ROADMAP

INCLUSIVE PLANNING

Indicator module

C40 CITIES

C40 CITIES CLIMATE LEADERSHIP GROUP

The C40 Cities Climate Leadership Group, now in its 13th year, connects 90+ of the world's greatest cities which have committed to tackling climate change. We bring mayors from around the world together to learn from each other in reducing greenhouse gas emissions and creating

Resilient, sustainable and inclusive cities. C40 cities represent more than 700 million urban citizens and their economies account for 25% of global GDP. Our 'deadline 2020' report sets out the critical role that the world's major cities have to play in delivering the historic Paris agreement to prevent catastrophic climate change.

WORLD RESOURCES INSTITUTE – WRI

ROSS CENTER FOR SUSTAINABLE CITIES

Ross Center for Sustainable Cities works to make urban sustainability a reality. Global research and on-the-ground experience in Brazil, China, India, Mexico, Turkey, and the United States combine to spur action that improves life for millions of people. Based on long-standing global and local experience in urban planning and mobility, WRI Sustainable Cities uses proven solutions and action-oriented tools to increase building and energy efficiency, manage water risk, encourage effective governance, and make the fast-growing urban environment more resilient to new challenges. Aiming to influence 200 cities with unique research and tools, WRI Sustainable Cities focuses on a deep cross-sector approach in four megacities on two continents, and targeted assistance to 30 more urban areas, bringing economic, environmental, and social benefits to people in cities around the globe.

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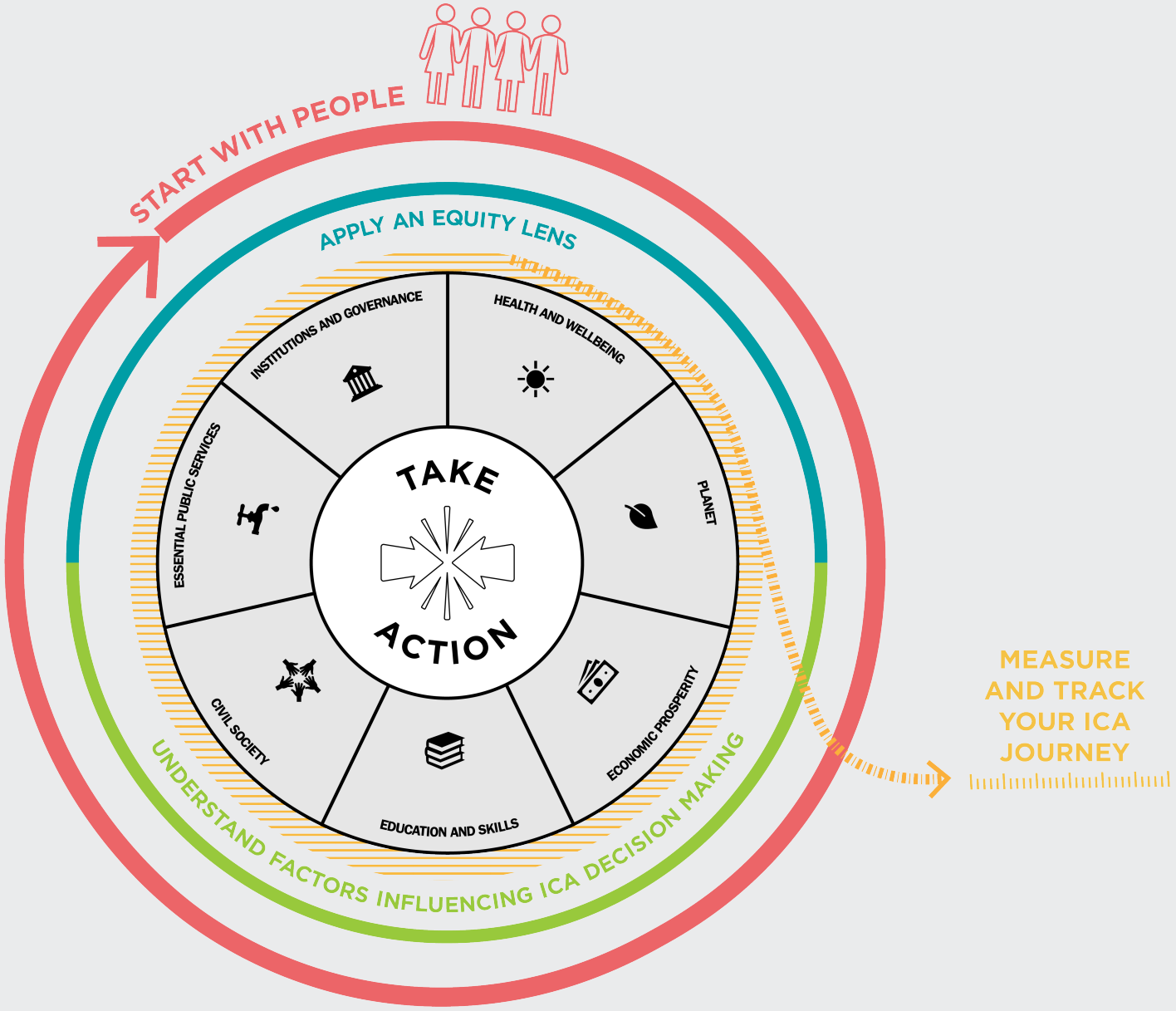
TERMINOLOGY

Term	Definition
Age	Chronological grouping based on years lived.
Community	Any individual or group who has a vested interest/influence in, or is impacted by, the project.
Disability	Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others.
Equity	The absence of avoidable or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, or geographically.
Gender and sexuality	The socially constructed characteristics of women and men – such as norms, roles and relationships of and between groups of women and men. Categories can include lesbian, gay, bisexual, transsexual and intersex.
Hard-to-reach	Those groups or individuals within society that are typically under-represented in the engagement process or have limited capacity to be involved
Impact	Effects of climate change and/or climate action on lives, livelihoods, health, ecosystems, economies, societies, cultures, services and infrastructure.
Inclusivity	The practice of including relevant stakeholders and communities, particularly marginalised groups, in the policy-making and urban governance process, in order to ensure a fair policy process with equitable outcomes.
Income level	Grouping or thresholds connected to earnings of labour and/or capital. Categories typically are defined in relation to the local/national economy.
Informality status	Relationship of individuals, households, activities or firms to the formal or informal economy, typically with respect to production, employment, consumption, housing or other services.
Intersectionality	How different aspects of an individual or group's social and political identities overlap and intersect
Migrant status	Refers to the legal and immigration status of a person who changes their place of residence. Categories include locals, expatriates, documented or undocumented migrants, refugees and asylum seekers.
Race and ethnicity	Race is defined as a category of humankind that shares certain distinctive physical traits. The term ethnicity is more broadly defined as large groups of people classed according to common racial, national, tribal, religious, linguistic, or cultural origin or background.
Religion	Religious or spiritual belief or preference, regardless of whether or not this belief is represented by an organised group, or affiliation with an organised group having specific religious or spiritual tenets.
Sex	Sex refers to the biological characteristics that define humans as female or male. While these sets of biological characteristics are not mutually exclusive, as there are individuals who possess both.

INTRODUCTION

Cities can drive ambitious climate action and be at the forefront of the fight against climate change. Making a strong case for action, by highlighting its multiple benefits, is instrumental in getting the job done.

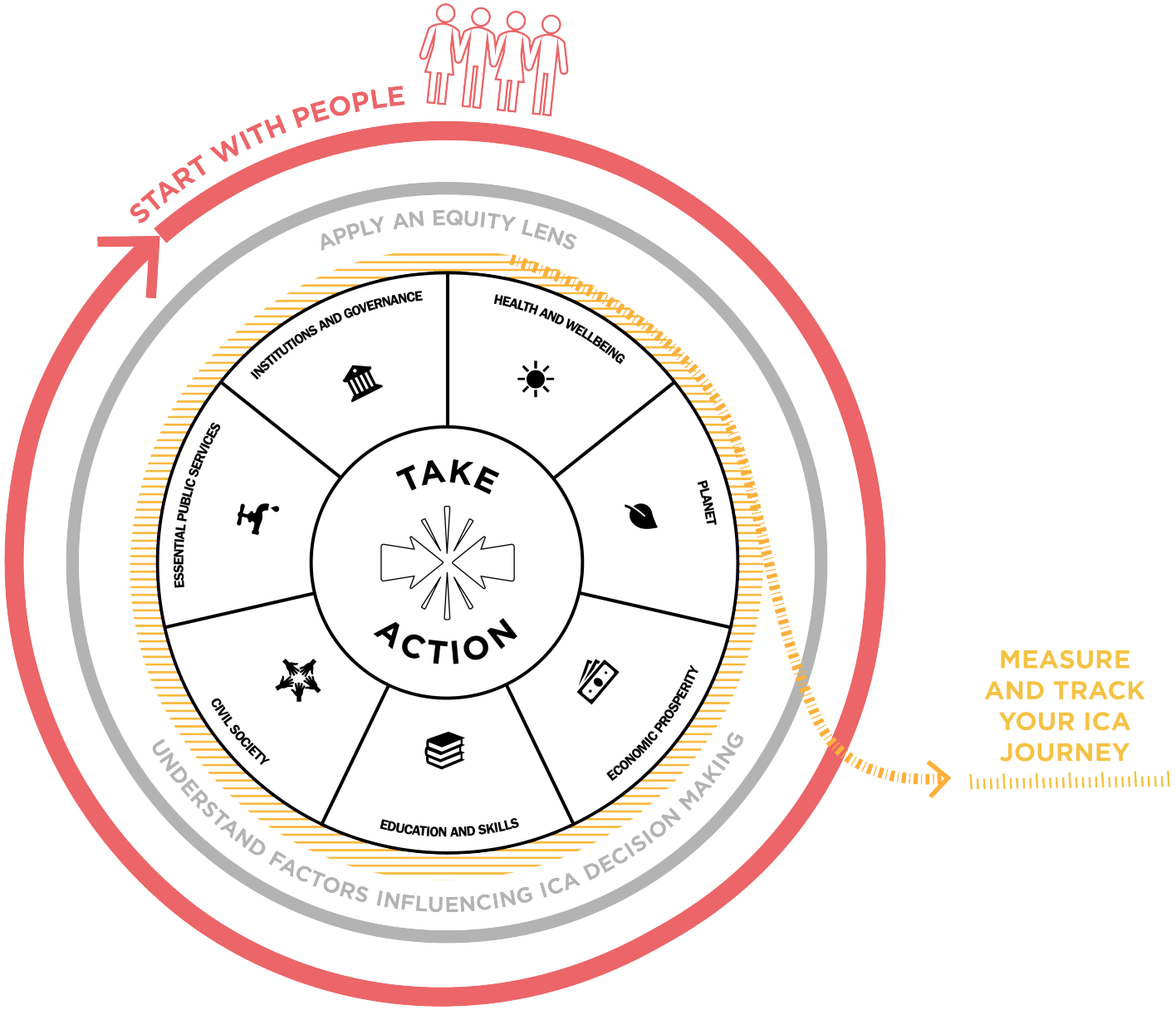
Based on the experience of working with the cities, C40 has gathered insights on the most important elements to be considered throughout the design and implementation of inclusive climate actions plans. There are five key elements and recommendations to help drive bold and ambitious action, tackling climate change while harnessing the maximum benefits for their people.



PUT PEOPLE AT THE HEART OF CLIMATE ACTIONS

Creating inclusive climate action plans involves developing co-created solutions and prioritizing local knowledge and experiences of communities on the frontline of climate change. In order to do this, urban decision makers must put people at the heart of the climate action planning process—from vision setting, to policy design and further implementation.

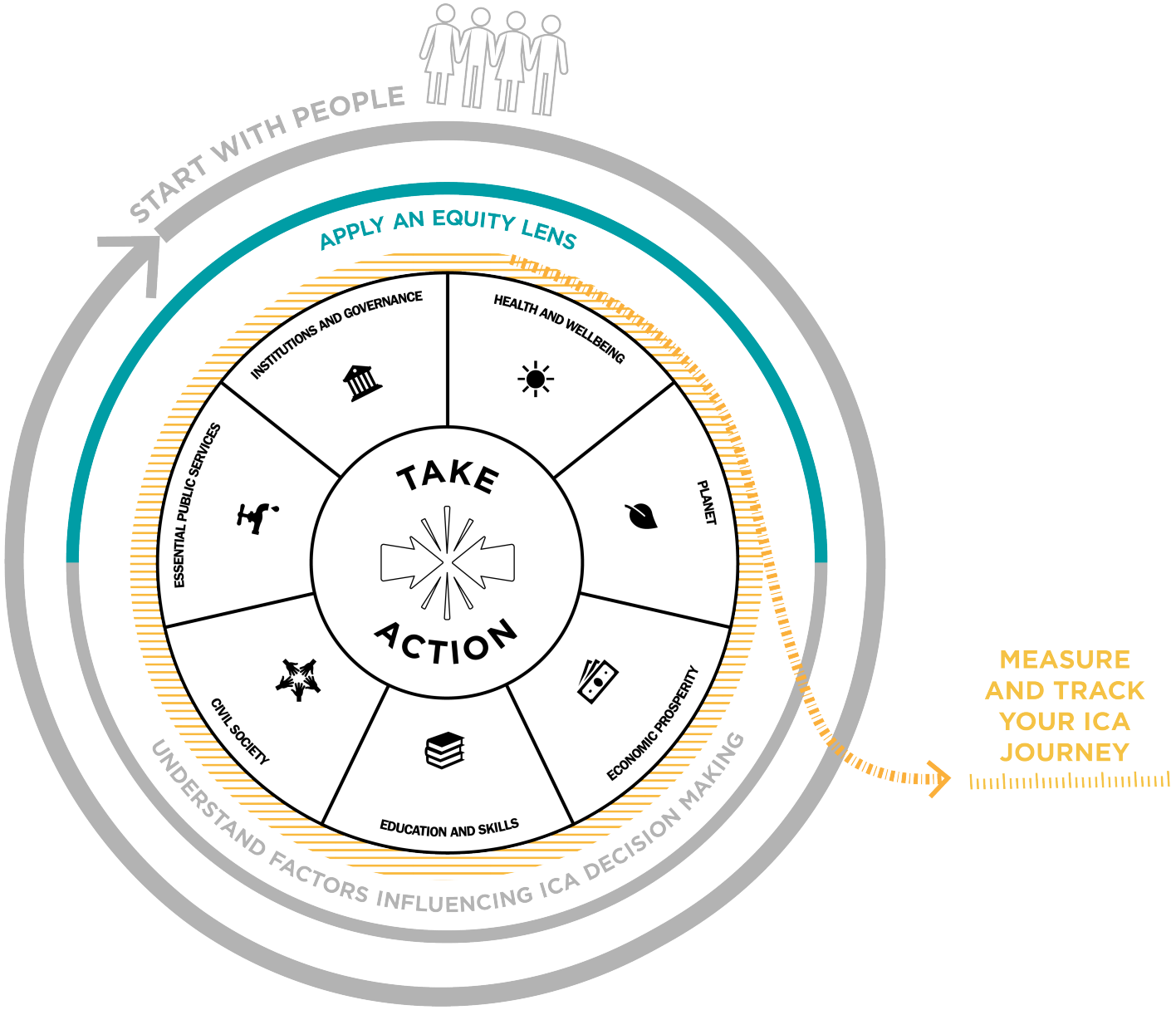
By engaging with various communities in the design and implementation process of climate actions, cities can ensure an equitable distribution of benefits and protect groups most affected by climate change.



APPLY AN EQUITY LENS

In order to put people first, cities must understand how certain communities are impacted by climate change. Cities should apply an equity lens fit for their local context, to identify the most at-risk communities. Applying an equity lens allows cities to understand what existing social and economic barriers some communities might face, and how this impacts their ability to benefit from climate actions.

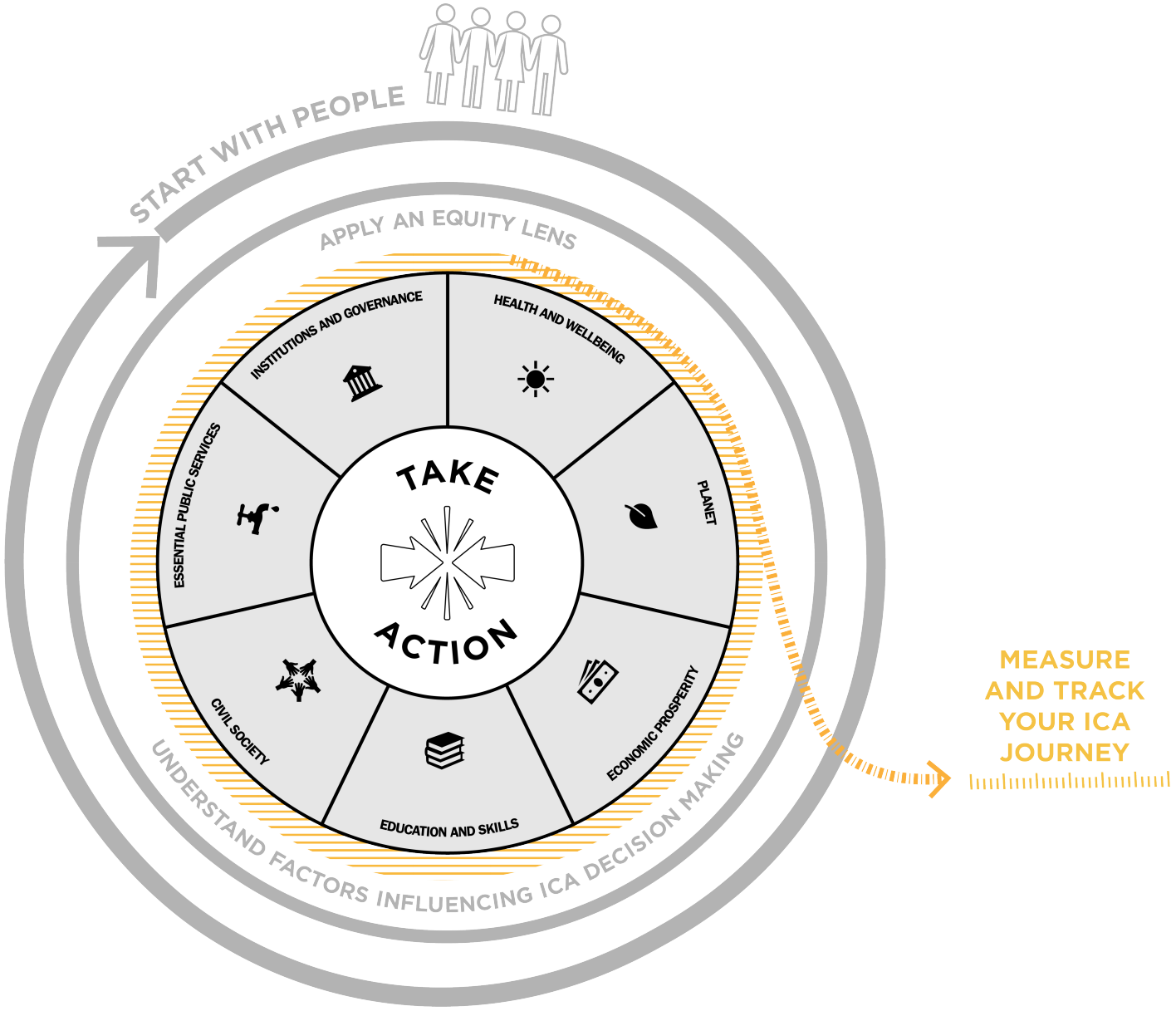
Cities must understand how access to services and policies differs amongst parts of the urban population in order to design climate policies that reach the maximum number of people. This includes: assessing the root causes of marginalisation (or social exclusion) and the lack or absence of access for certain groups in the city; deciphering key challenges around economic mobility and affordability; and finally, analysing how services and policies are distributed spatially and whether any spatial inequalities exist. By applying this equity lens while planning and designing, cities can ensure that climate actions have fair and equitable outcomes.



CONDUCT A DIAGNOSIS OF EXISTING CITY NEEDS

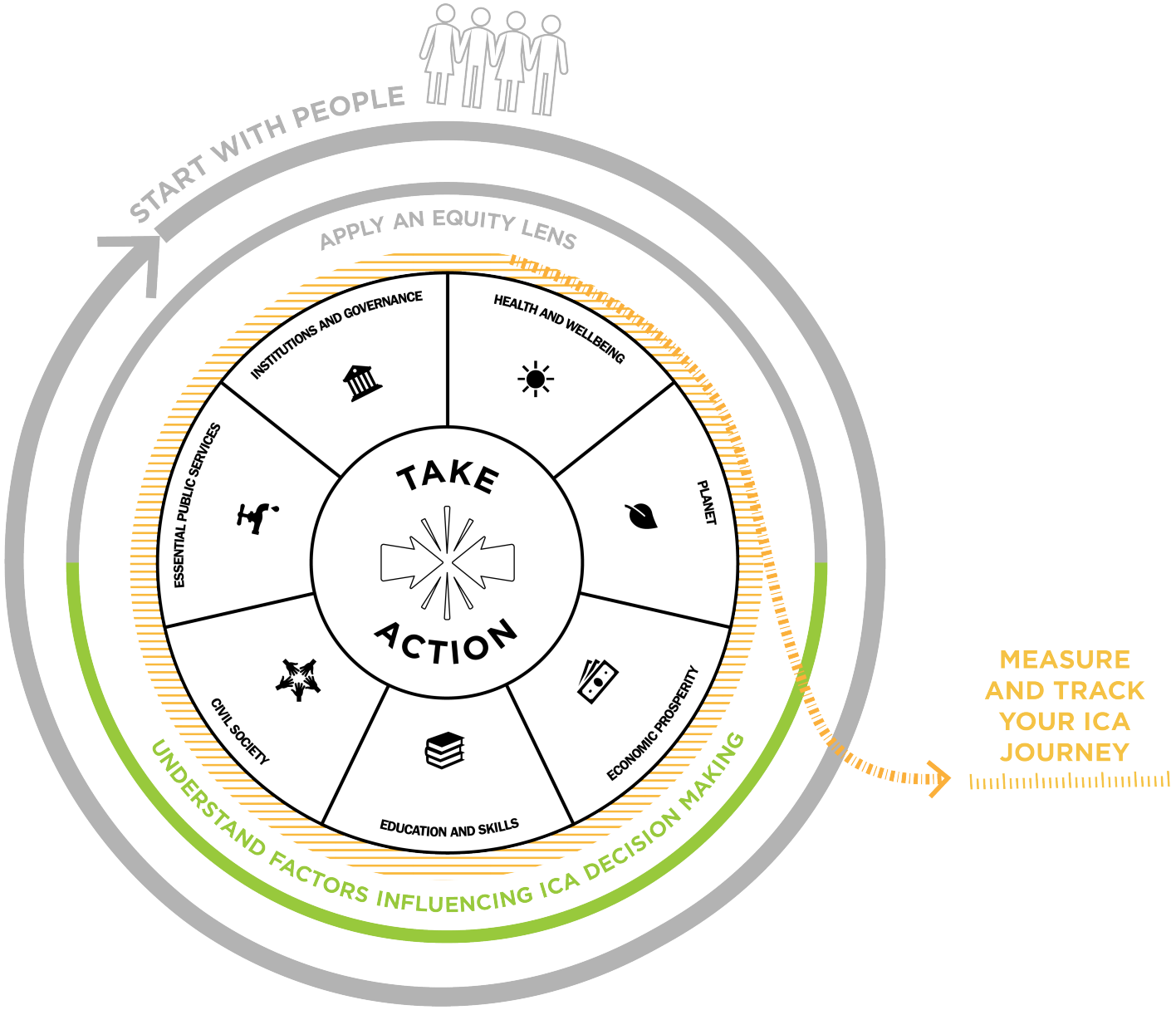
Based on this understanding, cities should seek to design climate actions that meet existing needs of residents, such as improving urban health and well-being, increasing economic prosperity, and promoting education and skill development.

By diagnosing the broad areas where the city is doing well—and not so well—urban planners and policy-makers can design climate policies that target specific needs.



UNDERSTAND THE POLITICAL ECONOMY FOR ACTION PLANNING

Understanding the key influencing factors for a set of climate actions is crucial to designing and implementing them in an inclusive way. Cities should consider their existing governance and decision- making structures, as well as the constraints or opportunities these structures create. Those working on climate action must understand the political economy drivers responsible for existing conditions which may potentially impact the implementation of actions. This understanding will allow city decision makers and practitioners to effectively navigate the institutional, political, and administrative powers in place to implement an inclusive climate action plan that has broad impact.

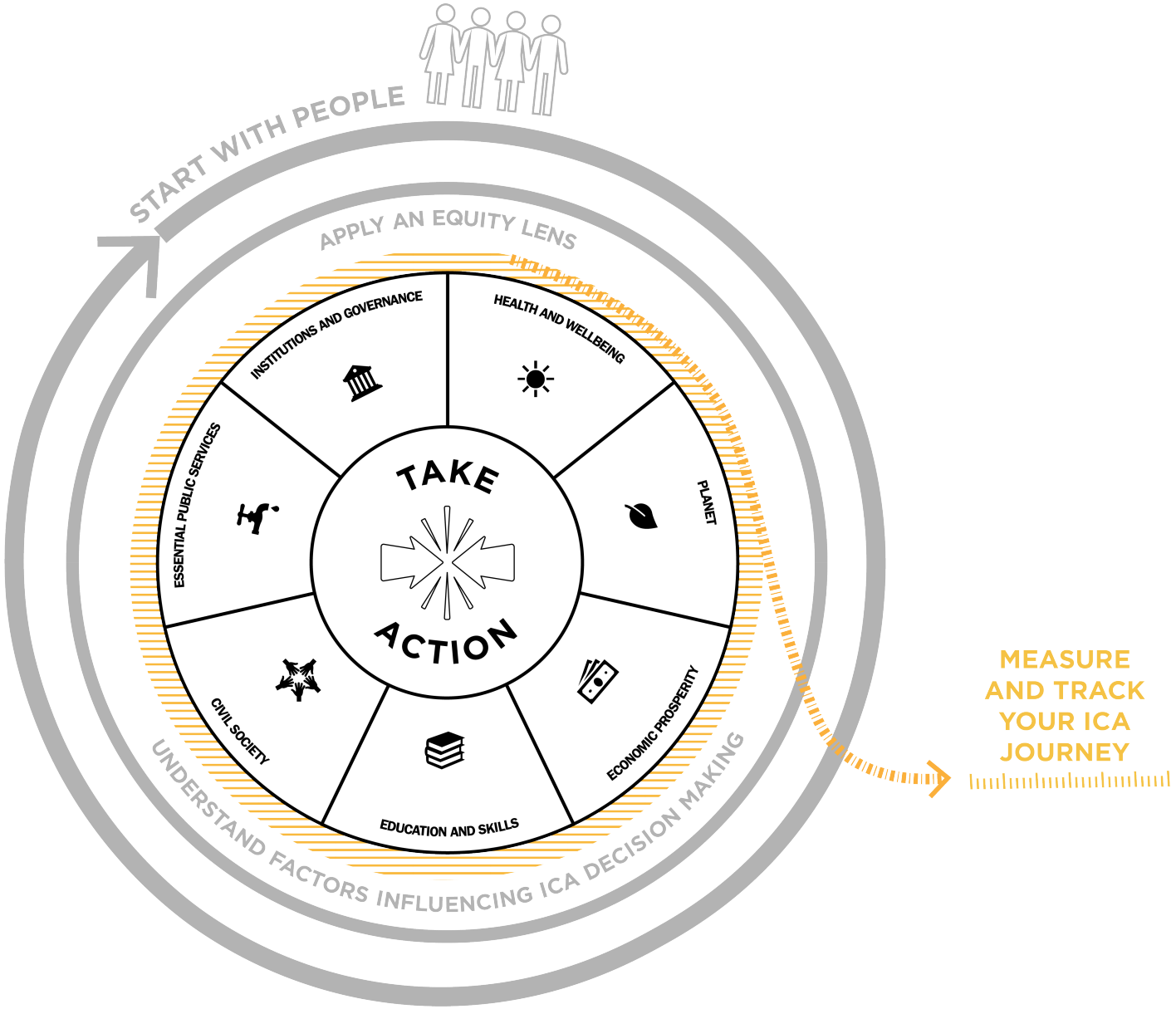


USE EVIDENCE TO TRACK THE JOURNEY

Cities should set benchmarks for their climate action plans to track progress towards their intended outcomes. This can also build momentum and ensure that a city has realistic and achievable goals for its inclusive climate action plans. Without continuous monitoring and evaluation of climate actions, cities will be ill-equipped to ensure that policies are inclusively designed and their impact equitably distributed.

In order to understand the needs of frontline communities and track whether climate actions are delivering benefits to them, cities must gather data that is disaggregated by population group and spatial distribution.

This detailed information will allow the city to understand which communities and areas are benefitting from improved air and which are currently suffering most from existing pollution. Collecting disaggregated data can take place in parallel with community engagement efforts.



SIMULTANEOUSLY TACKLING CLIMATE CHANGE AND GROWING INEQUALITIES NEEDS CAREFUL PLANNING

Our research shows that while some cities and communities are testing and implementing transformational initiatives that engage and deliver benefits to a diverse group of residents, for many others, the lack of available case studies and tested techniques is a key barrier to delivering climate action in an inclusive and equitable way.

Needs Assessment module

A customizable workshop to evaluate a city's existing needs and how to address them with climate action

Action Analysis module and database

A database of the potential challenges frontline communities may face in accessing 17 climate actions

Policy Recommendation summaries

A collection of strategies tied to the specific actions and challenges in the database, with example equity indicators and targets for each action

Indicator database with module

The Indicator Database can be used throughout all of the Roadmap for Inclusive Planning, It is a catalog of policy-ready equity and inclusivity indicators, mapped to climate actions, and sustainable development and comes with a training module.

KEY STEPS TO INCLUSIVE PLANNING

1 NEEDS ASSESSMENT

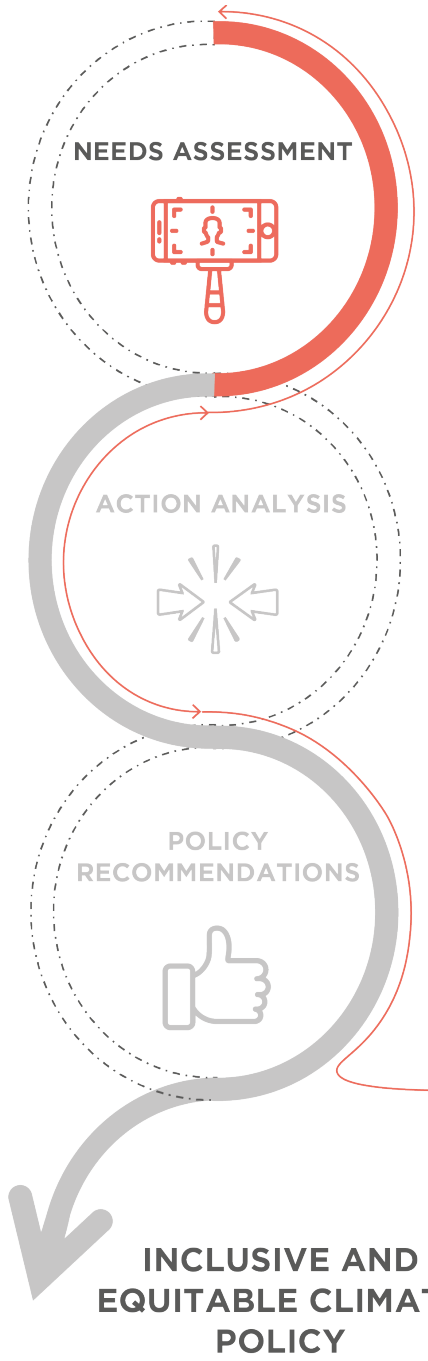
The first step of inclusive climate action planning is to conduct a Needs Assessment. The Needs Assessment helps to answer the question, "how might we tackle climate action based on the needs of our cities and citizens?". Through this assessment, cities can identify both the communities that are most vulnerable to climate change and those that are the most sensitive to climate actions. Contextualising climate actions in terms of who will be most impacted helps the city ensure that selected climate actions have the widest economic, environmental, and social impact.

The Needs Assessment walks through a series of questions relevant to understanding the needs of various frontline communities (e.g. women, informal workers, children, people with disabilities, etc.). These questions are framed around three elements of equity—access, prosperity, and place.

Health checks throughout this guidance ensure progress towards intended outcomes of conducting the Needs Assessment (e.g., 'we can propose methods to gather data through proxies and address data gaps').

Relevant indicators have been imbedded throughout the Needs Assessment to help cities identify the impact of their inclusive climate action planning. These indicators can be selected from the Indicators Database and should be relevant to the climate action that the city is pursuing and for which the city has some spatially disaggregated data.

The final stage of the Needs Assessment is to understand the different factors influencing decision-making in the city. This includes identifying key governance mechanisms and political economy drivers of change that can inform how the city goes about passing and implementing inclusive climate actions.



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KEY STEPS TO INCLUSIVE PLANNING

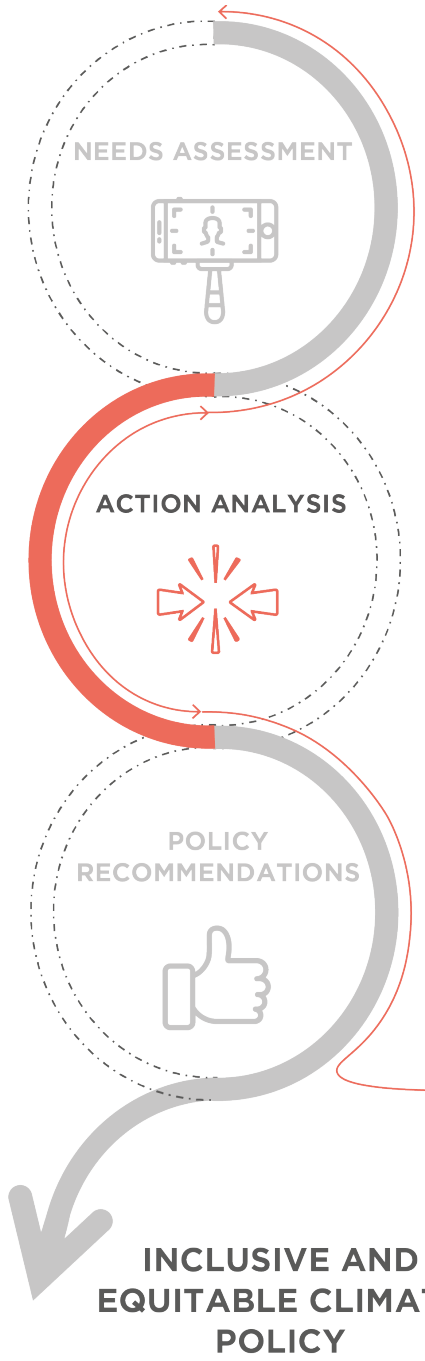
2 ACTION ANALYSIS

Next, cities can analyse the inclusivity and equity implications of potential climate actions using the Action Analysis database. This database explores the benefits and potential barriers that cities might face in implementing 17 climate policies, from creating new low-carbon building standards to improving emergency management and early warning systems for climate hazards. The benefits of each climate action are mapped to the following domains or outcome areas: health and wellbeing, planet, education and skills, economic prosperity, essential public services, civil society, and institutions and governance.

Like the Needs Assessment, the Action Analysis focuses on people. The goal of this analysis is to understand who typically accesses and benefits from potential climate actions and who may not, given existing inequities.

This analysis looks at the benefits of potential climate actions through the lenses of access and availability, prosperity and affordability and spatial inclusion and place.

The Indicators database compliments the Action Analysis, providing several indicators to measure the inclusivity and equity considerations of each climate action. Each indicator is also mapped to the city's primary domains or outcome areas. Finally, a list of priority indicators, selected for their applicability across the 17 climate actions, is provided to help cities streamline their monitoring and evaluation efforts for inclusive climate actions.



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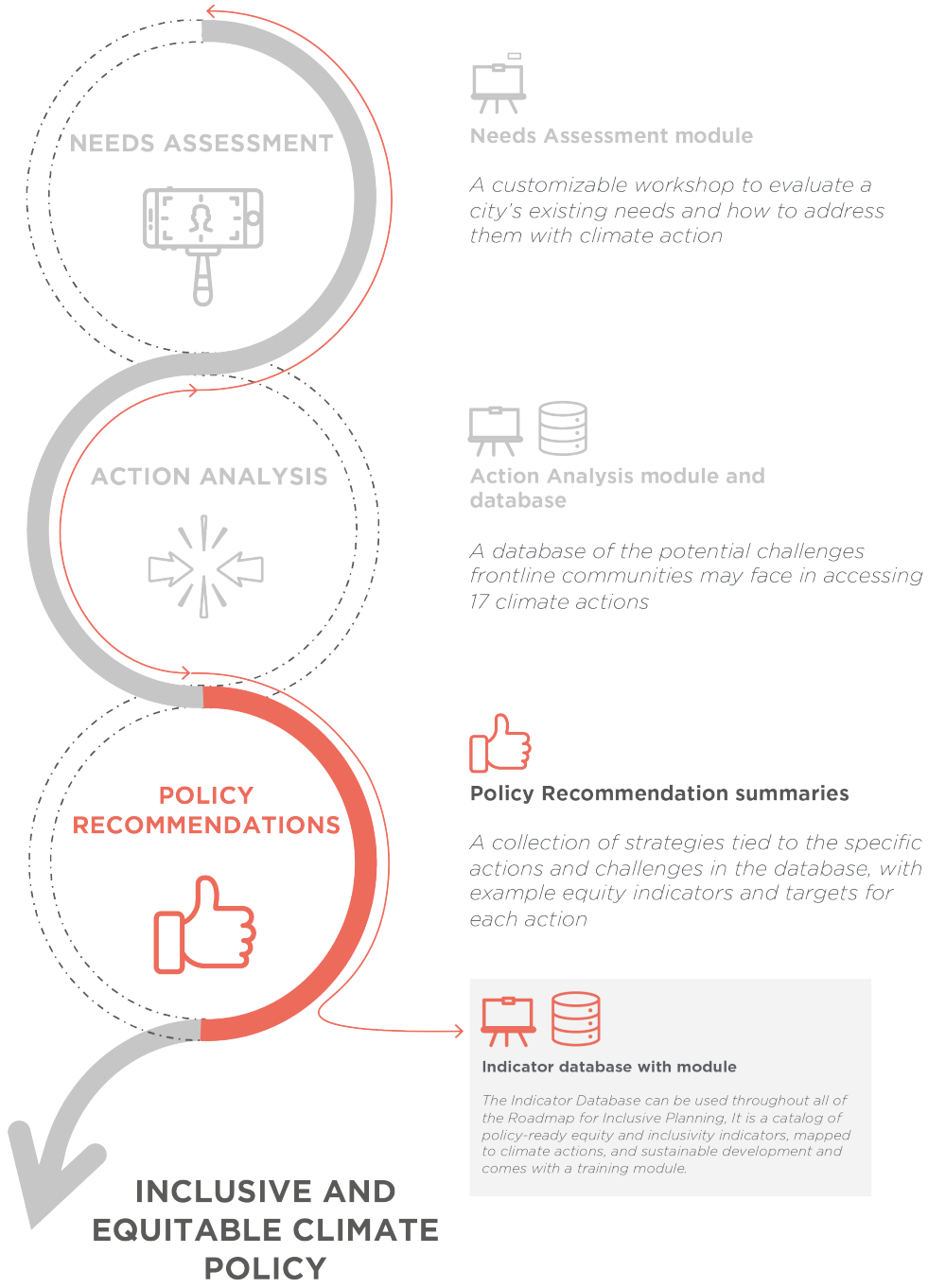
KEY STEPS TO INCLUSIVE PLANNING

3 POLICY RECOMMENDATIONS

Building on the detailed Action Analysis database, the Policy Recommendations provide clear steps for a city to take in order to implement climate actions in an inclusive way. For each action, key recommendations are provided based on city best practices from around the world. Each headline recommendation is supported by more specific steps; this additional detail helps cities implement inclusivity and equity incrementally in their climate planning. The Policy Recommendations also include the action-specific indicators that the city can use to track its progress, as well as example targets that other cities have adopted.

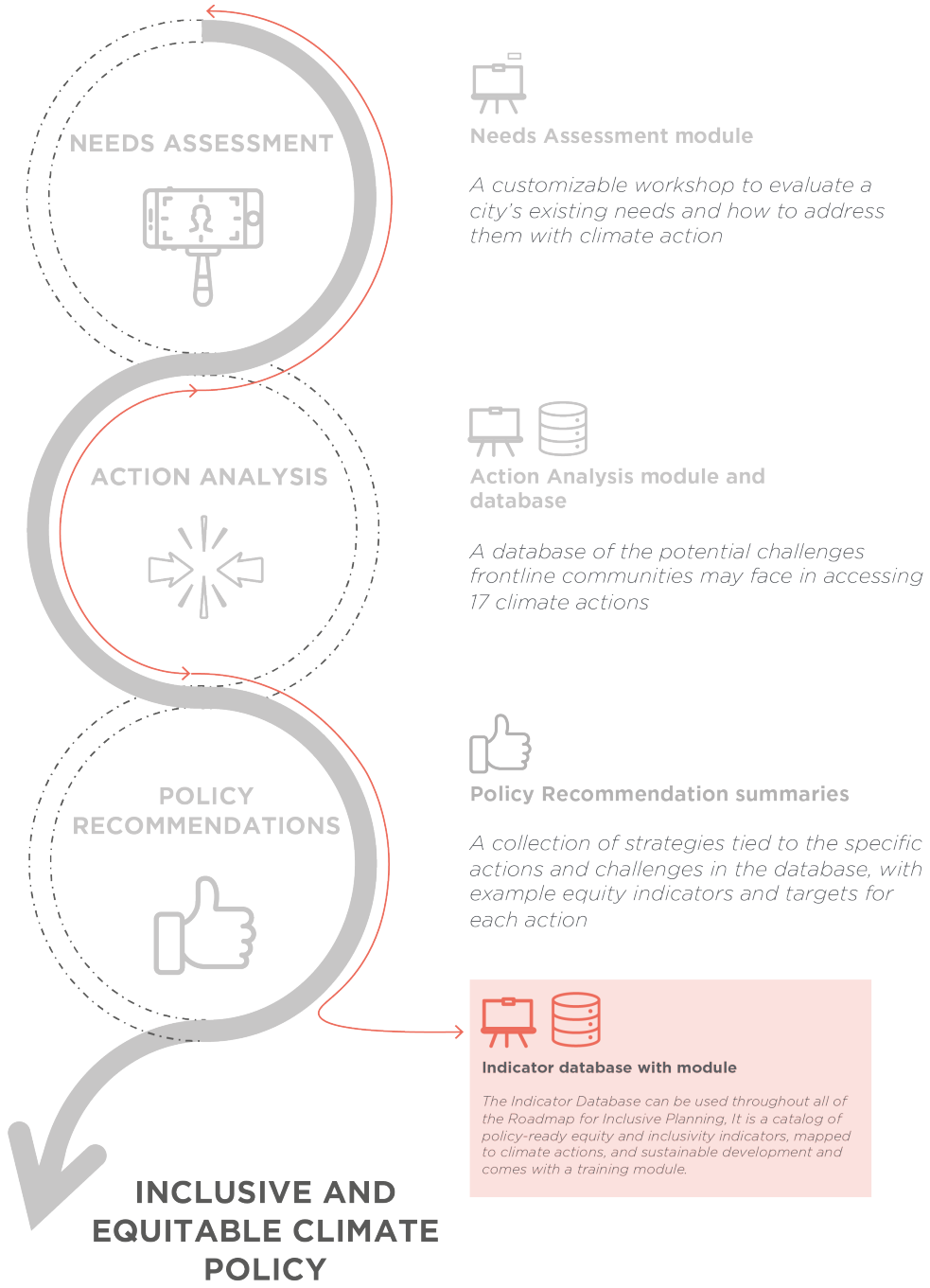


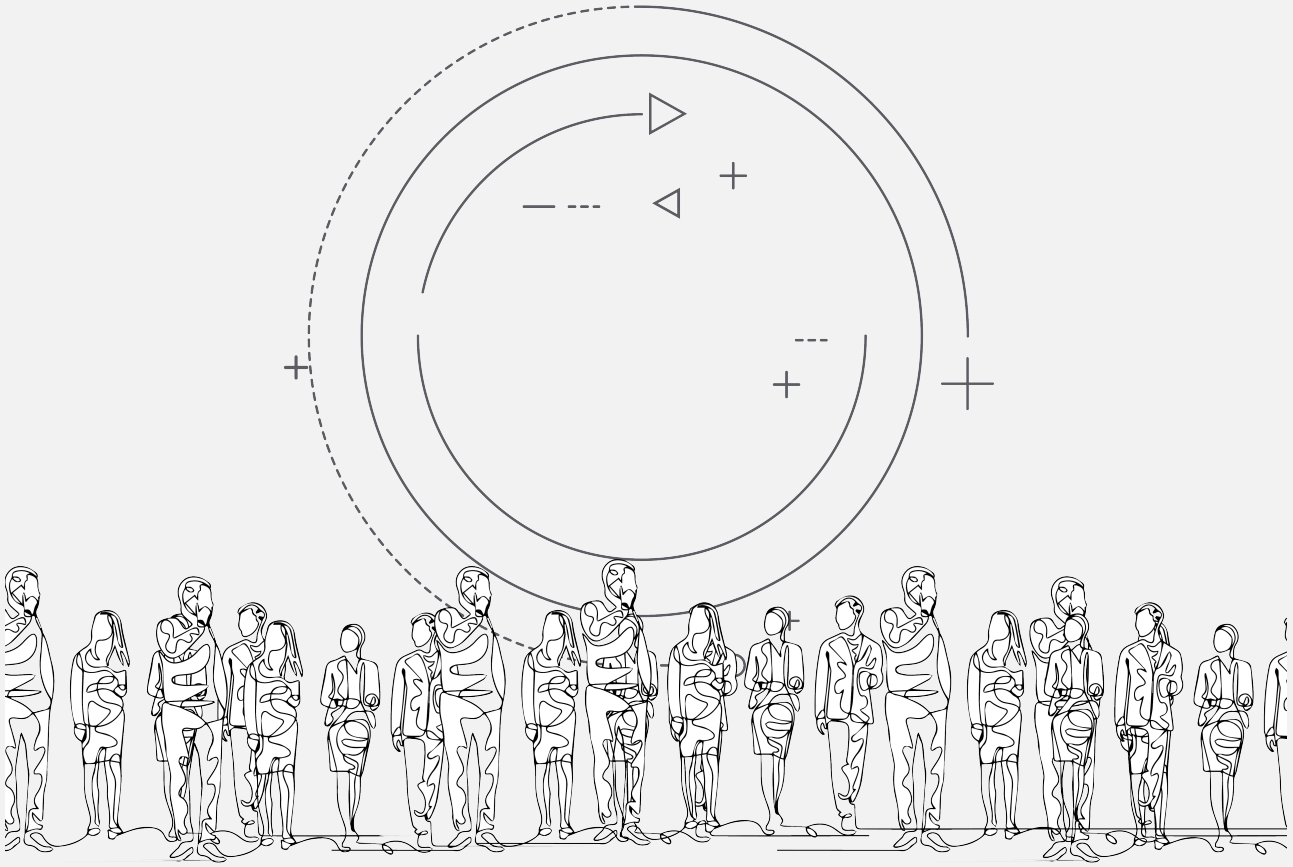
KEY STEPS TO INCLUSIVE PLANNING

USE EVIDENCE TO TRACK THE JOURNEY

Without continuous monitoring and evaluation of climate actions, cities will be ill-equipped to ensure that policies are inclusively designed and their impact equitably distributed.

This should be done throughout the three key steps of inclusive planning.





CONTENTS

OVERVIEW OF INDICATOR GUIDANCE

5 steps to identifying priority indicators

1 Understand monitoring and evaluation for climate action

What is monitoring and evaluation (M&E)? Why use indicators in M&E? Why is this important in inclusive climate action?

2 Gather city data to set a baseline

Where should we begin in using data to measure and track our ICA journey?

3 Explore indicators across different city domains

What is the ICA Indicators Database? How does it work? How can our city use this tool in our ICA work?

4 Prioritise indicators for inclusive climate action

What are the most important indicators? How do these indicators relate to inclusive climate action?

5 Set city specific targets to track progress

How should our city set goals and targets? How can we use indicators to measure and track our ICA journey?

Each step will begin with an exploration of 3 key considerations

Why?

Why should your city include this step?

How?

How could your city carry out this step?

What is the outcome?

What might your city expect to gain after completing this step?

01

MONITORING AND EVALUATION

What is monitoring and evaluation (M&E)? Why use indicators in M&E? Why is this important in inclusive climate action?

Key Considerations: Monitoring and Evaluation

Why?

In this introduction to monitoring and evaluation (M&E)
we will define terms, explore challenges, and link to related resources.

How?

We will then discuss the ways your city can use M&E data and indicators.

What is the outcome?

With this foundational knowledge your city will be ready to measure and track your ICA journey using robust targets and indicators.

Defining Terms

TOP TIP

Dive Deeper

For more resources on this topic, see the C40's MER Framework.

Monitor	Evaluate	Report
The systematic collection of data on specified indicators to provide data on the extent of progress.	*Understanding changes identified over time along the indicators chosen and against the baseline.*	*A method of presenting the data and analysis to stakeholders for information or knowledge sharing.*

Objectives of monitoring, evaluation and reporting

FACILITATING LEARNING ACROSS CITIES

- Developing an MER provides a platform for knowledge exchange for cities to learn about actions and their results and if they are effective
- This can be within the city or between different cities or bringing together lessons learned from around the world

ENCOURAGING PARTICIPATION AND ENGAGEMENT

- MER encourages engagement with other city departments and key actors
- In doing so it promotes inclusive climate action as different departments, private and public actors often become involved

MAKING THE CASE FOR CLIMATE ACTIONS

- Demonstrate the end-benefits of climate action
- Communicate on results
- Obtain public and political buy-in from relevant and stakeholders

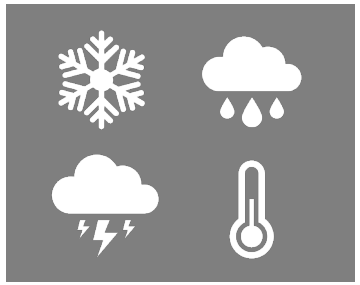
ENHANCING TRANSPARENCY AND ACCOUNTABILITY

- MER means monitoring the use of city resources, both in implementing the action and evaluating the impact
- It allows stakeholders (different departments) to communicate on what has been achieved
- Hold the city accountable towards citizens and stakeholders – often citizens want to know what the city is doing to allow them to prosper, keep them safe and more. MER can allow for this

IMPROVE THE DECISION-MAKING PROCESS

- Identifying successful climate action approaches – reporting and evaluating actions can allow decision making and prioritisation of the most effective actions
- Collecting lessons learned to make informed decisions
- Contribute to building an evidence base

Challenges of M&E



Uncertainty and temporal scope

- Climate hazards are unpredictable, also there aren't many local level projections available
- There can be mismatch between the time span of climate change as a long-term process, compared to the much shorter time-span of programme management cycles

Diversity of actions

- Climate actions have great diversity, as climate change can impact nearly all or most parts of society in a different ways
- City departments and other actors (private sector or residents) might also implement actions that influence climatic risks, knowingly or unknowingly
- The city department responsible for the plan may or may not be aware of these actions

No single metric

- Inclusive climate (adaptation or mitigation) actions cannon be measured with a single metric
- Each action has its own specific outputs and outcomes which require tailored indicators

Unpacking intervention logic

TOP TIP

Remember

The output-outcome-impact relation is rarely linear & is rarely direct (i.e. outcomes and impacts are often also influenced by external factors that are (1) sometimes within our control if we are aware of them (2) sometime out of our control even if we are aware of them and (3) sometimes out of our control and we are not aware of them.

ACTIONS	OUTPUTS	OUTCOMES	IMPACTS	DISTRIBUTION
Any policy, programme, or investment initiated by urban public officials with the intention to provide some contribution to climate adaptation.	What an action produces, such as a provided service, facility, infrastructure, or a financial tool. It should be under the direct control of the project	The change generated by the output. It is necessary for the intended impact to occur and is generally not under direct control of the project/intervention.	The change generated by the outcome. It is necessary for the intended impact to occur and is generally not under direct control of the project/ intervention.	The distribution of impacts generated by the outcome. The impact is rarely equally distributed across a city. The same action might positively impact some groups and negatively impact others.

Actions and intervention logic

Disaggregate **TOP TIP**

Throughout this process, cities should consider the disaggregation of the information they gather. Find out more on disaggregated data in the next chapter!

ACTIONS	OUTPUTS	OUTCOMES	IMPACTS	DISTRIBUTION
Action 11 Green Infrastructure	Equitable distribution of green infrastructure by spatial need Indicator: Percent of citizens within a 5 min walk of a park.	Less flooding, more controlled microclimates, for impacted groups / frontline Indicator: Number of flooding instances by neighborhood	Improved health and well being Indicator: # mortality,,,	Improved accessibility for people with disabilities to services within flood-prone neighbourhoods

Remember **TOP TIP**

Sometimes the issue is not the frequency of the hazard but rather the time it takes to recover from this hazard.

e.g. How long it takes for the flood waters to be absorbed in the flooded neighborhoods.

Health Check

☐	We know the definitions of monitoring, evaluation, and reporting.
☐	We understand the use of indicators in M&E.
☐	We are familiar with the challenges of monitoring, evaluation, and reporting.
☐	We are prepared to plan for gathering data.

Not quite ready? **Return to Overview of monitoring and evaluation**

02

ESTABLISH A BASELINE

Where should we begin in using data to measure and track our ICA journey?

Key considerations: Establish a baseline

Why?

By examining pre-existing data city officials can get a high-level picture of the city and its people.

How?

Identify the existing data that we can work with, identify our capacity to collect and manage information about our city. The indicators database suggests a number of sources for baseline city data that we might find helpful.

What is the outcome?

Once baselines are known, city leaders can set adequate targets and align indicators to existing data sources.

Quantitative

Performance Data

Statistics

Official databases

Qualitative

Observations

Interviews

Focus Groups

Panel Surveys

Household Surveys

Disaggregated data

Is crucial for leaving no one behind.

Disaggregation includes breaking down data by:

- *Gender*
- *Age*
- *Ethnicity*
- *Disability*

...and more

Key ICA terms and icons

Inclusivity Focus	Icon	Impacted Group	Definition
Income level		Low-income communities	Grouping or thresholds connected to earnings of labor and/or capital. Categories typically are defined related to the local/national economy.
Migrant status		Migrants	Refers to the legal and immigration status of a person who changes their place of residence. Categories include locals, expatriates, documented or undocumented migrants, refugees and asylum seekers.
Gender		e.g. Women	The socially constructed characteristics of women and men – such as norms, roles and relationships of and between groups of women and men. Categories typically include lesbian, gay, bisexual, transsexual and intersex, and traditional biological sex categories of male and female.
Race and ethnicity		Racial and ethnic minorities	Race is defined as a category of humankind that shares certain distinctive physical traits. The term ethnicity is more broadly defined as large groups of people classed according to common racial, national, tribal, religious, linguistic, or cultural origin or background.
Religion		Religious minorities	Religious or spiritual belief of preference, regardless of whether or not this belief is represented by an organized group, or affiliation with an organized group having specific religious or spiritual tenets.
Informality status		Informal communities (residents, workers)	Relationship of individuals, households, activities or firms to the formal or informal economy, typically with respect to production, employment, consumption, housing or other services.
Disability		People with disabilities	Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.
Age		Elderly, Youth, Children	Chronological grouping based on years lived
Working conditions		Outdoor workers, temporary workers, workers in transitioning industries	Working conditions cover a broad range of topics and issues, from working time (hours of work, rest periods, and work schedules) to remuneration, as well as the physical conditions and mental demands that exist in the workplace and job stress for workers in transitioning industries (e.g. fossil fuels)

Guide to the ICA Indicators Database

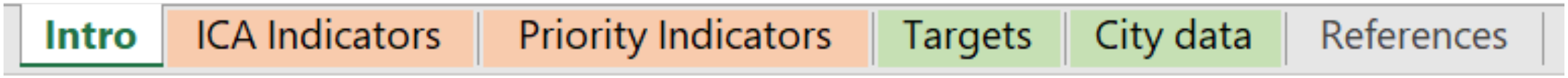
TOOLS IN ACTION

This database can help the city identify priority indicators useful for monitoring and evaluating Inclusive Climate Action. The Database will be helpful to understand and carry out each step of this guidance.

Below you can see the different components of the ICA Indicator Database. The guidance will refer to these components at each stage in order to facilitate exploring, identifying and prioratising ICA indicators.

a subset of approximately 50 priority indicators frequently used by cities and most relevant to common climate actions

Resources and activities to help cities use these targets and indicators

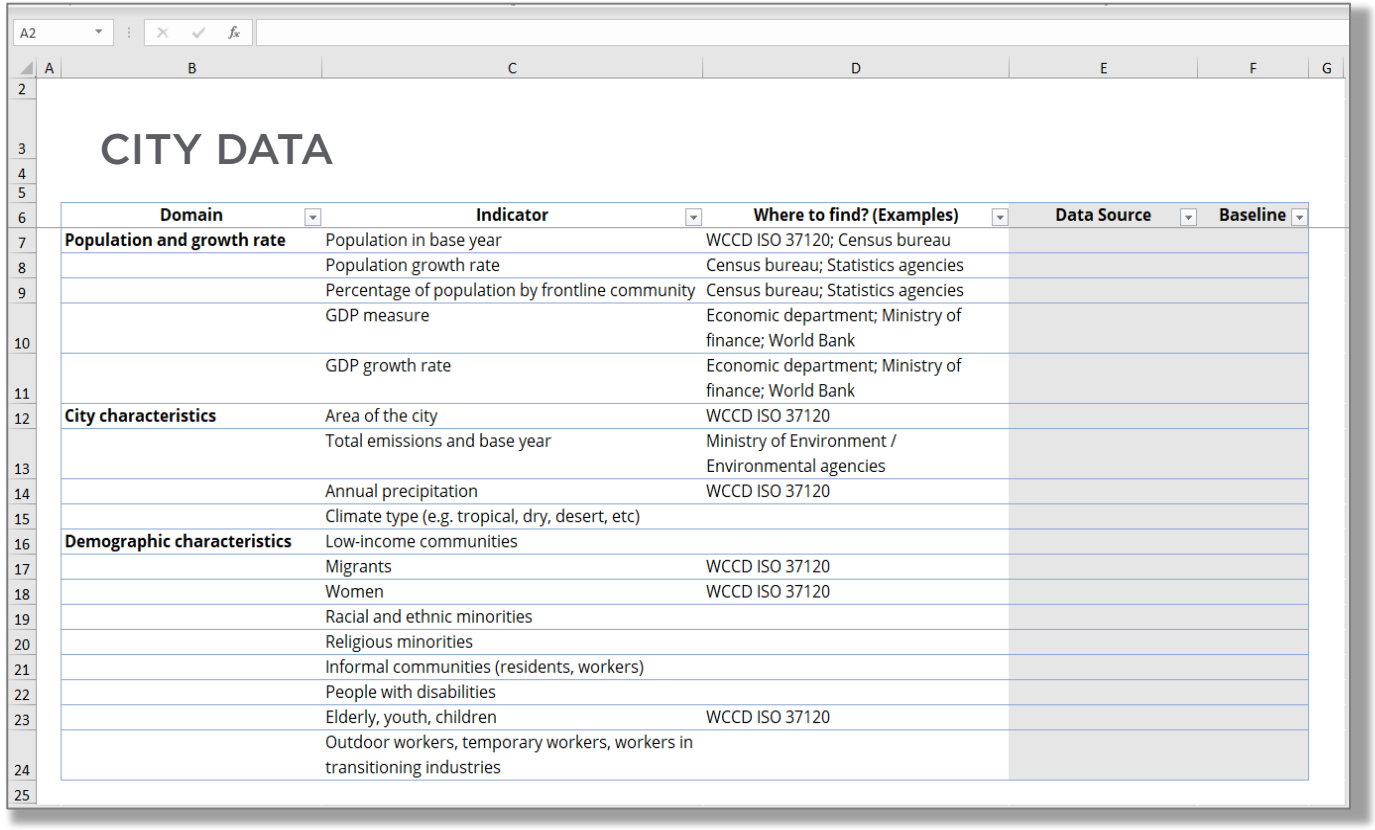


*A catalogue of over **150 indicators** frequently used in city and national-level datasets to track well-being, equity, and inclusivity*

City Data

TOOLS IN ACTION

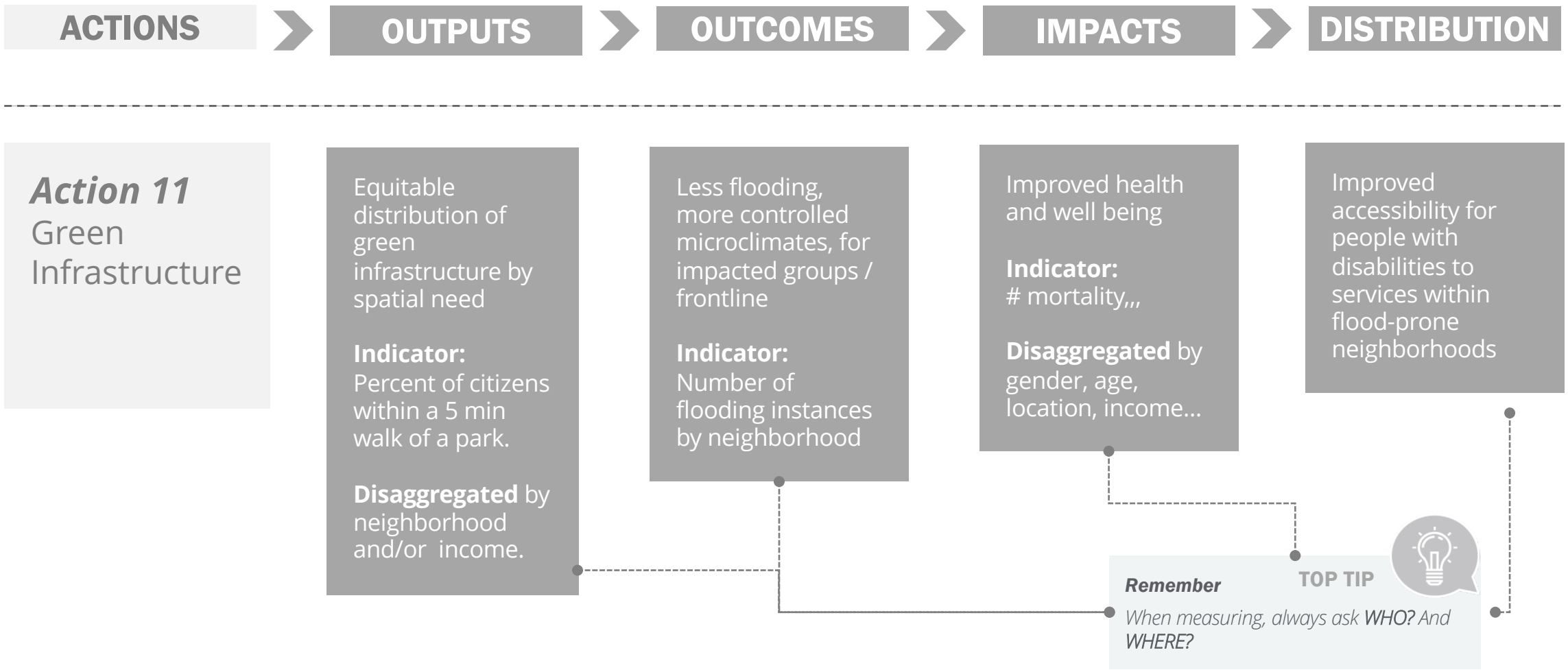
Refer to the City Data tab in the ICA Indicator Database to identify the type of data that you will need and already have to establish a baseline



CITY DATA

Domain	Indicator	Where to find? (Examples)	Data Source	Baseline
Population and growth rate	Population in base year	WCCD ISO 37120; Census bureau		
	Population growth rate	Census bureau; Statistics agencies		
	Percentage of population by frontline community	Census bureau; Statistics agencies		
	GDP measure	Economic department; Ministry of finance; World Bank		
	GDP growth rate	Economic department; Ministry of finance; World Bank		
City characteristics	Area of the city	WCCD ISO 37120		
	Total emissions and base year	Ministry of Environment / Environmental agencies		
	Annual precipitation	WCCD ISO 37120		
	Climate type (e.g. tropical, dry, desert, etc)			
Demographic characteristics	Low-income communities			
	Migrants	WCCD ISO 37120		
	Women	WCCD ISO 37120		
	Racial and ethnic minorities			
	Religious minorities			
	Informal communities (residents, workers)			
	People with disabilities			
	Elderly, youth, children	WCCD ISO 37120		
	Outdoor workers, temporary workers, workers in transitioning industries			

Actions and intervention logic: Disaggregated data



A FOCUS ON DISAGGREGATED DATA: AN EXAMPLE

The Division of Sustainability and Resilience in the Department of City Planning undertook the Pittsburgh Equity Indicators effort to measure progress towards selected objectives of the OnePGH Resilience Strategy, specifically seeking to measure inequity across the city in these priority areas.

The Equity Indicators represent the first step in a planned larger evaluation effort that will help the city measure its resilience and wellbeing and track its progress over time, inform current and future planning efforts, and support better communication and engagement with city residents.

Source: https://apps.pittsburghpa.gov/redtail/images/3171_PGH_Equity_Indicators_Final.pdf

TOP TIP

More examples

You can find more indicator frameworks in the ICA Indicator Database: References (tab).

Table 1. Equity Indicators framework for Pittsburgh

Theme	Topic	#	Indicator name	Ratio
Health, Food, and Safety	Access and prevention	1	Lack of health insurance	Black-to-white
		2	Access to primary care facilities	White-to-black
		3	Supplemental Nutrition Assistance Program (SNAP) participation	Black-to-white
		4	Very low food security	Black-to-white
	Health status and outcomes	5	Heart attack hospitalizations	Black-to-white
		6	Opioid overdose deaths	Low-to-high income
		7	Diabetes	Low-to-high income
		8	Hypertension	Low-to-high income
	Childhood health and wellbeing	9	Infant mortality	Black-to-white
		10	Low birth weight	Black-to-white
		11	Asthma hospitalization rates	Black-to-white
		12	Association with the child welfare system	Black-to-white
	Policing and criminal justice	13	Arrests	Black-to-white
		14	Use of force	N/A
		15	Currently incarcerated population	Black-to-white
		16	Multiple incarcerations	Black-to-white
	Public safety	17	Domestic violence	Black-to-white
		18	Homicides	Black-to-white
		19	Property crime	Black-to-white
		20	Traffic accidents involving bikes or pedestrians	Low-to-high income
Theme	**Topic**	**#**	**Indicator name**	**Ratio**
Housing, Transportation, Infrastructure, and Environment	Housing affordability and stability	41	Home loan denials	Black-to-white
		42	Home ownership	High-to-low income
		43	Housing cost burden for renters	Low-to-high income
		44	Homelessness	Black-to-white
	Infrastructure quality and investment	45	Housing stock with conditions	Rent-to-own
		46	Properties with tax delinquency	Black-to-white
		47	Capital budget projects by location	White-to-black
		48	Index of distress	Black-to-white
	Neighborhood composition and opportunity	49	Market strength	White-to-black
		50	Parcels in poor or worse condition	Black-to-white
		51	Community Development Block Grant (CDBG) areas	Black-to-White
		52	Racial segregation index	N/A
	Transportation	53	Commute time	Black-to-white
		54	Lack of access to a high-frequency transit network	Black-to-white
		55	Use of a car	White-to-black
		56	Walkability	White-to-black
	Environment and sustainability	57	Utilities burden	Black-to-white
		58	Air quality	Black-to-white
		59	Access to green space	White-to-black
		60	Blood lead levels	Black-to-white

AN EQUITY LENS

When it comes to climate action how is access to services, policies distributed among different groups?

ACCESS AND AVAILABILITY

Understanding of root causes for marginalization (or social exclusion) and lack/absence of access for certain groups in the city and designing climate actions in a way that addresses these.

PROSPERITY AND AFFORDABILITY

Understanding key challenges around economic mobility and affordability for frontline communities and impacted groups

SPATIAL INCLUSION AND PLACE

Understanding the importance of considering actions spatially and addressing spatial inequalities in the city.

PLACE

TOP TIP

Accurate spatial data is often very useful in understanding distribution within and around cities.

Spatial data can help highlight hotspots for frontline communities and impacted groups and reveal particular climate inequities. It can also help us predict future climate risks and who will be most impacted.

Spatial data is therefore crucial for building a baseline for understanding inclusion in the city.

Health Check

- [ ] We know where to find relevant city data.
- [ ] We understand how city data can help establish targets.
- [ ] We have evaluated our capacity to gather city data.
- [ ] We understand the meaning and value of disaggregated and spatial data for achieving inclusive climate actions in our city.

Not quite ready? **Return to Gather city data to set a baseline**

03

EXPLORE INDICATORS FOR CITY DOMAINS

What is the ICA Indicators Database? How does it work? How can our city use this tool in our ICA work?

Key considerations: Explore indicators for city domains

Why?

To highlight key inclusivity and equity challenges and provide a quantitative and qualitative means for tracking well-being over time as it relates to these challenges.

How?

Define key terms and learn how the ICA Indicators Database works through demonstration and activities.

What is the outcome?

Understand how the ICA Indicators Database can be a resource to your city in climate action planning.

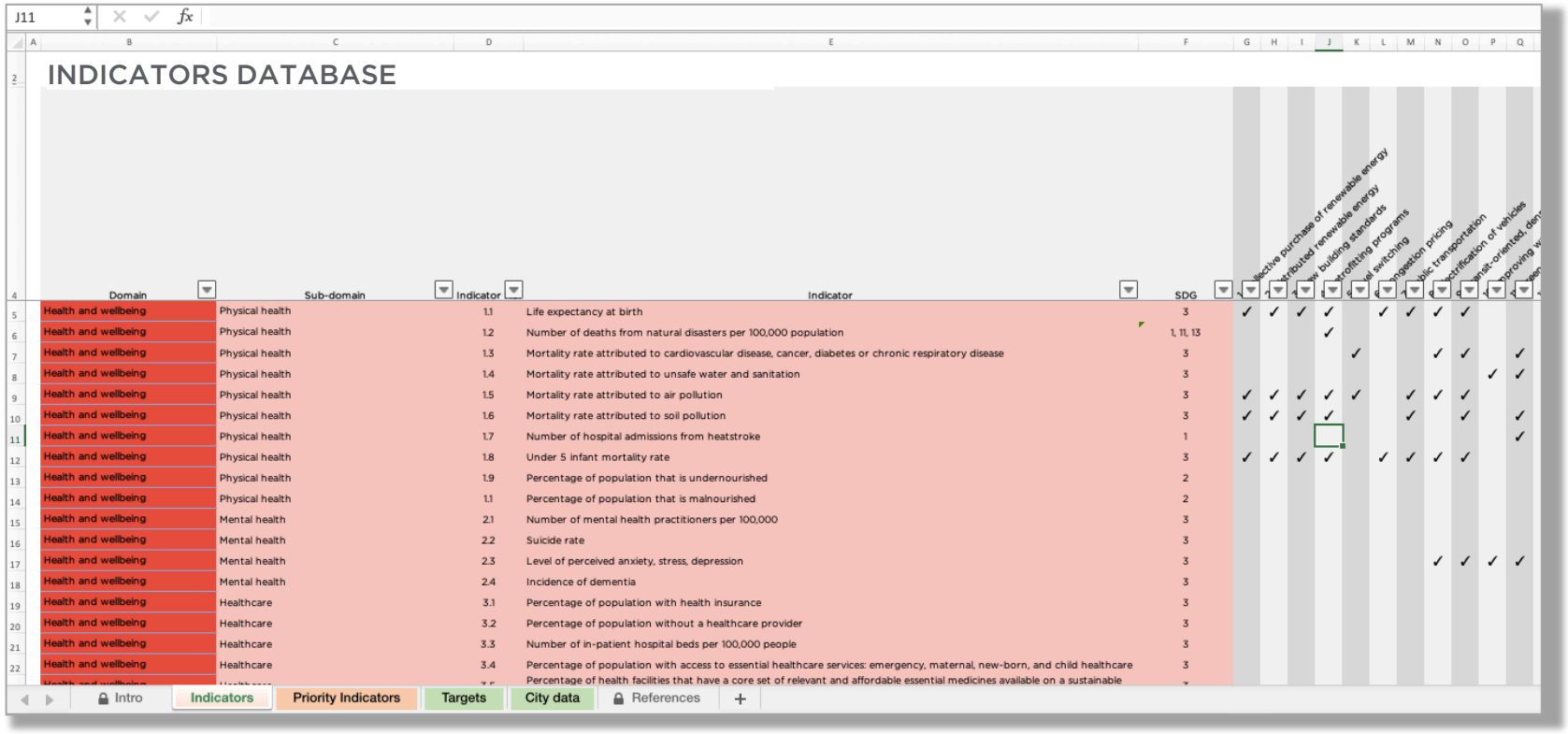
ICA Domains and sub-domains

Domain	*Sub-domain*
Health and wellbeing	*Physical health, mental health, healthcare, work-life balance, peace and security*
Planet	*Air quality, water quality, soil quality, green infrastructure, environmental awareness*
Education and skills	*Education attainment, training and green jobs, education quality*
Economic prosperity	*Employment, economic innovation, income and poverty, prosperity*
Essential public services	*Energy, housing, solid waste, transportation, water and sanitation*
Civil society	*Neighborhood and community involvement, non-governmental organizations, technology and communication*
Institutions and governance	*Voter participation and representation, good governance mechanisms, crime and justice, land management*

Indicator Database

TOOLS IN ACTION

There are over 150 indicators in the database for you to chose from



INDICATORS DATABASE

Domain	Sub-domain	Indicator	Indicator	SDG	Collective purchase of renewable energy	Distributed renewable energy	New building standards	Retrofitting programs	Fuel switching	Congestion pricing	Public transportation	Electrification of vehicles	Transit-oriented dem	Improving w
Health and wellbeing	Physical health	1.1	Life expectancy at birth	3	✓	✓	✓	✓		✓	✓	✓	✓	
Health and wellbeing	Physical health	1.2	Number of deaths from natural disasters per 100,000 population	1, 11, 13				✓						
Health and wellbeing	Physical health	1.3	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	3					✓		✓	✓		✓
Health and wellbeing	Physical health	1.4	Mortality rate attributed to unsafe water and sanitation	3									✓	✓
Health and wellbeing	Physical health	1.5	Mortality rate attributed to air pollution	3	✓	✓	✓	✓	✓		✓	✓		
Health and wellbeing	Physical health	1.6	Mortality rate attributed to soil pollution	3	✓	✓	✓	✓			✓			✓
Health and wellbeing	Physical health	1.7	Number of hospital admissions from heatstroke	1										✓
Health and wellbeing	Physical health	1.8	Under 5 infant mortality rate	3	✓	✓	✓	✓		✓	✓	✓		
Health and wellbeing	Physical health	1.9	Percentage of population that is undernourished	2										
Health and wellbeing	Physical health	1.1	Percentage of population that is malnourished	2										
Health and wellbeing	Mental health	2.1	Number of mental health practitioners per 100,000	3										
Health and wellbeing	Mental health	2.2	Suicide rate	3										
Health and wellbeing	Mental health	2.3	Level of perceived anxiety, stress, depression	3							✓	✓	✓	✓
Health and wellbeing	Mental health	2.4	Incidence of dementia	3										
Health and wellbeing	Healthcare	3.1	Percentage of population with health insurance	3										
Health and wellbeing	Healthcare	3.2	Percentage of population without a healthcare provider	3										
Health and wellbeing	Healthcare	3.3	Number of in-patient hospital beds per 100,000 people	3										
Health and wellbeing	Healthcare	3.4	Percentage of population with access to essential healthcare services: emergency, maternal, new-born, and child healthcare	3										
			Percentage of health facilities that have a core set of relevant and affordable essential medicines available on a sustainable											

Intro | Indicators | Priority Indicators | Targets | City data | References

EXPLORE INDICATORS FOR CITY DOMAINS

ICA Diagnosis Wheel

TOOLS IN ACTION

City Selfie OR Actions Analysis

You can use this wheel to develop an ICA diagnosis on either your city (city selfie) OR your climate action (actions analysis) – see other inclusive planning modules. Start by placing your city or action at the centre of the wheel.

Sustainability Domains

This ring is about the key domains that make cities thrive. Look at your city using these domains as lenses, for example, how does your city look through the 'essential public services' lens?

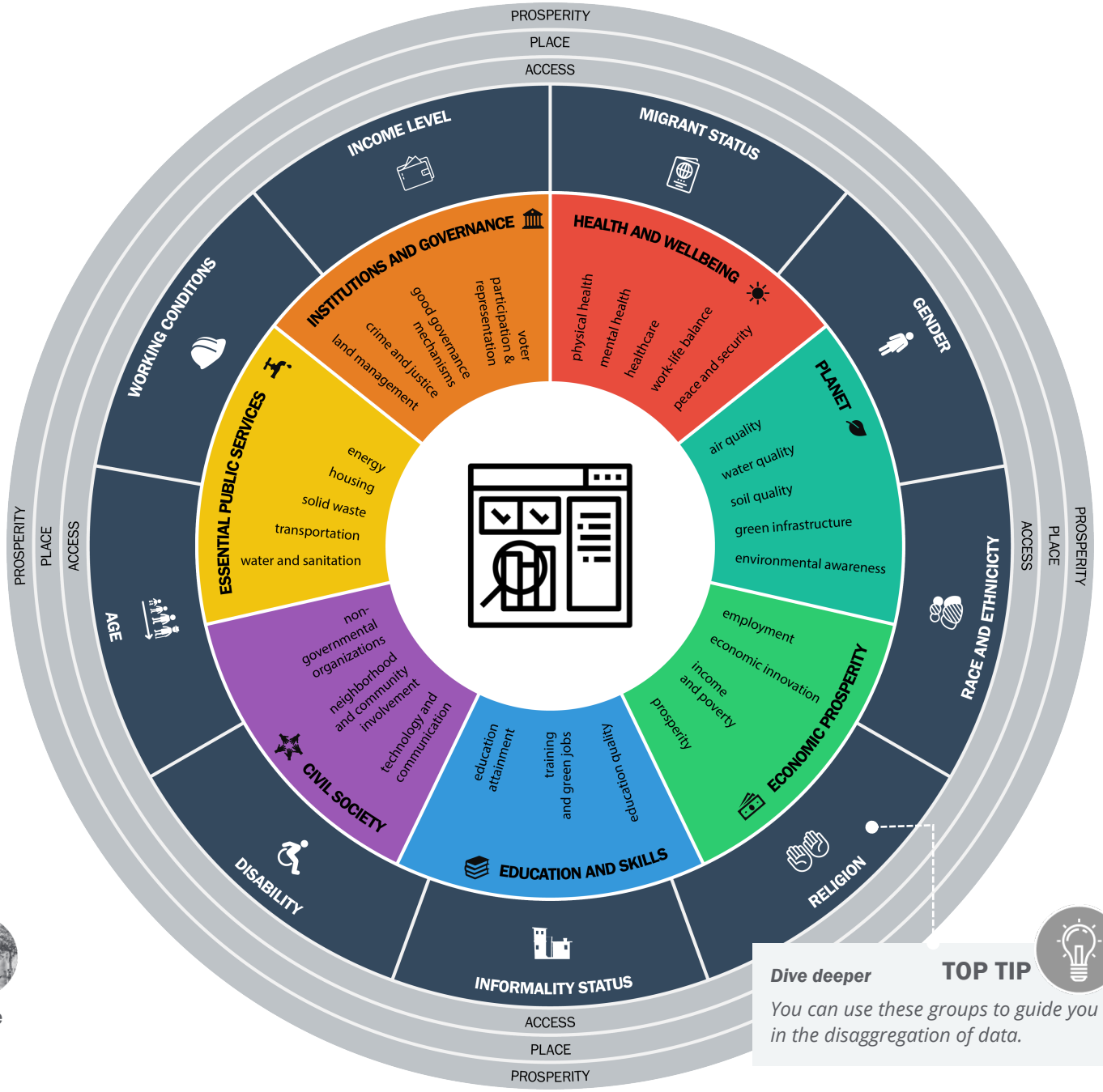
Impacted groups

Use this third ring to look through the lens representing each of the impacted groups relevant for your city. How is the city doing in relation to these groups (e.g. migrants)? What are the strengths and threats that these groups face in your city?

An equity lens

The last three rings of this wheel refer to the three key aspects that define equity: access, place and prosperity

Access Prosperity Place



Dive deeper

TOP TIP

You can use these groups to guide you in the disaggregation of data.

A FOCUS ON
CITY SELF-EVALUATION » BARRIERS TO DATA COLLECTION

Sustainability issue or Domain *(with Subdomains)*	To what extent are you gathering data to track progress on this issue? *(Place the slider.)*	What is the form of this data? Provide indicator examples and mention if spatial or not	What are the barriers to collecting these data?	How might you address these barriers and what proxy data could be used?
Health and wellbeing *(physical health, mental health, healthcare, work-life balance, peace and security)*	100% 50% 0%			
Planet *(air quality, water quality, soil quality, green infrastructure, environmental awareness)*	100% 50% 0%			
Education and skills *(education attainment, training and green jobs, education quality)*	100% 50% 0%			
Economic prosperity *(employment, economic innovation, income and poverty, prosperity)*	100% 50% 0%			
Essential public services *(energy, housing, solid waste, transportation, water and sanitation)*	100% 50% 0%			
Civil society *(neighborhood and community involvement, non-governmental organizations, technology and communication)*	100% 50% 0%			
Institutions and governance *(voter participation/ and representation, good governance mechanisms, land management, crime and justice)*	100% 50% 0%			

Health Check

- [ ] We know the definitions of “inclusivity” and “equity.”
- [ ] We understand key ICA terms like “impact,” “frontline communities,” and “impacted groups.”
- [ ] We know how the indicators database works and are familiar with the 135+ individual indicators.
- [ ] We understand how the Indicators Database can be used to track actions related to impacted groups.
- [ ] We can identify sources of data and barriers to data collection in our city.

Not quite ready? **Return to Explore Indicators for City Domains**

04

PRIORITIZE INDICATORS FOR CLIMATE ACTION

What are the most important indicators? How do these indicators relate to inclusive climate action?

Key considerations: Prioritize indicators for climate action

Why?

To assess and highlight key equity and inclusivity aspects of each action with a focus on the impact on frontline communities.

How?

Use the 17 Actions to find indicators that are most useful for your city.

What is the outcome?

Filled in ICA actions analysis spreadsheet – list of ICA action specific indicators for a minimum of 10 actions.

A FOCUS ON
INDICATOR DEVELOPMENT APPROACH

Global Indicators (Top-down analysis)

- *Conducted a comprehensive **literature review** of global equity, inclusivity and well-being indicator sets.*
- *Reviewed over 50 global indicator sets and identified **8 priority indicator sets** based on relevance for city context and strength of underlying methodology.*
- *Identified most common and applicable **domains**, sub-domains, and high-level indicators to develop final indicators.*
- *All indicators are also mapped to the Sustainable Development Goals.*

Action Specific Indicators (Bottom-up analysis)

- *Identified **17 high impact priority climate adaptation and mitigation actions***
- *Conducted literature review to define each action and its relevant indicators.*
- *Defined **5-10 relevant indicators per action** and mapped these across the applicable domains and sub-domains.*
- *For each action provided example indicators and targets used and set by other cities in their city and climate plans.*

Priority Indicators (Combined approach)

- *Linked Climate Action indicators with the global indicators (both direct linkages and co-benefit and indirect linkages) to identify which indicators are most frequently used by or connected to Action Indicators.*
- *Identified **top ~50 indicators** most frequently used by 8 indicator sets and the 17 climate actions (separately and combined) to finalise a set of recommended"priority" indicators.*

A FOCUS ON
INDICATOR GUIDANCE FOR 17 CLIMATE MITIGATION AND ADAPTATION ACTIONS

TOP TIP

Dive deeper

For more resources on this please use this resource in conjunction with indicators and guidance from ***"Policy Recommendations summaries"***

No.	CLIMATE ACTION
1	Collective Purchase of Renewable Energy
2	Distributed Renewable Energy
3	New building standards, codes and regulations for energy and water conservation
4	Retrofitting programmes that improve both building efficiency and resiliency
5	Fuel switching, away from dirty fuels used for cooking and heating
6	Congestion pricing and Low Emissions Zones (LEZ)
7	Expansion or Improvement of Public Transportation Options
8	Electrification of vehicles, with focus on public transport and shared vehicles
9	Pursue transit-oriented, dense, and mixed-use development (TOD)
10	Improving waste management through segregation, recycling, and composting
11	Green infrastructure to manage flooding and for microclimate control
12	Water management techniques
13	Improving conditions in informal settlements for increased climate resilience
14	Improvement of emergency management and early warning systems
15	Climate resilient land use planning and infrastructure development
16	Sustainable Diets through Public Procurement
17	Expanding Walking and Cycling Options and Last-Mile Access to Transit Stations

Action specific indicator examples

2

DISTRIBUTED RENEWABLE ENERGY

Percentage of population participating in RE training programmes and jobs (e.g. by income level, gender, age, race/ethnicity, migrant status)

6

CONGESTION PRICING AND LOW EMISSIONS ZONES (LEZ)

Number of jobs accessible by public transit inside and outside the congestion zone or LEZ (e.g. by income group, disability status, gender, etc.)

11

GREEN INFRASTRUCTURE TO MANAGE FLOODING AND FOR MICROCLIMATE CONTROL

Percentage of residents within 5-minute walk to a park (e.g. by income level, race/ethnicity, migrant status, informality status, age)

13

IMPROVING CONDITIONS IN INFORMAL SETTLEMENTS FOR INCREASED CLIMATE RESILIENCE

Percentage of city population in informal settlements (e.g. by age, gender, ethnicity, etc.)

14

IMPROVEMENT OF EMERGENCY MANAGEMENT AND EARLY WARNING SYSTEMS

Number of lives saved through early warning systems (e.g. by age, race/ethnicity, migrant status, informality status)

17

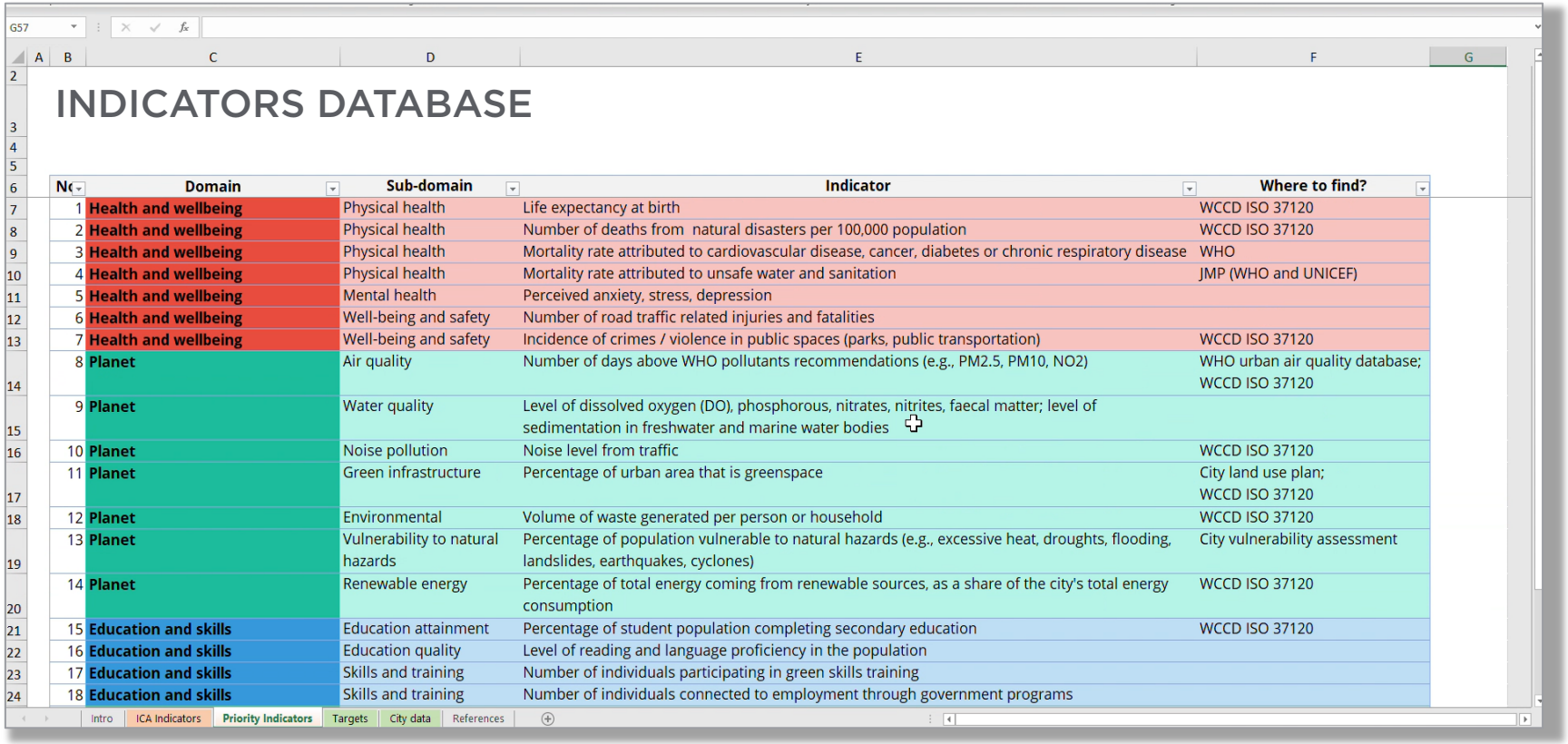
EXPANDING WALKING AND CYCLING OPTIONS AND LAST-MILE ACCESS TO TRANSIT STATIONS

Percentage of population with access to opportunities (e.g. jobs or other services) within 30-60 minutes through walking and cycling (e.g. by income groups, gender, age, etc.)

Guide to the ICA Indicators Database

TOOLS IN ACTION

The database has 50 categorised priority indicators that you can chose from when you prioratise your indicators for inclusive climate action



INDICATORS DATABASE

No	Domain	Sub-domain	Indicator	Where to find?
1	Health and wellbeing	Physical health	Life expectancy at birth	WCCD ISO 37120
2	Health and wellbeing	Physical health	Number of deaths from natural disasters per 100,000 population	WCCD ISO 37120
3	Health and wellbeing	Physical health	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	WHO
4	Health and wellbeing	Physical health	Mortality rate attributed to unsafe water and sanitation	JMP (WHO and UNICEF)
5	Health and wellbeing	Mental health	Perceived anxiety, stress, depression	
6	Health and wellbeing	Well-being and safety	Number of road traffic related injuries and fatalities	
7	Health and wellbeing	Well-being and safety	Incidence of crimes / violence in public spaces (parks, public transportation)	WCCD ISO 37120
8	Planet	Air quality	Number of days above WHO pollutants recommendations (e.g., PM2.5, PM10, NO2)	WHO urban air quality database; WCCD ISO 37120
9	Planet	Water quality	Level of dissolved oxygen (DO), phosphorous, nitrates, nitrites, faecal matter; level of sedimentation in freshwater and marine water bodies	
10	Planet	Noise pollution	Noise level from traffic	WCCD ISO 37120
11	Planet	Green infrastructure	Percentage of urban area that is greenspace	City land use plan; WCCD ISO 37120
12	Planet	Environmental	Volume of waste generated per person or household	WCCD ISO 37120
13	Planet	Vulnerability to natural hazards	Percentage of population vulnerable to natural hazards (e.g., excessive heat, droughts, flooding, landslides, earthquakes, cyclones)	City vulnerability assessment
14	Planet	Renewable energy	Percentage of total energy coming from renewable sources, as a share of the city's total energy consumption	WCCD ISO 37120
15	Education and skills	Education attainment	Percentage of student population completing secondary education	WCCD ISO 37120
16	Education and skills	Education quality	Level of reading and language proficiency in the population	
17	Education and skills	Skills and training	Number of individuals participating in green skills training	
18	Education and skills	Skills and training	Number of individuals connected to employment through government programs	

Intro | ICA Indicators | Priority Indicators | Targets | City data | References

A FOCUS ON
DIDN'T SEE YOUR ACTION OR INDICATOR ON THE LIST?

HERE'S HOW YOU CAN SELECT THE MOST RELEVANT INDICATORS:

- For city's priority indicators, it is ideal to ensure all domains and sub-domains are reflected.
- The priority indicators are a good starting point, but ultimately, indicators should reflect the city's need and context.

Keep indicators SMART:

- Specific
- Measurable
- Achievable / Attributable
- Relevant
- Timely

TOP TIP

Dive deeper

For more resources on SMART indicators see the World Bank's Performance Indicators Guidance here.

A FOCUS ON PRIORITIZING INDICATORS

TOP TIP

Dive deeper

For more resources on this topic, see the Actions Analysis database

Action	Benefits	Relevant Indicator(s)	Inclusivity Focus	How to disaggregate indicators for inclusivity?
Distributed renewables	*Job training, increased green jobs*	*Number of green jobs created since baseline year*	*Women may face more barriers in the green/tech job market*	*Disaggregate green/tech jobs data by gender*

Health Check

- [ ] We are familiar with the 17 Inclusive Climate Actions
- [ ] We understand how these actions are referenced in the indicators database.
- [ ] We see how to nuance indicators by disaggregating data.
- [ ] We are prepared to develop our own city-specific indicators.

Not quite ready? **Return to Prioritize Indicators for Climate Action**

05

SET CITY-SPECIFIC TARGETS AND TRACK WITH RELEVANT INDICATORS

How should our city set goals and targets?
How can we use indicators to measure
and track our ICA journey?

Key considerations: City-specific targets

Why?

Achieve city climate goals through specific, quantitative targets.

How?

Select targets that align with climate actions and indicators.

What is the outcome?

Measuring and tracking your ICA journey is essential on the path to sustainable cities.

Policy design and recommendations

2

DISTRIBUTED RENEWABLE ENERGY

Achieve 2 GW of solar PV installations by 2050

London, United Kingdom

6

CONGESTION PRICING AND LOW EMISSIONS ZONES (LEZ)

Decrease drive alone commute trips by 50% by 2030

Pittsburgh, USA

11

GREEN INFRASTRUCTURE TO MANAGE FLOODING AND FOR MICROCLIMATE CONTROL

Achieve 1m² of greenery per resident by 2030, equivalent to 160 hectares of new green spaces

Barcelona, Spain

13

IMPROVING CONDITIONS IN INFORMAL SETTLEMENTS FOR INCREASED CLIMATE RESILIENCE

Comprehensive sewerage system will cover 99% of the city's territory by 2040

Quito, Ecuador

14

IMPROVEMENT OF EMERGENCY MANAGEMENT AND EARLY WARNING SYSTEMS

Have a total of 12 million residents participate in disaster drills

Tokyo, Japan

17

EXPANDING WALKING AND CYCLING OPTIONS AND LAST-MILE ACCESS TO TRANSIT STATIONS

Increase bicycle mode share from 3.5% to 8-10% between 2013 and 2018 and walking mode share from 17.5% to 21%

San Francisco, USA

A FOCUS ON
TARGETS WORKSHEET

This is an exercise workbook for cities to record which data they are collecting and how this information is being used to formulate and measure progress towards targets for inclusive and equitable climate action.

Key city-wide political ambitions and targets	Description of goal	ICA indicators used to measure progress	Status	Source/link to document

Health Check

- [ ] We know the importance of setting quantitative city-specific targets.
- [ ] We understand how actions, indicators, and targets work together to increase climate resilience in our city.
- [ ] We know where to go to find more examples of indicators.
- [ ] We have a list of city priorities and goals and have created targets to measure and track relevant indicators.

Not quite ready? **Return to Set City-specific Targets and Track with Relevant Indicators**


C40
CITIES