around 7 hazards.

2,075 HAZARDS ARE CONSIDERED HIGH-RISK



The number of completed assessment steps for earning the adaptation badge increased by more than 67%.



# ENERGY IS A SECTOR WITH A HIGH VULNERABILITY

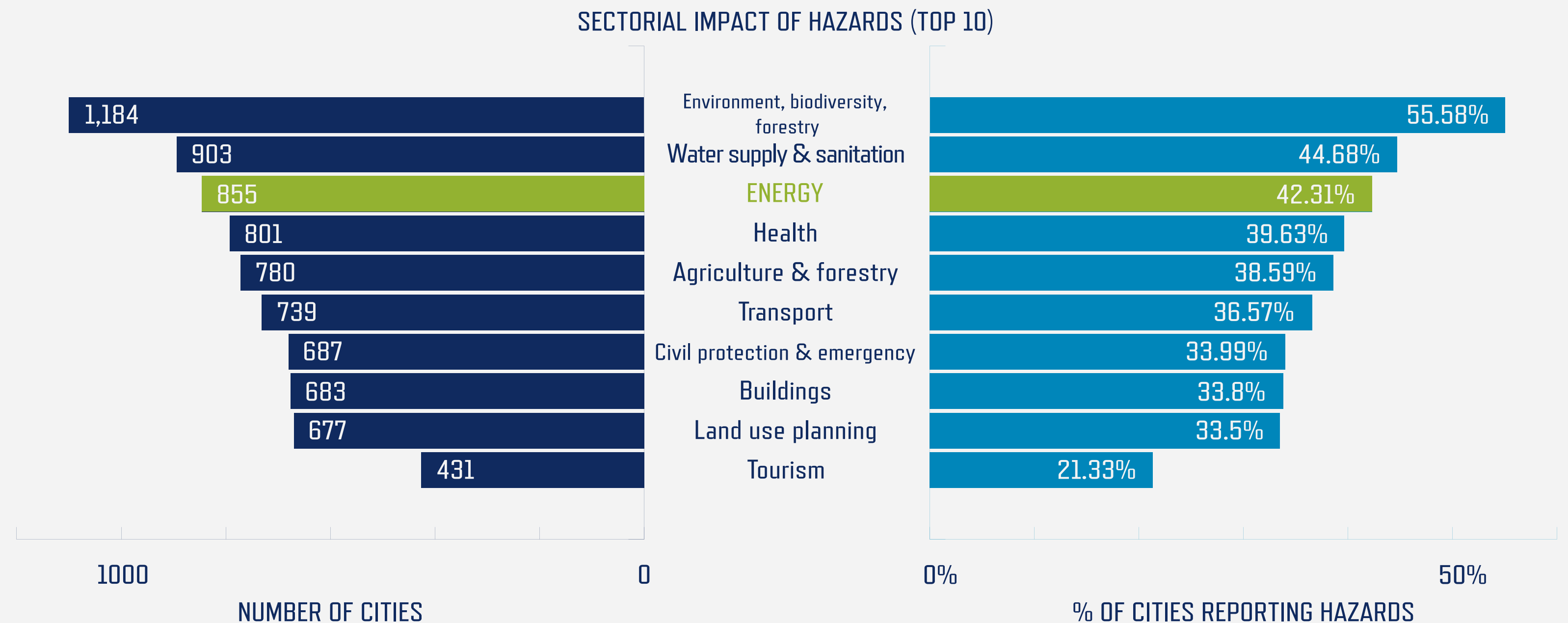
Climate hazards are a truly global problem facing the world's growing urban population. According to the International Energy Agency (IEA), 53% of the planet's population lives in a country that is ranked as either high risk or medium-high risk in terms of climate hazards, and most of those people live in cities [15]. 340 million people, more than a third of the population represented by the GCoM alliance, live in a GCoM city or local government reporting that they are facing high-risk climate hazards.

275 cities and local governments across the alliance reported energy as a particularly vulnerable sector to high-risk hazards, meaning that energy generation, transmission, and distribution is at risk. Furthermore, GCoM cities and local governments expect these high-risk hazards to increase in frequency and intensity in the future, which may lead to increasing frequency of power outages and growing instability of energy supplies.

Our analysis shows that many GCoM cities and local governments are faced with significant climate change-induced hazards. However, the data also show that they are taking action to address these hazards.

**1,618** CITIES REPORT THE SECTORIAL IMPACT OF HAZARDS

**42%** OF THE GCOM CITIES REPORTING HAZARDS INDICATE ENERGY AS A VULNERABLE SECTOR



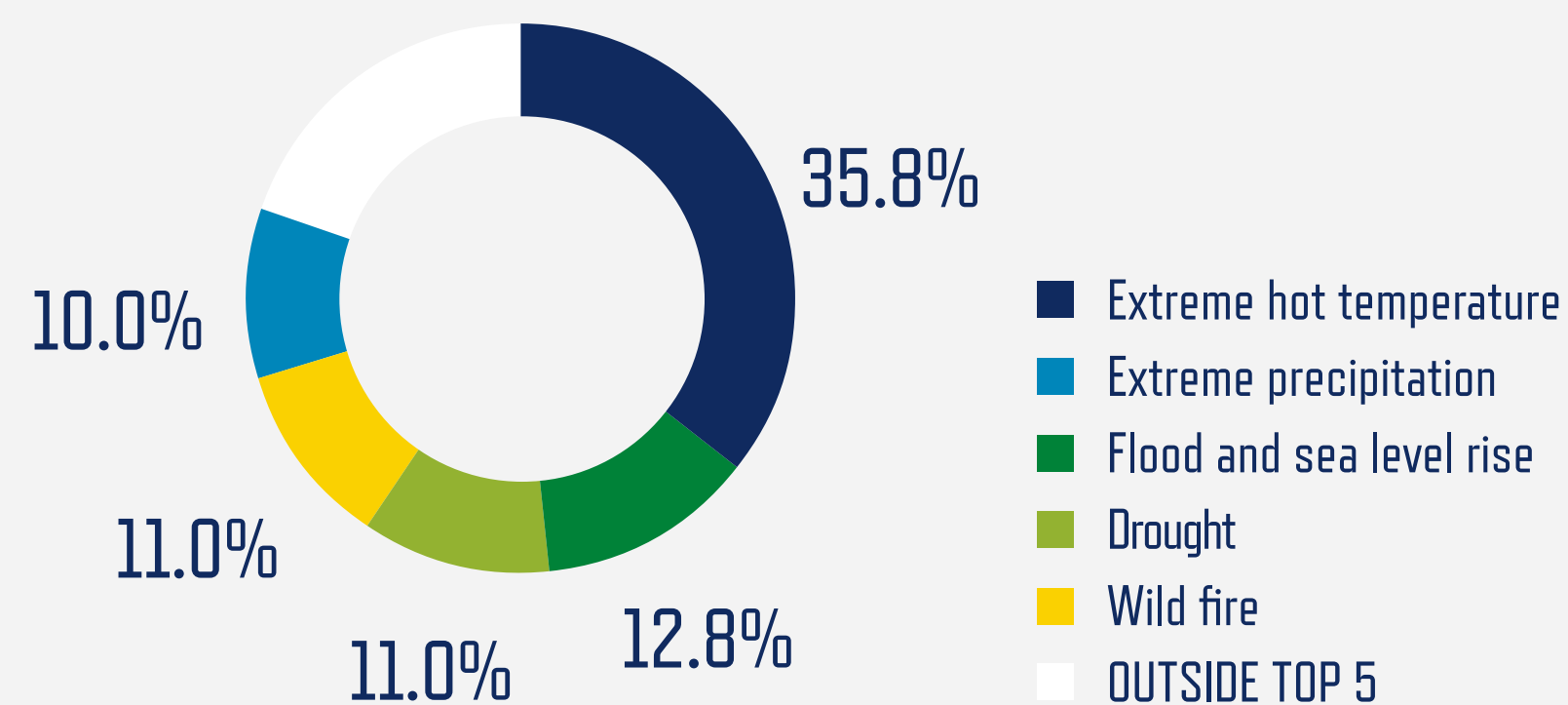


# THE ENERGY SECTOR (AND SUPPLY) IS AFFECTED BY HIGH-RISK HAZARDS

The most common hazard affecting the energy sector is extreme heat, accounting for 36% of all hazards affecting energy. Among other impacts, extreme heat may cause droughts that make hydroelectric dams untenable, or lead to blackouts as grids become overwhelmed by sudden demand for energy for cooling. Flood and sea level rise (13%), drought (11%) and wild fire (11%) were also major concerns due to the physical damage they can cause.

Energy infrastructure underpins the majority of the critical infrastructure that supports urban life, including transport networks, ICT services, water and wastewater distribution, healthcare and emergency services. When energy supplies are compromised, the resilience of a city can be dangerously undermined. Nevertheless, the IEA reports that 25% of its members' or association members' national climate or energy plans do not address the climate resilience of energy infrastructure [16]. This puts the responsibility on sub-national governments – including cities – to take action.

HIGH-RISK HAZARDS AFFECTING THE ENERGY SECTOR



Extreme hot temperature is the number one high-risk hazard impacting the energy sector.







CHAPTER 04

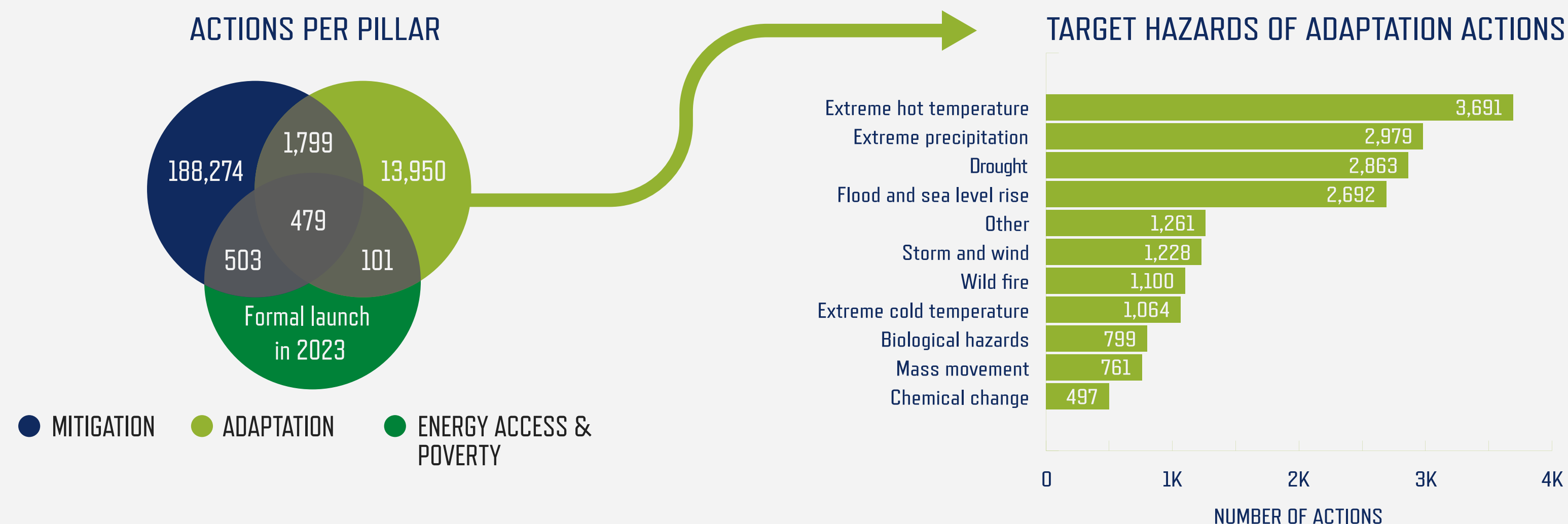
# CITIES ARE TAKING ACTION



# CITIES ARE TAKING ACTIONS TO REDUCE EMISSIONS AND INCREASE RESILIENCE

With GCoM cities and local governments committed to ambitious cuts in emissions, while also facing challenges from rising energy prices and high-risk climate hazards, a strong response is key. GCoM cities and local governments are taking actions across climate change mitigation, adaptation, and energy access.

GCoM signatories have reported 205,106 actions to address climate change. Of these actions, more than 93% relate to mitigation, and close to 8% relate to adaptation and resilience.



The number of actions per pillar is very much influenced by the time of introduction of the three pillars.

Cities are acting (target hazards of actions) on the hazards they are expecting (Risk & Vulnerability Assessment, Chapter 3).

**7,271** CITIES REPORTING ACTIONS  
**205,106** ACTIONS REPORTED  
**191,055** MITIGATION ACTIONS  
**16,329** ADAPTATION ACTIONS



# CITIES REPORT INCREASED ACTIVITY AROUND ENERGY ACCESS & POVERTY

The Energy Access and Poverty Pillar will be made formally available at the start of 2023. Energy access and energy poverty are important elements for the sustainable development, resilience, and well-being of cities and local governments. All three pillars, namely mitigation, adaptation and energy access & poverty are an integral part of the journey of local government towards a more sustainable future. Therefore, strategies and measures undertaken by cities can address simultaneously more than one single pillar.

More than 190,000 actions are linked to the mitigation pillar. Most of these actions address community energy generation programmes, building retrofits, district heating and energy systems, and behaviour change and awareness campaigns, all of which lead to quantifiable energy savings. A subset of these actions confers quantifiable increases in renewable energy generation, for example through rooftop solar arrays, energy from waste plants, or micro wind turbines. A number of these actions can be specifically targeted at improving energy access for urban dwellers.

Many of the mitigation actions will yield benefits for energy access & poverty by helping to reduce energy consumption and emissions and to diversify and localise energy supplies, leading to greater energy security, sustainability and affordability. This year's data show that a number of signatories have preliminary reported mitigation and adaptation actions with an additional impact on energy access & poverty. As a result of the formal launch of the Energy Access and Poverty Pillar there should be a considerable increase in the number of reported actions that contribute to secure, affordable and sustainable energy.



Cities are increasingly reporting actions resulting in quantifiable energy savings, increased energy efficiency and renewable energy generation.



# CITIES ACTIONS AND THEIR CO-BENEFITS ILLUSTRATED

## Developing Energy-Efficient and Resilient Housing Strategies in Multiple Cities, Maldives

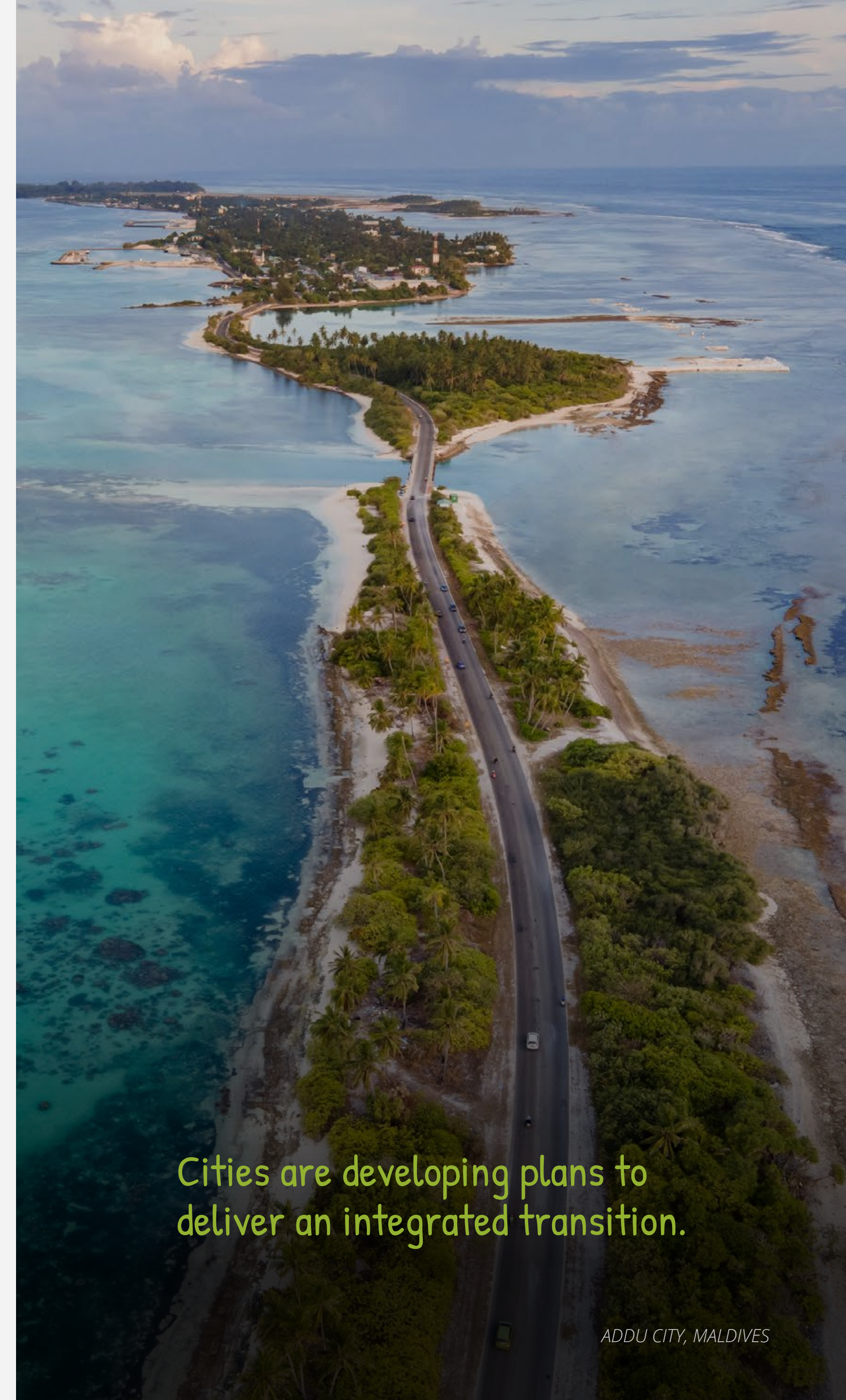
Supported by the City Climate Finance Gap Fund - of which the GCoM alliance is a supporting partner - this project is focused on the development of energy-efficient affordable housing strategies and action plans for green construction and low-carbon development for Greater Male (Malé City, Hulhumalé, Thilafushi, Gulhi Falhu) and two key urbanising atolls (Addu City and Fuvahmulah City). The activity aims to develop or expand on existing city climate strategies and action plans, and strengthen the National Spatial Plan's approach to climate change mitigation and adaptation, while also supporting energy access.

## Solar-powered street lighting project, Cameroon

Through the generous support from the Gulbenkian Prize for Humanity - awarded to the GCoM alliance in 2021 - the City of Garoua will renovate and extend their existing street lighting network. This project will greatly increase the energy efficiency of the street lighting network and reduce greenhouse gas emissions. It is estimated that the renovation project will save 1,500 MWh and save 389 tons CO<sub>2</sub> annually. This project will also improve living conditions for local people, through greater safety for pedestrians, extended working hours for street-vendors, and providing light to residents in nearby homes without electricity.

## Supply of drinking water to help adapt to longer dry seasons, Senegal

Supported through the Gulbenkian Prize, the Senegalese public urban water asset manager (SONES) is implementing a nation-wide subsidised connection campaign, connecting vulnerable homes to household water supplies. This action is having positive impacts on the economy and on public health, as well as reducing vulnerability to changing precipitation patterns. Typically, women in Senegal are responsible for collecting, transporting, storing, and using water. By connecting vulnerable homes to a water supply network this project supports development programmes and addresses gender impacts.



Cities are developing plans to deliver an integrated transition.





CHAPTER 05

# CRISIS AS A CATALYST FOR TRANSFORMATION



# CAUSE FOR OPTIMISM

While GCoM cities have long been committed to action on climate change, recent events have reiterated the urgency of an energy transition. 2022 could be remembered as a turning point – and as a catalyst for change.

This year's data show that many cities and local governments remain dependent on fossil fuels as their dominant source of energy; a fact which threatens local energy security, sustainability, and affordability. Data also show that cities and local governments are vulnerable to a range of climate hazards, which affect the continuity of critical infrastructure and services.

Nevertheless, there is cause for optimism too. In many cases, GCoM cities are going further and faster than national commitments, already reporting hundreds of thousands of practical actions to increase energy savings, improve energy efficiency, invest in renewable energy generation, address energy access, and adapt to the impacts of climate change.

Data reported by GCoM signatories show that the actions to increase resilience are well-aligned with the most common high-risk climate hazards.





# CALL TO ACTION

This impact report emphasises the links between today's global energy crisis, the extreme weather events that have been experienced internationally throughout 2022, and the urgency of action on climate change. Cities, national governments, civil society and the private sector must come together to accelerate bold and ambitious climate action.

Reflecting on this year's data, we stand behind these four calls to action.

## **Sharing best-practices.**

Cities can be effective testbeds for both climate change mitigation, adaptation and energy access solutions. Whether it is low traffic neighbourhoods, district heating systems, decentralised microgrids, or installing electric vehicle charging infrastructure, cities and local governments across the world are taking actions that others can learn from. This will help to move more actions into implementation across the GCoM alliance.

## **Harnessing co-benefits.**

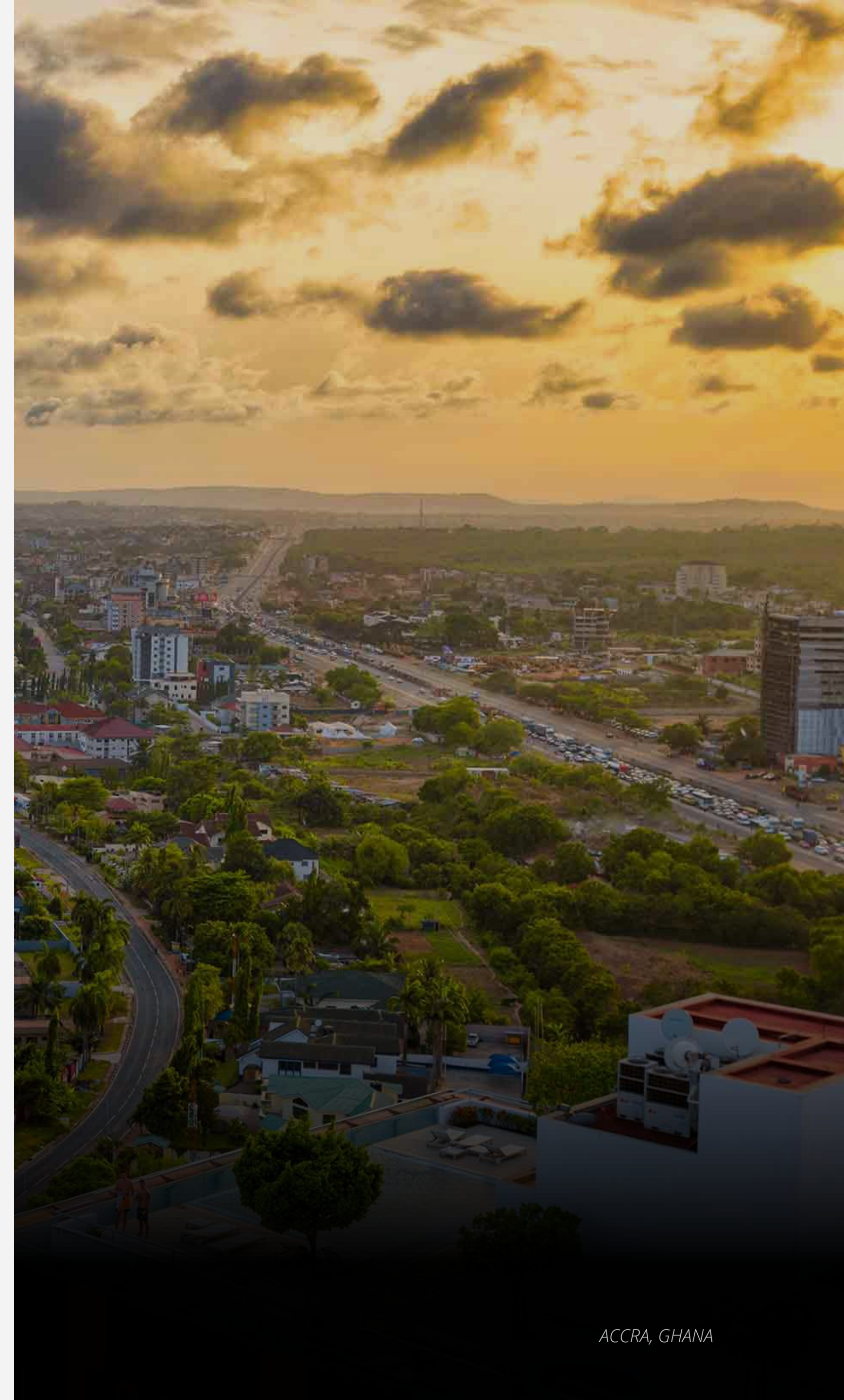
Investment needs to take a joined-up approach to mitigation, resilience and energy access, recognising the co-benefits across these pillars and building these benefits into a holistic investment case. Cities and local governments are recognising the interactions between these objectives. Examples show how they are developing plans to deliver an integrated transition, and how they are attracting necessary investments.

## **Increasing collaboration.**

Cities and local governments can benefit from strategic partnerships, particularly with utilities from the private sectors and with other tiers of government. There are numerous opportunities for cities and local governments to work closely with others to accelerate the required energy transition. Securing greater awareness and engagement with residents will also be pivotal to reducing energy use.

## **Funding retrofit**

The rising cost of energy over the past year has demonstrated the necessity to reduce energy use for reasons of sustainability, security and affordability. While individual energy retrofit projects are reported to be taking place, cities and local governments need support to deliver at scale. Although some cities and local governments may have budget to achieve this, others need more support from national and regional governments, international financial institutions and the private sector.





# FIVE INITIATIVES TO ENERGIZE THE ALLIANCE

There is great potential, waiting to be unleashed. Mayors are ready to implement bold actions and measures, and the continuous growth of the GCoM alliance is linking more and more like-minded city and local government leaders together, building an ever-stronger movement for transformative change.

Against the backdrop of the crises explored in this report, GCoM has developed an Energy Access and Poverty Pillar and an associated badge to recognise the efforts cities and local governments are taking in this area. This pillar launches in January 2023, and in the next disclosure cycle signatories will be able to report their progress in this area.

Alongside this, we encourage signatories to develop long-term and intermediate mitigation targets and adaptation goals to align climate action with the goals of the Paris Agreement.

GCoM's extensive programme of work is driven by five initiatives to help cities develop and strengthen their climate ambition. The initiatives are:

**Amplify4Cities:** Inspire citizens and policymakers alike towards meaningful climate actions.

**Invest4Cities:** Enhance and accelerate city and local government access to financial resources.

**Data4Cities:** Develop, maintain, and manage the data underpinning the GCoM alliance, partnering networks and cities, and highlighting the progress and power of cities.

**Innovate4Cities:** Tackle the information and technology gaps cities have prioritized to drive science-based replicable action and sustainable innovation at the scale the world demands, and those cities need.

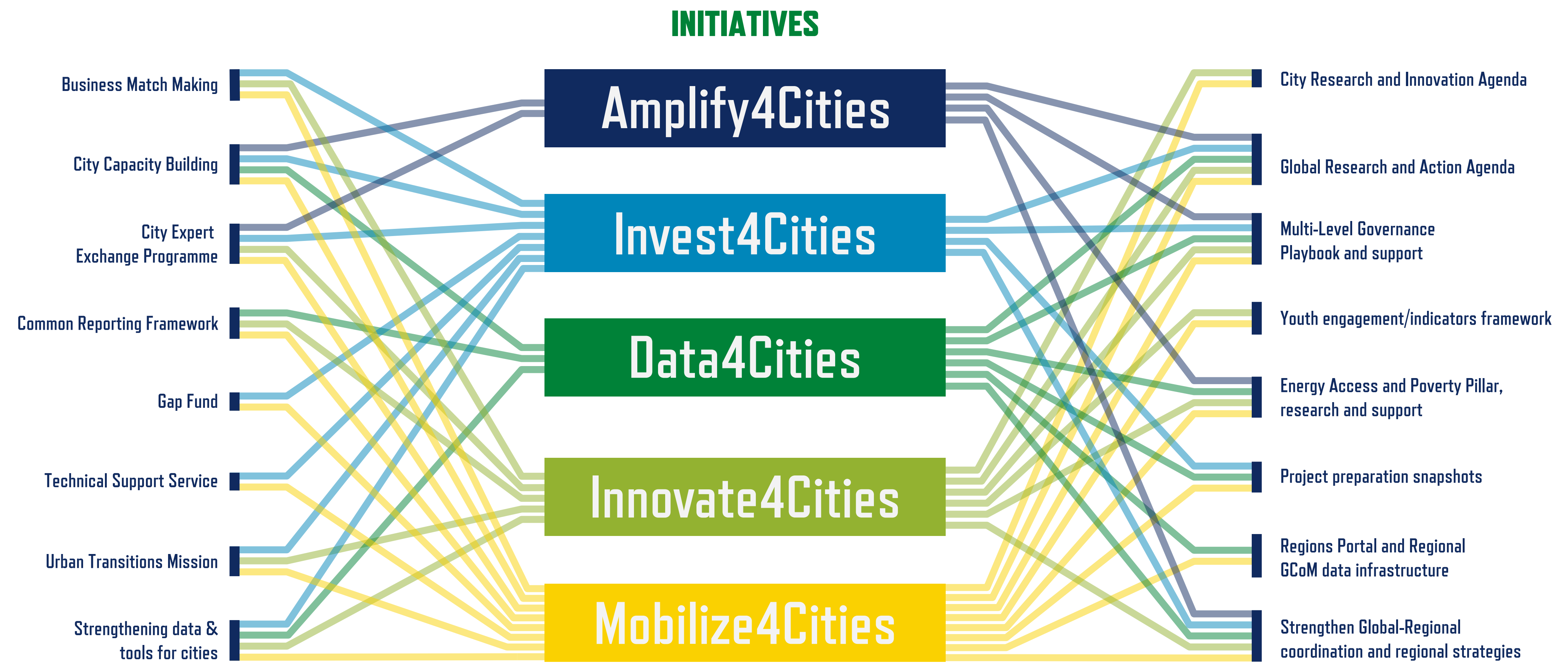
**Mobilize4Cities:** Provide expertise via local, national, and international specialists to enable urban action along the city climate journey and across regional contexts.





# ONGOING AND UPCOMING ACTIVITIES

The following graph shows ongoing and upcoming activities that are part of the GCoM's extensive programme of work. These activities are driven by five initiatives that help cities develop and strengthen their climate ambition. The lines document the link between the activities and the five initiatives.





# REFERENCES

- [1] Africanews, [Cameroonians queue for fuel as shortages hit the capital](#)
- [2] BBC news, [Bangladesh fuel prices: 'I might start begging in the street'](#)
- [3] The Guardian, [Ecuador facing food and fuel shortages as country rocked by violent protests](#)
- [4] UK Parliament, [Domestic energy prices](#)
- [5] Dawn, [Power outages return to haunt Rawalpindi, Islamabad](#)
- [6] Arab News PK, [Massive outages hit Pakistan's north after flash floods damage over 20 power houses](#)
- [7] International Energy Agency, [Renewable Energy Market Update - May 2022](#)
- [8] International Energy Agency, [Electricity Market Report - July 2022](#)
- [9] International Energy Agency, [IEA SDG 7 report overview](#)
- [10] The World Bank, [World Bank Commodities Price Data \(The Pink Sheet\)](#)
- [11] The GCoM Common Reporting Framework (CRF) streamlines measurement and reporting procedures to ensure robust climate action planning, implementation, and monitoring in line with IPCC guidelines. The CRF facilitates opportunities for collaboration on city climate action and the global aggregation of data, while retaining the flexibility needed to meet specific local and regional circumstances.
- [12] These figures are calculated based on latest city reported data from both MyCovenant and the CDP-ICLEI Track, as well as latest NDCs submitted at the time of writing.
- [13] Cities in The Caribbean have reported very few risks and vulnerabilities. For this analysis, the regions Latin America and The Caribbean are displayed in one region Latin America & The Caribbean.
- [14] For this analysis, high risk hazards are defined as those reported to be both high impact and high likelihood.
- [15] International Energy Agency, [IEA SDG 7 report overview](#)
- [16] The Resilience Shift, [How climate resilient is the global energy sector?](#)





The Global Covenant of Mayors would like to welcome you to our alliance to share in the knowledge and strength of 12,500+ cities and local governments on every continent that are committed to addressing many of the same climate change and energy challenges you face.

The cities and partners of GCoM share a long-term vision of supporting voluntary action to combat climate change and towards a resilient and low-emission society. GCoM serves cities and local governments by mobilizing and supporting ambitious, measurable, planned climate and energy action in their communities by working with city/regional networks, national governments, and other partners to achieve our vision.

Contact us today to learn more about taking climate and energy action with the GCoM alliance.

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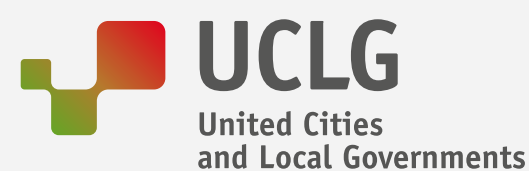




## AUTHORS

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## SUPPORTING PARTNERS



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