GLOBAL COVENANT of MAYORS for CLIMATE & ENERGY

URBAN ENERGY ACCESS TOOLKIT

FOR LOCAL GOVERNMENTS

At COP27, the Global Covenant of Mayors (GCoM) launched the new Energy Access and Poverty Pillar (EAPP) of its *Common Reporting Framework (CRF).* To support the understanding and data sharing in this pillar, GCoM published the report *Unlocking Urban Energy Access and Poverty* in 2023. This report included analyses of local context, barriers, powers, and solutions – to better understand how local governments could address energy access and poverty (EAP).

Through the research and engagement with Signatories, it was clear that the analysis was only the starting point to develop a vocabulary and practice around EAP. However, a further step was needed to effectively support local governments. This Urban Energy Access Toolkit for Local Governments was therefore conceptualised to provide a practical resource for local government staff. The Toolkit aims to enable local government staff and administrations to:

- Define the local energy poverty context and energy access challenges using community stories and quantitative data;
- Analyse the systemic barriers they experience in implementing EAP interventions; and
- Identify pathways to address EAP, such as available powers and influence, suitable interventions, relevant stakeholders, and potential benefits.

It is our hope that the outcomes and impacts of energy access solutions developed by local government staff – and sharing of best practices and GCoM's Energy Access and Poverty Pillar (EAPP) indicators – will enable individuals, households and communities to participate more in the economic, social and cultural life of their neighbourhoods.

The modules broadly provide support on EAP data collection consistent with the CRF, as well as defining and developing solutions to EAP. The format and content of the Toolkit, modules and tools are based on stakeholder engagement with signatory officials and the EAPP Subcommittee. Workshops were conducted to understand their key challenges and support needed, as well as to test modules with a range of local governments and contexts.

This Toolkit is created for the use of local government staff; who often lack the resources they need to advocate how EAP affects the citizens they serve, and the solutions to address this deprivation. The tools provided are to help you to start conversations in your own local government; to bring your stories, experiences and ideas together into a dynamic and living action roadmap.

Urban Energy Access Toolkit for local governments

The modules in this toolkit will help you build a comprehensive understanding of and plan for addressing Energy Access & Poverty (EAP) within your administrative area, in a way that considers wider benefits of action. Modules can be navigated sequentially or at random, depending on your interests, needs, and your current position.

Each local government is unique, where multiple and diverse departments and staff members may have a role in addressing EAP in your specific context.

This Toolkit is built for local government staff working in EAP, however the tools and guidance in this toolkit could also have value for wider stakeholders.

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Toolkit module orientation

The Toolkit starts with Module 1 on stakeholders – mapping where the relevant organisations are key to enable progress on specific energy access interventions or EAP action as a whole.

Modules 2 and 3 explore different types of data. They come together in module 4 to create your unique EAP baseline.

Modules 5 and 6 help you develop an understanding of the barriers you may face in addressing EAP, and what powers you have available to tackle these challenges.

Module 7 introduces the different interventions that could be used by local governments to tackle EAP. Of the interventions introduced in this module, you may select the most appropriate and relevant for you, building on your EAP learnings from Modules 1 to 6.

Finally, Module 8 brings together the previous seven modules to make a case for a specific EAP solution, whilst also highlighting its co-benefits.

The rest of this section presents a more detailed overview of each module.

Module overview

Module overview

Introduction

This toolkit begins by introducing what EAP is and defines its three pillars of secure, sustainable, and affordable energy.

It also details the EAP commitments and GCoM signatories' pledge to report under the Common Reporting Framework, by giving an overview and explanation of the Energy Access and Poverty Pillar (EAPP).

Introduction objectives

- Understand what the Common Reporting Framework is and how the EAP pillar fits in the CRF
- Understand what EAP is and its three key attributes
- Learn how to navigate the toolkit and use the health checks

Module 1 overview

Knowing our EAP stakeholders

Module 1 helps local governments understand key EAP stakeholders and how they enable the planning of interventions going forwards. In this module, we walk you through how Cape Town in South Africa used mapping and engagement of stakeholders to enable projects and solutions.

The tool in module 1 will guide you to identify who the key stakeholders are, and it will also help you to understand where there may be other stakeholders to consider, and their roles.

Module objectives

- Identify which national, regional, municipal and community partners are relevant
- Compare groups that are most involved against groups that should be given space to participate and lead interventions

Module 2 overview

Stories as data

Module 2 emphasises that real stories about communities, households and individuals are vital to developing a full picture of EAP in your local government's context. It explains how qualitative data about "lived experiences" are useful and necessary to define EAP, which can be iteratively refined and used to understand how quantitative data relates to what is happening on the ground.

The tool in this module enables you to identify and document the lived experiences of EAP that city staff and other stakeholders are most aware of in local communities. It suggests how these stories represent qualitative data for both the mandatory and the non-mandatory indicators of the EAPP.

Module objectives

- Brainstorm what community stories of "lived experiences" provide starting points to understand EAP in your local government area
- Note where stories indicate important contexts or solutions to be addressed in EAP interventions

Module 3 overview

Mapping available local data

Module 3 explores the importance of collecting and reporting the mandatory and non-mandatory global and regional indicators proposed by the EAPP. This module also discusses the important role of local governments as data owners, and how using data can help the local understanding of EAP. Finally, this module highlights how and why the definition of EAP is contextual and unique for each local government.

The tool in this module will help guide you on how to map what data you have, and how they align with the EAPP's indicators.

Module objectives

- Map what data is useful and crucial to understand, communicate and monitor EAP in your local government area
- Understand what quantitative data is and is not available to local governments, and action to collect data

Module 4 overview

Developing an EAP baseline

Module 4 brings the stories, quantitative data, and learning from modules 2 and 3 together – to help you consolidate these into an EAP baseline. The EAP baseline is unique and specific for each local government. It is the first step in enabling the planning of appropriate interventions and solutions for local governments.

The tool in this module will help you to formulate the EAP baseline for your context, based on the stories and quantitative data about EAP in your local government area.

Module objectives

- Draft a definition of EAP in your local government area that is easy to communicate and understand across a diversity of stakeholders

Module 5 overview

Understanding local barriers

Module 5 explores local governments' barriers to uncover the complexities they work within, as a starting point to map potential ways forward. This module highlights various categories of barriers to identify opportunities and innovative solutions. These solutions could be found within your administrations, or by collaborating with relevant community, private sector, regional and national stakeholders.

The tool in this module will guide you in identifying the barriers to EAP in your area, and recognise the relationships and interconnectedness between these barriers – including other issues and forms of deprivation in your contexts.

Module objectives

- Self-identify what are the key barriers experienced as local government staff in addressing energy poverty or improving energy access
- Discuss which of these barriers are obvious and tangible, due to gatekeeping by other actors, and/or narrative blocks around what is possible for residents and communities
- Discuss which barriers are interrelated within EAP, or other local issues and forms of deprivation

Module 6 overview

Maximising available city powers

Module 6 highlights the different asset types that related to EAP, where powers are held by your local government. By understanding where different levels of government, utilities, and wider stakeholders hold powers, this module helps local governments maximise available powers and influence to take effective and efficient action.

The tool in this module will enable you to define the unique powers within your context. Rather than framing powers as either “all or nothing”, this tool helps to unpack the nuance and complexity of local governments’ powers.

Module objectives

- Self-identify the EAP assets in which local governments have full, shared or no powers to influence policy and implement solutions
- Reflect and brainstorm how and where local governments have convening and advocacy powers

Module 7 overview

Designing EAP interventions

Module 7 outlines the five different categories of interventions local governments can employ to improve energy access and reduce energy poverty. This module also highlights the importance of understanding how these different interventions should consider the barriers and power structures a local government has.

The tool in Module 7 will help you to identify which interventions you could use. This includes understanding outcome horizons, the workload of stakeholder collaboration, and the degree of local government powers needed in most cases. It will also guide you in how to split your chosen interventions down into smaller, more actionable steps.

Module objectives

- Reflect on your local government's appetite for specific interventions based on time horizon, current capacity, and powers available
- Self-identify which interventions are prioritised and suitable for your local government and residents
- Detail interventions and break them down into smaller steps

Module 8 overview

Making the case for Energy Access

Module 8 brings together the previous seven modules to consolidate the available information and create momentum for action. The ability to consolidate this information is crucial to support effective and efficient advocacy, as well as planning and funding applications. Additionally, this module recommends synergies with other climate actions and co-benefits.

This tool provides a co-benefits matrix of the interventions outlined in module 6. It also provides a worksheet to bring together your understanding and knowledge from all the modules to make your case for EAP interventions in your context.

Module objectives

- Enable cities to make the case for a suite of interventions based on communities' lived experience

Introduction

Introduction

This module sets the scene on the importance of local governments in addressing energy access and poverty. This module also introduces what EAP is and defines its three pillars of secure, sustainable, and affordable energy. It will also establish what it means for GCoM signatories to pledge for EAP by giving an overview and explanation of the Common Reporting Framework (CRF).

Introduction objectives

- Understand what the Common Reporting Framework (CRF) is and how the EAP Pillar fits in the CRF
- Understand what EAP is and its three key attributes
- Learn how to navigate the toolkit and use the health checks

Other useful resources

- EU Commission's Energy Poverty Advisory Hub (EPAH) training course
- Theme report on energy access by the United Nations Technical Working Group on Energy Access

The potential of local governments

Local governments are central to improving energy access

Cities and local government work the closest to communities, households, and individuals who are experiencing energy poverty.

Local governments have a deep understanding of how people interact with energy suppliers, infrastructure, and tariffs in their operations and services. They can identify local expressions of energy poverty that arise from individuals' socioeconomic and cultural identities, contexts, and challenges.

Responding to local needs and priorities

With their ownership and understanding of data, and their closeness to local contexts, stories, and lived experiences, local governments are in a unique position to design innovative and effective energy access solutions.

By combining their vision with contextual data, they can create targeted interventions that address real-life challenges. This approach also presents an opportunity to co-produce knowledge, technical skills, and benefits for a diverse range of city stakeholders.

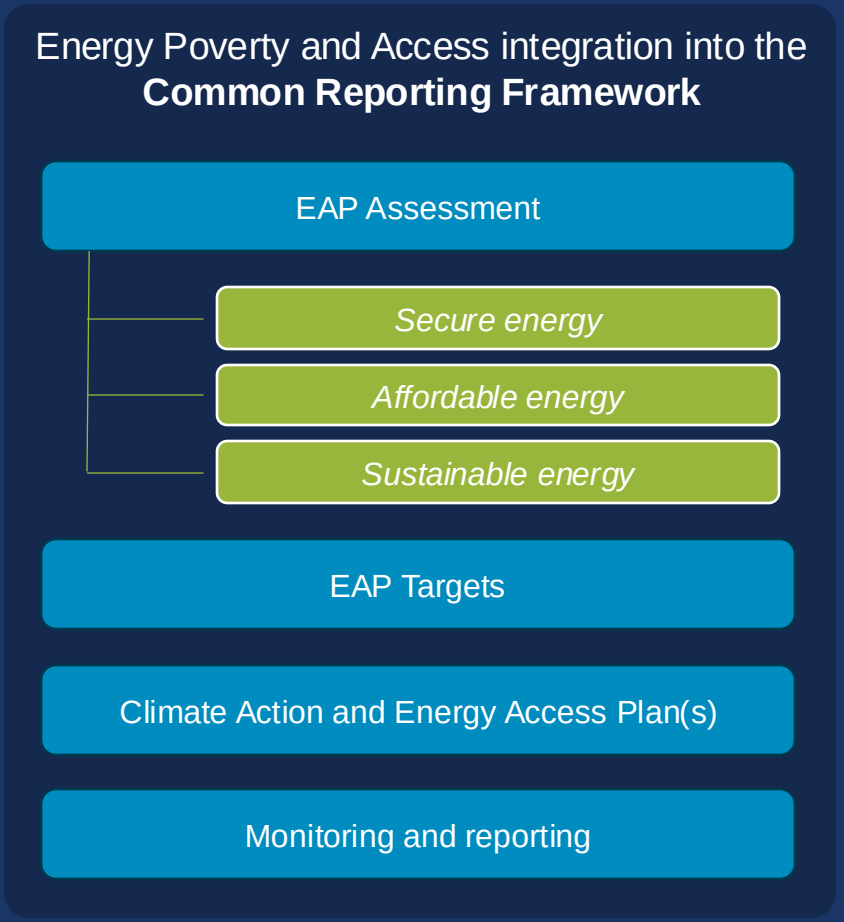
Finally, it balances the ownership of action, instead of solely relying on local governments' policies and infrastructure or individual energy consumption choices.

Common Reporting Framework (CRF)

GCoM's Common Reporting Framework (CRF) brings together local data, actions, and voices and raises the bar on a transparent, robust evidence base that amplifies the impact of local government climate action.

These recommendations streamline measurement and reporting procedures, ensure robust climate action planning, implementation and monitoring, and retain the flexibility needed to meet local and regional contexts.

Within the CRF, local governments prepare and submit an energy access and energy poverty assessment within two years after committing to the GCoM, considering the three attributes of secure, sustainable and affordable energy.



Energy Poverty and Access Pillar (EAPP)

Energy poverty is a direct expression of **deprivation** in a city's **every-day life** with both context and impact experienced by **individuals**, **households**, and **communities**.

The energy access and energy poverty pillar (EAPP) is an integral part of the journey of local government towards a more sustainable future. Therefore, strategies and measures undertaken by local governments can simultaneously address more than one pillar (i.e. climate change mitigation, adaptation and energy access/poverty).

GCoM signatories pledge to implement policies that facilitate energy access and/or reduce energy poverty and shall undertake measures to:

- Contribute to achieve SDG7 by ensuring access to affordable, reliable, sustainable and modern energy for all;
- Contribute to increase the level of energy access within the boundary of context;
- Contribute to reduce energy poverty within the boundary of context; and
- Track progress toward these objectives.

EAPP definitions

The three attributes assessed under the CRF of the EAPP are secure, sustainable and affordable energy.

These three categories assess the energy access and energy poverty conditions of local governments.

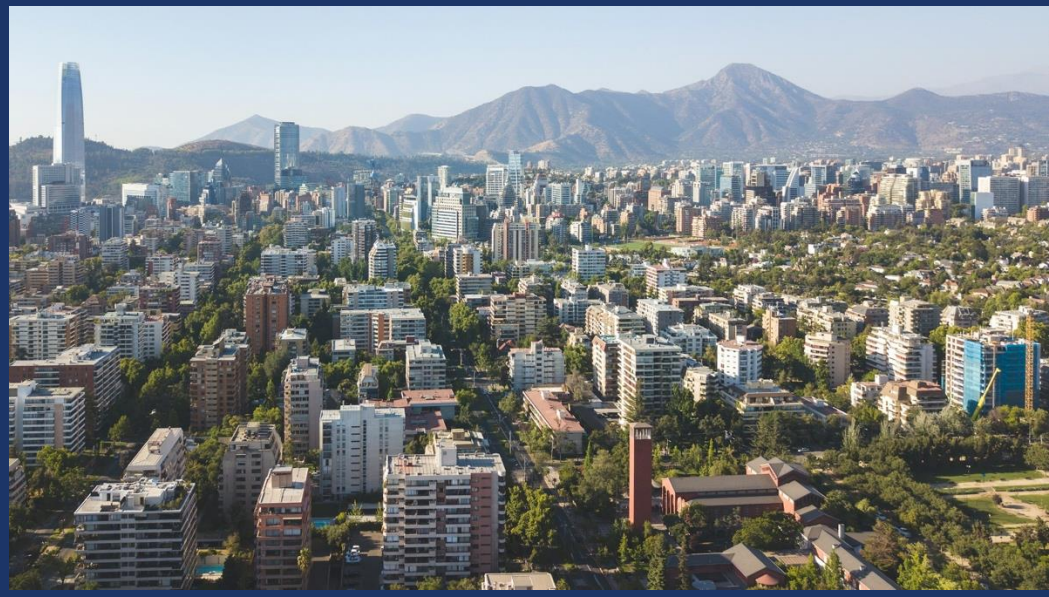
	Secure Energy	Sustainable Energy	Affordable Energy
Definition	Energy is accessible and/or reliable—enabling access to economic, social and cultural engagement	Energy is generated from renewable and non-pollutive resources—avoiding negative health, social and gender consequences	Energy is affordable and/or building stock is energy efficient to maximise value of expenditure—enabling energy applications for economic, social and cultural opportunities
EAPP CRF targets	• Increase average duration of available electricity • Increase percentage of population or households with electricity access • Improve annual average energy consumption per capita, without affecting the level and quality of use	• Increase installed renewables capacity • Increase total renewable energy generation • Increase renewable energy consumption • Transition source mix of energy for heating & cooling	• Reduce percentage of population or households that face energy poverty • Increase building energy efficiency

Opportunities with emissions reduction, climate resilience and social equity

Insecure, unsustainable and unaffordable energy access could have overlapping challenges with emissions, climate risks and socioeconomic inequality. Different local governments have various structures and understandings that could lead to EAP being addressed separately or combined with wider climate goals.

Considering the lack of data in many local governments, this overlap is an opportunity to identify where data can be shared.

This is also an opportunity to implement solutions that address multiple challenges – sharing and maximising limited resources across departments.



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Understanding EAP assets

In the context of EAP, the term “assets” is used to describe the technological, infrastructural and economic conditions that impact energy access and poverty alleviation.

Assets can be categorised into three main groups, based on their functions:

1. Energy generation
2. Energy transmission and distribution
3. Energy consumption

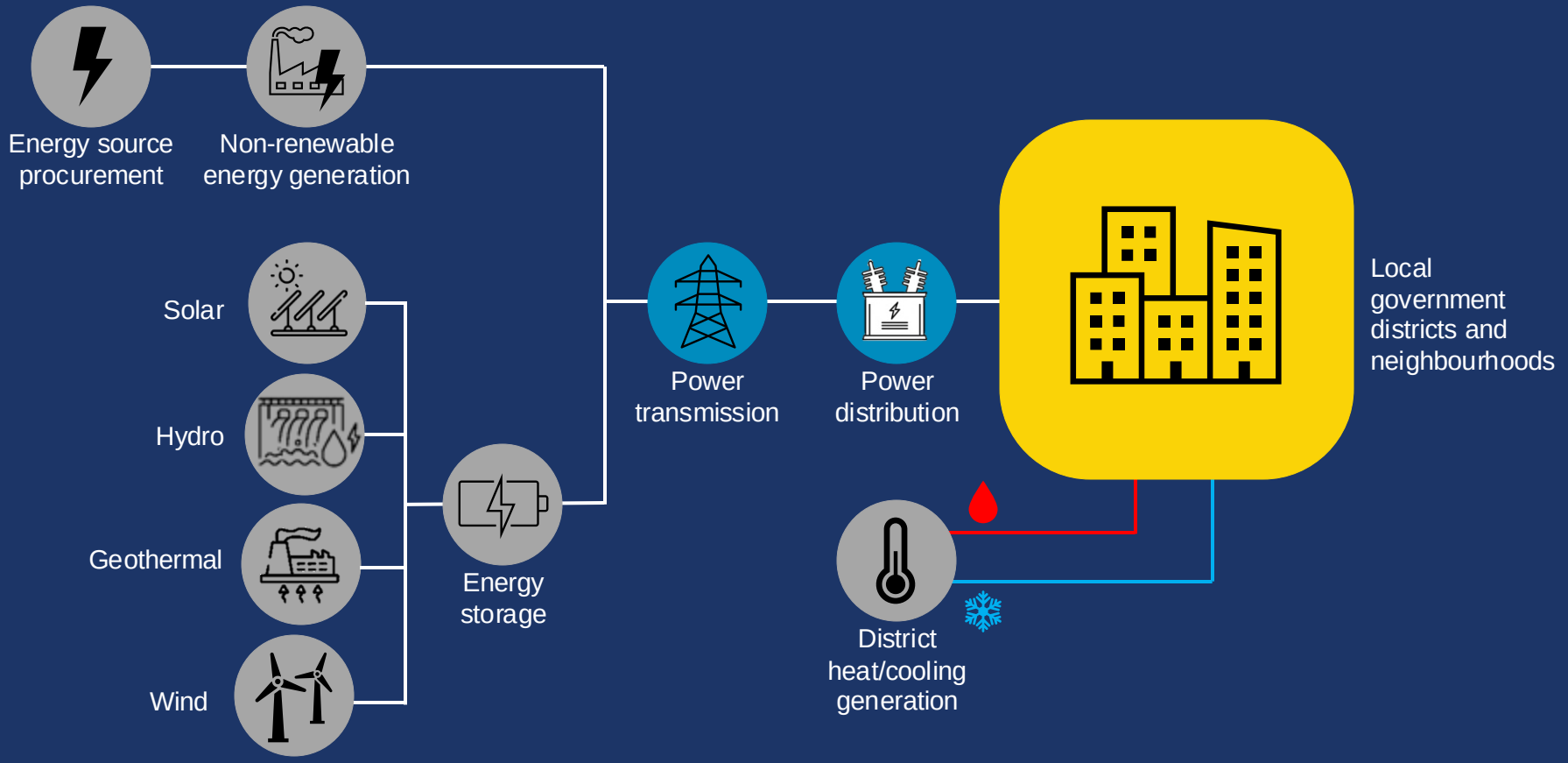
Throughout this toolkit we use assets as a framework to explore the barriers, powers, interventions, and stakeholders to help you better understand EAP in your context.

The next two pages present specific assets within the three main groups of generation, transmission and distribution, and consumption. They are arranged in three main groups:

1. Assets related to upstream generation, transmission, and distribution
2. Assets at the local government district and neighbourhood level
3. Assets at the building level

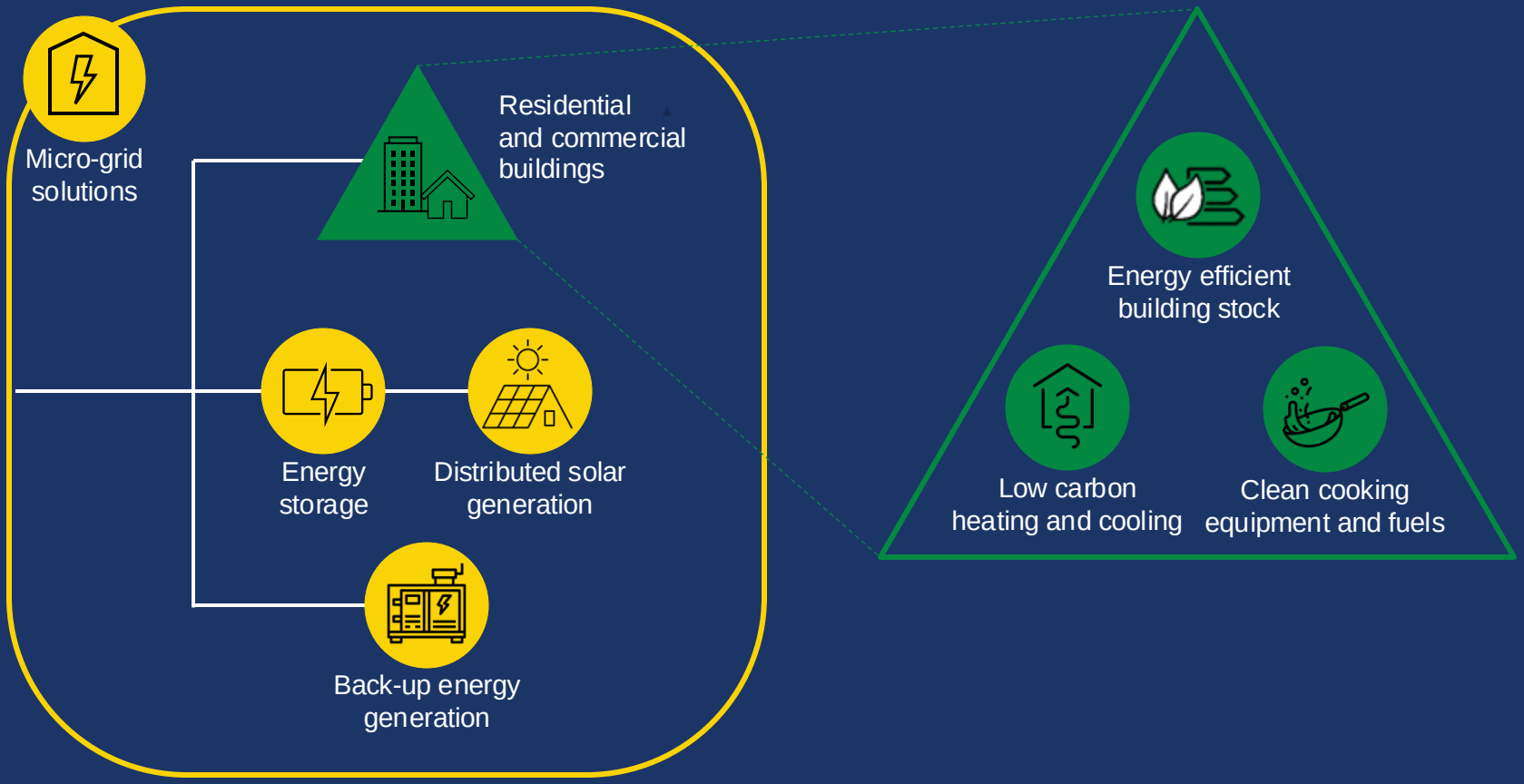
EAP asset types

Upstream generation and distribution



EAP asset types

District and neighbourhood scale



How to use this Toolkit

Using modules and tools

Module content

Each module in this toolkit begins by presenting the context and the content of the module. The content draws on the concepts and language around EAP from GCoM's 2023 research, presented in a way that unpacks your experiences as local government officers and builds your next steps.

Each module also closes with a "health-check worksheet". It will review if you have met the modules' objectives, by providing space to consolidate your EAP learning and reflections that are specific to your local government

Using the tools

Each module contains a tool for EAP planning and discussion. The tools have been designed to guide and support you to put into practice what you have learnt in the module.

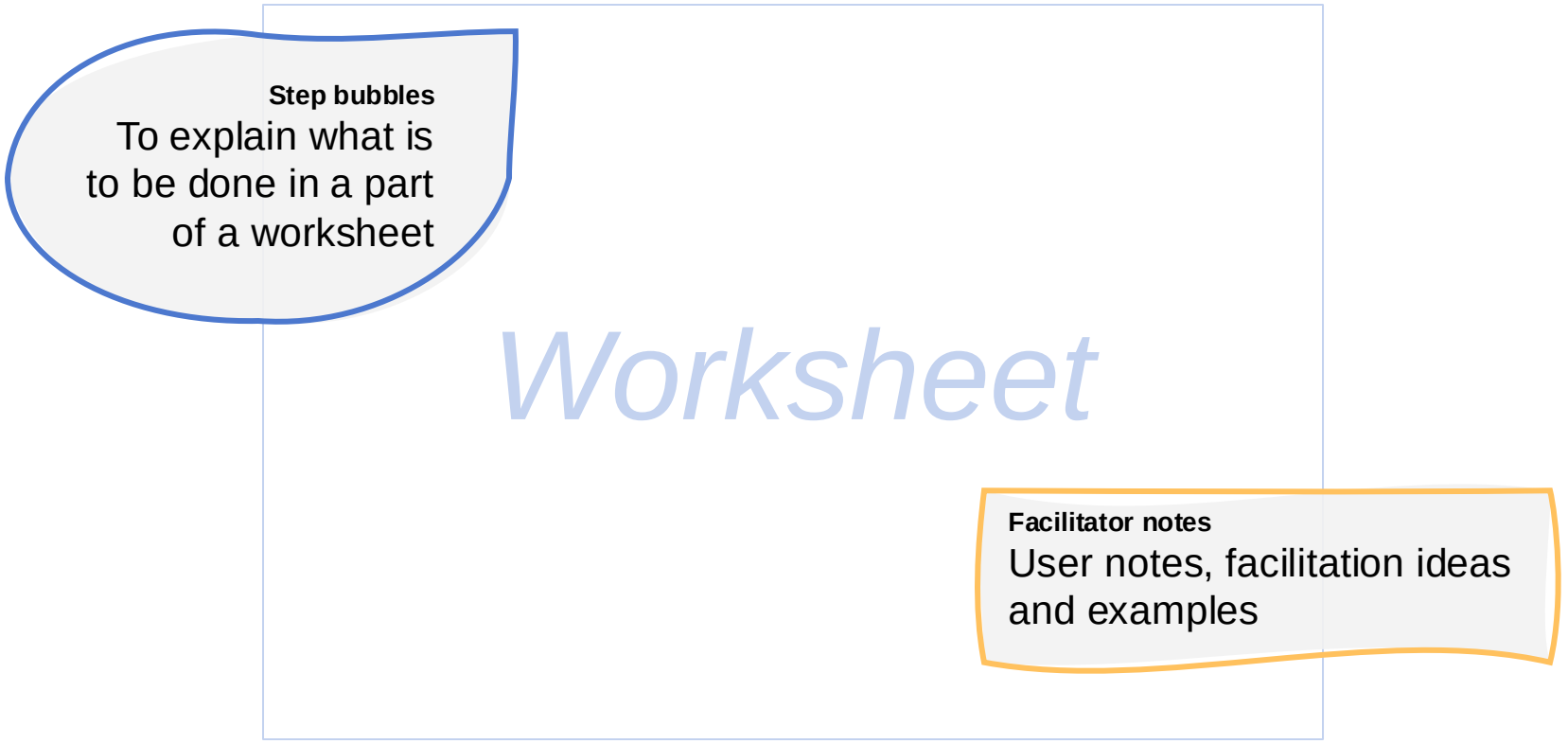
Each tool has been developed to support you in your unique EAP journey, taking into consideration your specific contexts. There is no specific order in which you must complete the tools – they are there to support you at your own pace. However, we have provided instructions for each tool, suggesting:

- when it is an appropriate time to complete the tool;
- who should be involved in the process;
- recommended “set ups”, for example some tools contain links to digital databases while others we suggest completing as worksheets (either printed or on a digital whiteboard).

How to use this Toolkit

Tool & facilitation guides

The worksheets and tools in every module are also accompanied by guides that provide steps and suggestions. This includes two types of notes, as demonstrated below: step bubbles to describe what should be done in the worksheet, and facilitator or user notes.



How to use this Toolkit

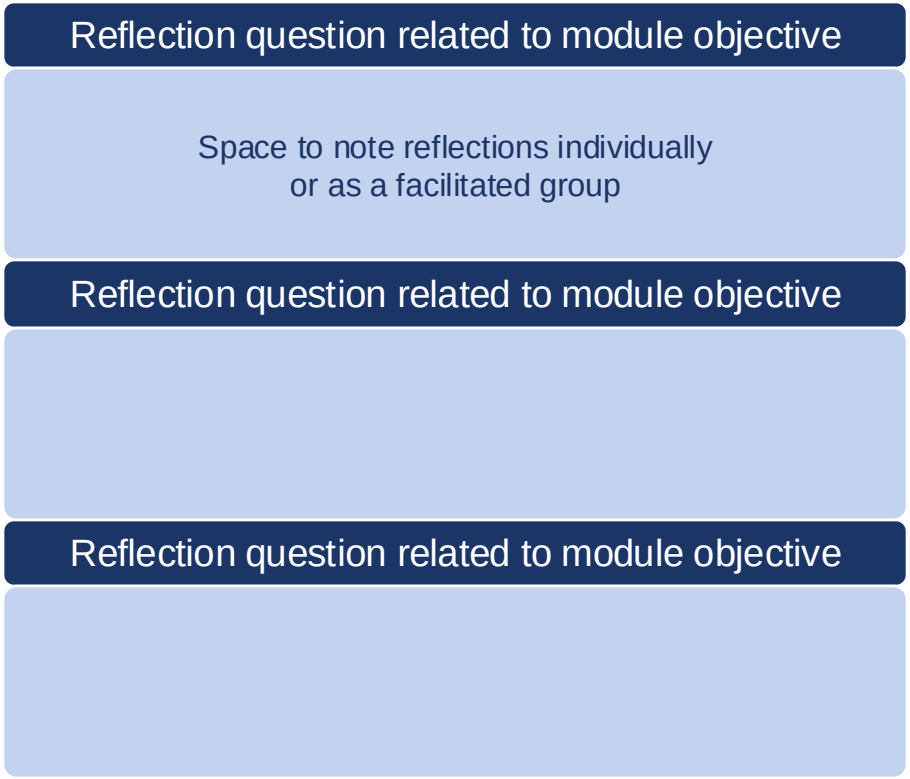
Health-check worksheets

At the end of each module, there is a health-check worksheet. These review the module objectives to consolidate what you have learnt about your local EAP context in the module.

Together, the worksheets will form a folio of EAP knowledge that you will be able to use for easy reference.

Here is an example of what the health-check worksheets look like.

Cities can also use the health-check prompts for other formats of engagement. E.g. online collaborative brainstorming via Miro and Google Jamboard, as well as online poll platforms such as Slido and Mentimeter.



Module 1
Knowing your EAP stakeholders

Knowing your EAP stakeholders

Who is at the decision-making table?

Stakeholders beyond local government play a crucial role in facilitating energy access and alleviating energy poverty.

National, regional, municipal, and community stakeholders have different roles in advancing energy access and tackling energy poverty.

Understanding this specific aspect of EAP enables local governments to develop your plans in a contextualised way.

Module objectives

- Identify which national, regional, municipal and community partners are relevant to strategic planning or delivering EAP interventions
- Compare groups that are most involved against groups that should be given space to participate and lead interventions/solutions

Other useful resources

- C40 Cities' Inclusive Climate Action playbooks

Who is included in decision-making?

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Knowing who key stakeholders are for an intervention, and how they can be engaged with is key to responding to EAP in meaningful and effective ways.

Engaging with community organisations representing groups who experience energy poverty – or lack of energy access – enables interventions to respond to local contexts. These specific needs and challenges may not be captured in reporting and quantitative data.

Private sector and non-profit stakeholders are also key. You can ensure that actions are technologically feasible by consulting solution providers. These engagements can also boost implementation via financing projects and research.

Finally, national and local government colleagues across departments and agencies are helpful to find opportunities to synchronise projects and funding to ensure delivery of EAP solutions.

EAP stakeholders in Cape Town

Cape Town is a port city of 4.6 million residents, where the majority are connected to licensed electricity suppliers. However, there are at least 70,000 informal households without direct grid connection, and more accessing electricity as informal “backyarders”. To advance various projects and solutions, city staff needed to identify the relevant stakeholders.

For example, Eskom, a state-owned utility in South Africa, operates most power generation assets in the country. Despite the City of Cape Town having limited influence over Eskom’s policies and infrastructure, the City challenged Eskom’s exclusive rights in court in 2019.

Subsequently, an amendment to the Electricity Regulation Act (2006) allowed municipalities to procure electricity from private sector energy developers. As a result, the City of Cape Town launched a tender to acquire 300 MW of renewable power from independent power producers (IPPs).

This move aimed to reduce reliance on Eskom and mitigate load-shedding, ultimately improving access to more affordable, reliable, and sustainable energy.

Cape Town interventions and stakeholders

Each local government will have its distinct chosen interventions with different stakeholders involved. In Cape Town, the municipality co-designed interventions with stakeholders listed below:

Solutions	**Renewable energy procurement**	**Small Scale Embedded Generation (SSEG) scheme**	**Free Basic Alternative Energy policy (under development)**	**City of Cape Town Low-income Energy Services (LINES) unit**	**Municipal Energy Resilience (MER) Initiative**
Intervention type	Establish legal and regulatory frameworks to implement interventions with private sector participation	Establish legal and regulatory frameworks to implement interventions with private sector participation	Policy and programme design that speaks to lived experiences that deliver socioeconomic benefits	Central working group for energy access to lead ownership, coordination, and stakeholder engagement	Joining regional and international platforms to share best practices, develop solutions, and form advocacy coalitions
Stakeholders	• City of Cape Town • Eskom	• City of Cape Town • Independent Power Producers	• City of Cape Town • Households • Municipalities	• City of Cape Town • Low-income Energy Services (LINES)	• City of Cape Town • Independent Power Producers

EAP governance

In the development of this Toolkit, many cities shared that a common challenge for local governments is a lack of clear ownership for EAP.

A clear EAP team that is empowered to collect data, engage with stakeholders and plan interventions is the most important starting point. Without this, local government officials will encounter barriers in discussing how EAP is a challenge for citizens.

Some potential EAP governance configurations are presented on this page. None of these are superior as contextual starting points for leadership on energy access. From here, EAP teams can start to plan how to navigate local government and national political structures to deliver EAP planning and interventions.

Examples of EAP governance configurations in local governments

EAP team and/or officers within a specific department (e.g. social equity and support, energy policy and infrastructure, housing provision and quality, etc.)

Energy Access Working Group with representatives from multiple departments

Individual officers with EAP-related roles across multiple departments

Stakeholder mapping tool

This tool will help you identify who the stakeholders are for various EAP assets that you would like to focus on. The worksheets in this tool can be copied and completed multiple times, depending on the specific focus needed.

Engaging with key stakeholders can help you to design and implement more impactful solutions. Collaborating with stakeholders also fills gaps in available local government powers (Module 6).

When you are ready to select and act on priority interventions (Module 7), this guidance and worksheets can be reviewed to narrow down key stakeholders.

When to use this Tool

Use this tool when you are ready to map the constellation of stakeholders who you can draw on for insights about energy access and poverty, and/or collaborate with in shaping and delivering interventions.

Who should be part of the conversation

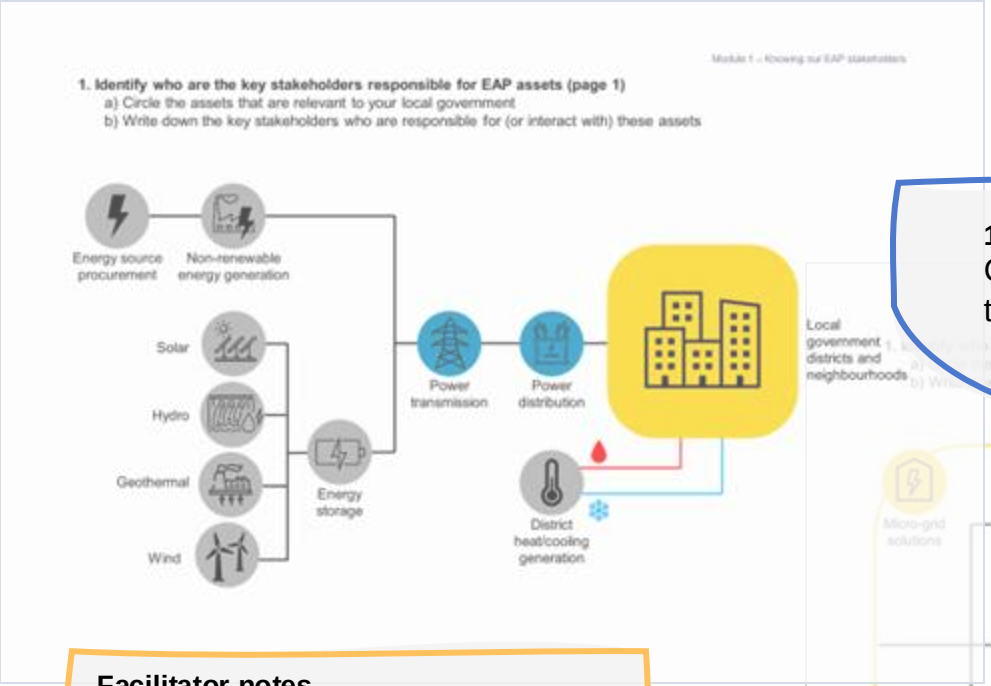
Local government staff who understand the interventions you are interested in exploring.

Suggested set-up and logistics

The following pages can be printed and used to centre discussions and conversations.

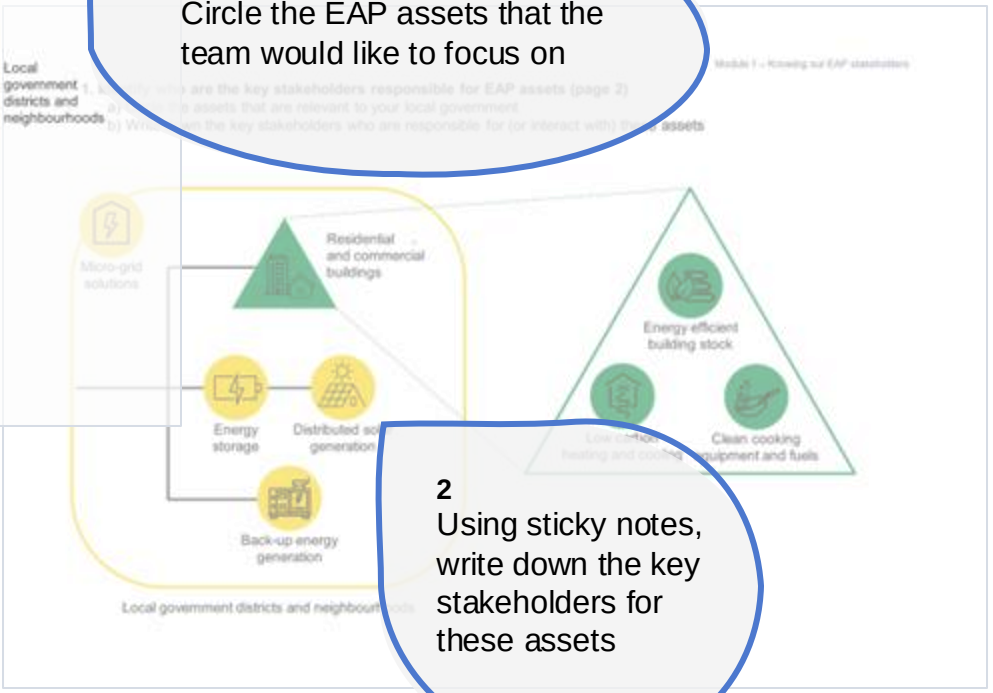
Tool & facilitation guide

Stakeholder identification



1
Circle the EAP assets that the team would like to focus on

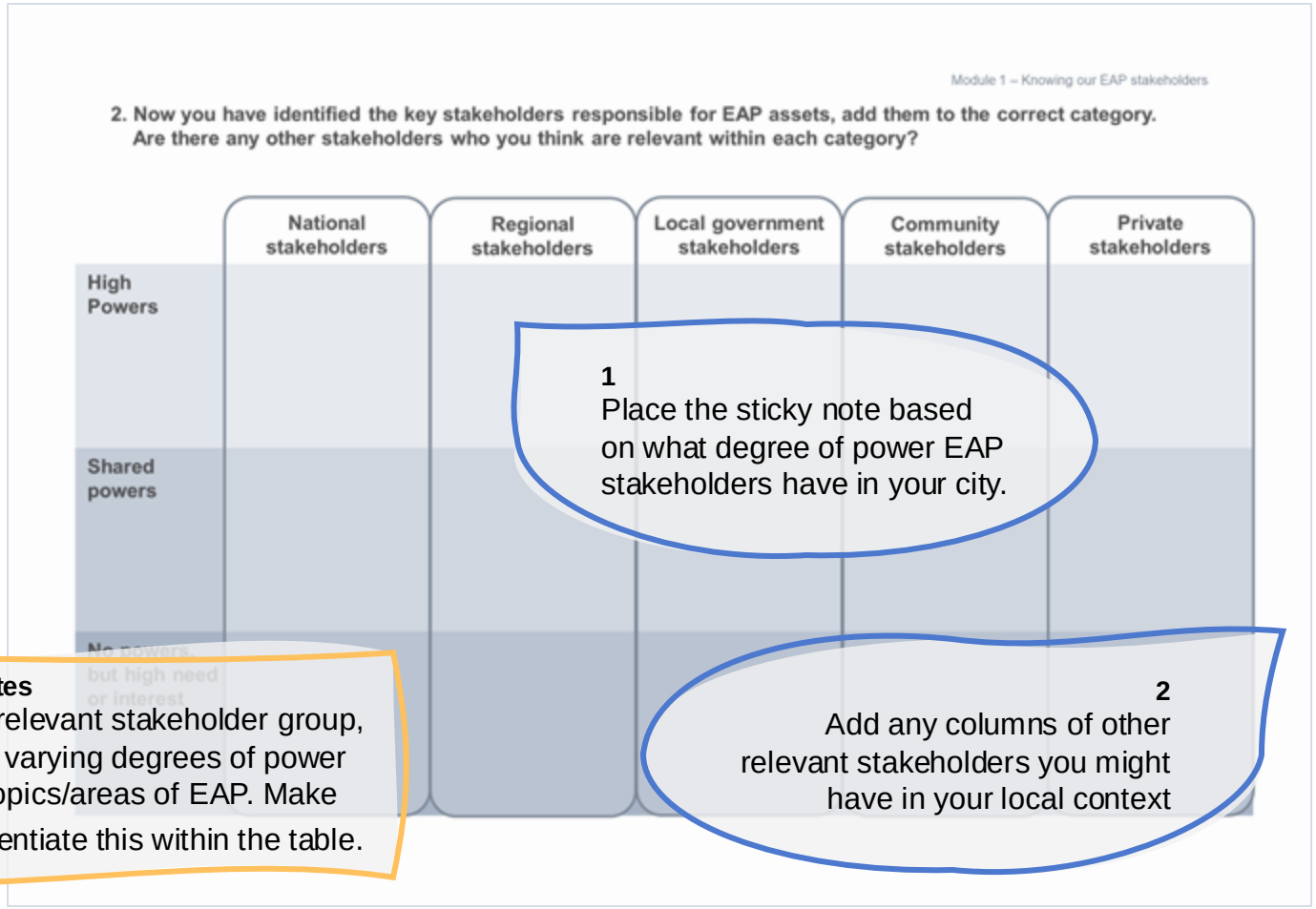
Facilitator notes
Key stakeholders could include organisations responsible for these assets, and communities that interact often with these systems



2
Using sticky notes, write down the key stakeholders for these assets

Tool & facilitation guide

Mapping stakeholders



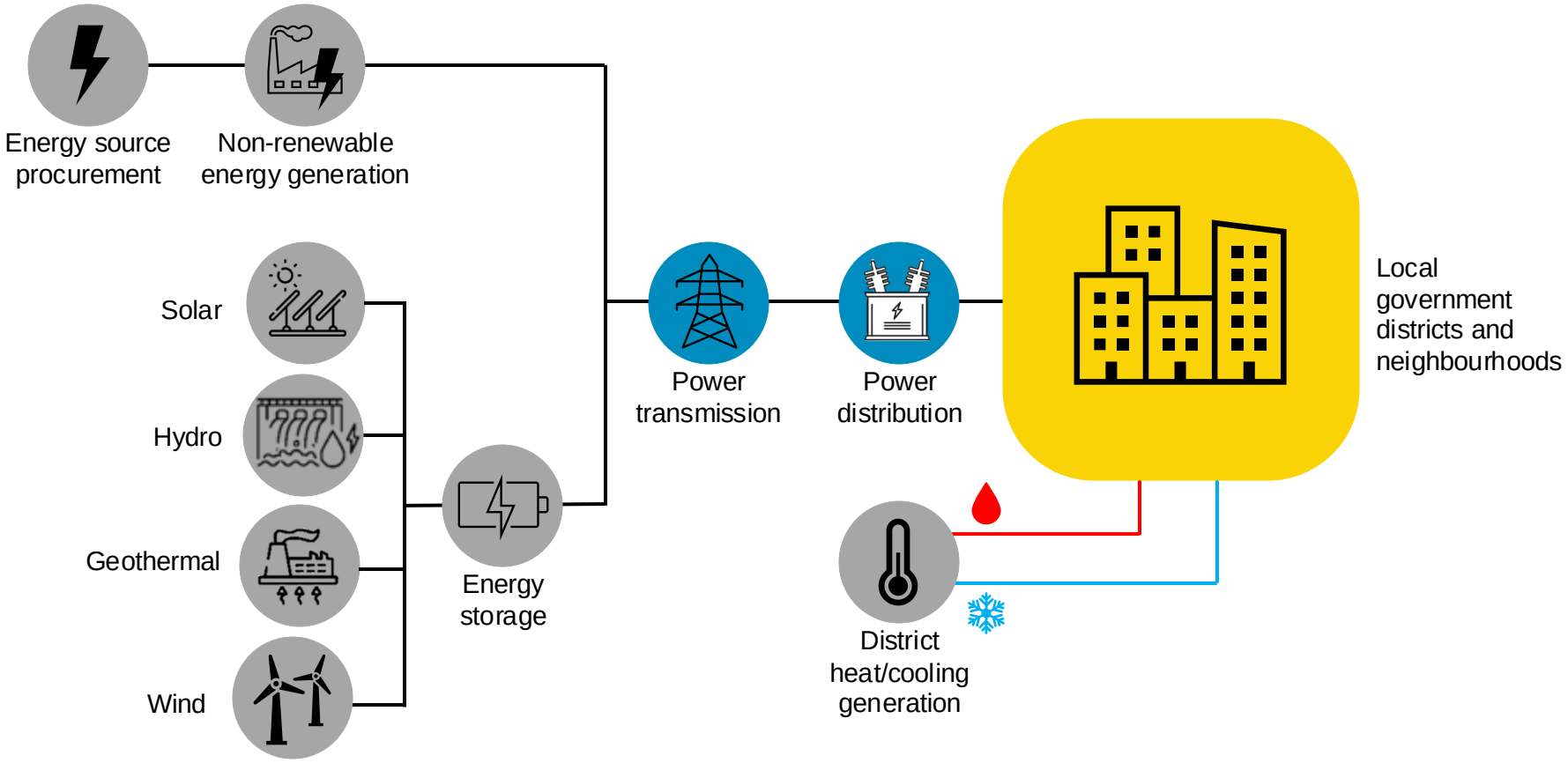
Facilitator notes

Within each relevant stakeholder group, there can be varying degrees of power for specific topics/areas of EAP. Make sure to differentiate this within the table.

1. Identify who are the key stakeholders responsible for EAP assets (page 1)

a) Circle the assets that are relevant to your local government

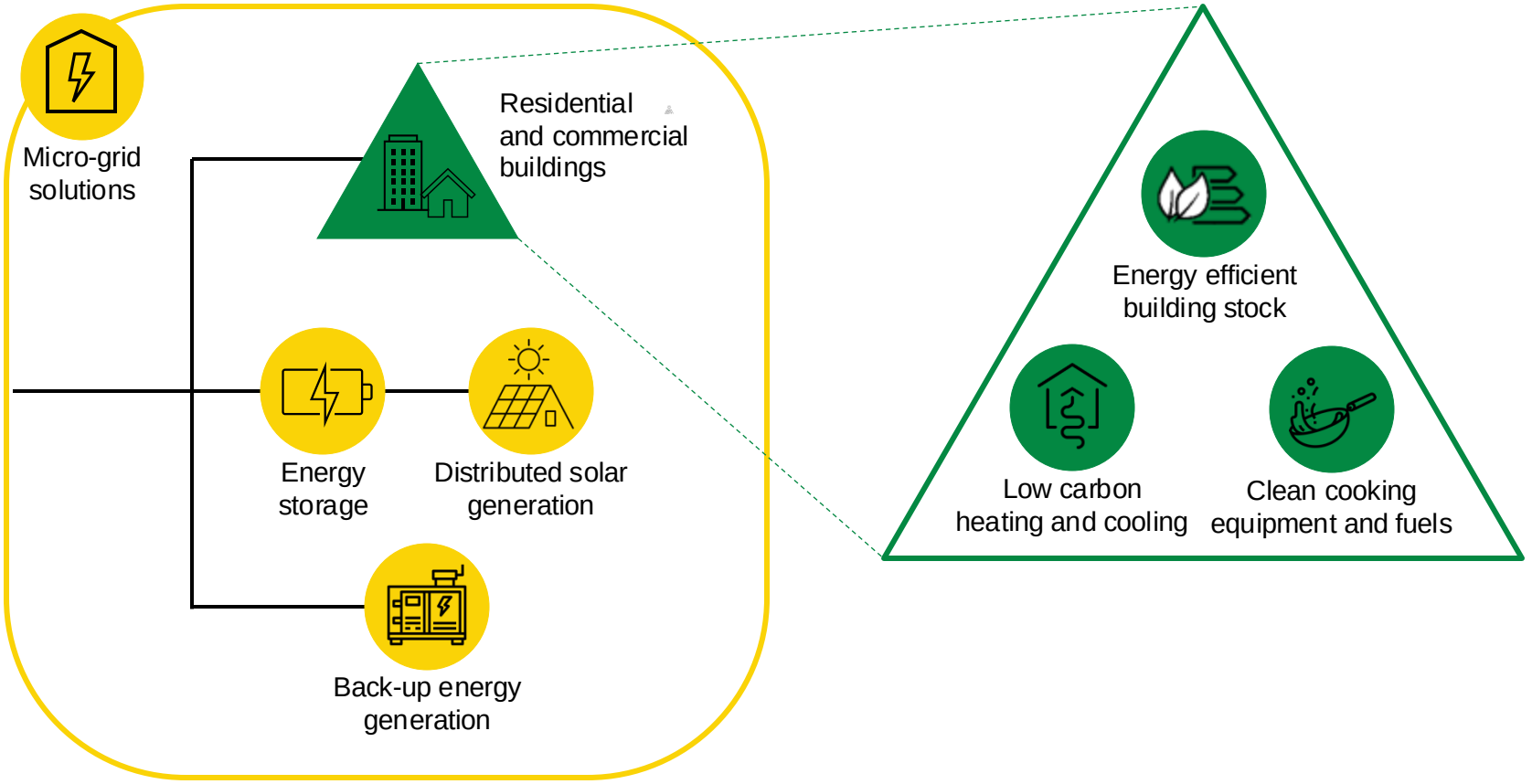
b) Write down the key stakeholders who are responsible for (or interact with) these assets



1. Identify who are the key stakeholders responsible for EAP assets (page 2)

a) Circle the assets that are relevant to your local government

b) Write down the key stakeholders who are responsible for (or interact with) these assets



2. Now you have identified the key stakeholders responsible for EAP assets, add them to the correct category. Are there any other stakeholders who you think are relevant within each category?

	National stakeholders	Regional stakeholders	Local government stakeholders	Community stakeholders	Private stakeholders
High Powers					
Shared powers					
No powers, but high need or interest					

Health-check worksheet

Knowing our EAP Stakeholders

Who are your key stakeholders who are relevant to the different EAP assets?

National stakeholders	Regional stakeholders	Municipal stakeholders	Community stakeholders

Which other important groups who should be given space and opportunities to participate and lead on interventions?

Module 2
Stories as data

Stories as data

Understanding lived experiences is vital to developing a full picture of EAP in your context. The EAPP aims to complement existing indicators within the CRF by exploring energy access and energy poverty with the lens of lived experience, which adds contextual nuance to the EAPP's indicators and targets, while unpacking the meaning of the data.

From a systemic perspective, households and individuals' interactions with energy supply and billing systems point to the infrastructural, technological and policy solutions that local governments can implement or advocate for.

At the community level, lived experiences of energy poverty's consequences provide qualitative data for local governments to tailor projects and socioeconomic support.

Module objectives

- Brainstorm what community stories of "lived experiences" provide starting points to understand EAP in your local government area
- Note where stories indicate important contexts or solutions to be addressed in EAP interventions

Other useful resources

- Supporting Fuel Poor and Vulnerable Households: Local Authority Toolkit
- C40 Cities' Inclusive Climate Action playbooks

Placing people at the centre

EAP being a real-life experience of deprivation for every-day people, it is important to ground it in the identities behind the stories.

Taking note of the types of people affected by specific EAP challenges is key for local governments to understand which identities are most at risk.

This could also allow local governments to prioritise and advocate support for specific combinations of identities (e.g. youth of minority ethnicity, the elderly with special needs, women in uncomfortable working conditions).

Some examples of specific needs and experiences for each identity category are:

Age
Lack of thermal comfort could result in unhealthy healthy homes and educational disadvantages

Ethnicity
Zoning of marginalised or deprived ethnic groups could experience lack of energy and fuel supply

Gender
Lack of energy access could lead to increased home workload for women to gather fuel sources

Special needs
Reliable energy supply is critical for many technologies for people with special needs

Income level
People with relatively lower incomes are less able to cope with energy price instability

Living and working conditions
Lack of non-pollutive and efficient energy generation could lead to negative health impacts

Documenting stories

This tool will enable you to identify and document the lived experiences of EAP that local government staff and other stakeholders are most aware of from your local communities.

This worksheet is particularly helpful at the very start of your local government's EAP journey, especially if quantitative data is not available or collected yet.

It can also be used to assess how these stories can serve as "qualitative data" for measuring energy access and poverty.

We recommend completing the exercise in a workshop format.

When to use this Tool

As a starting point to understand EAP in your communities and households, and when engaging with communities.

Who should be part of the conversation

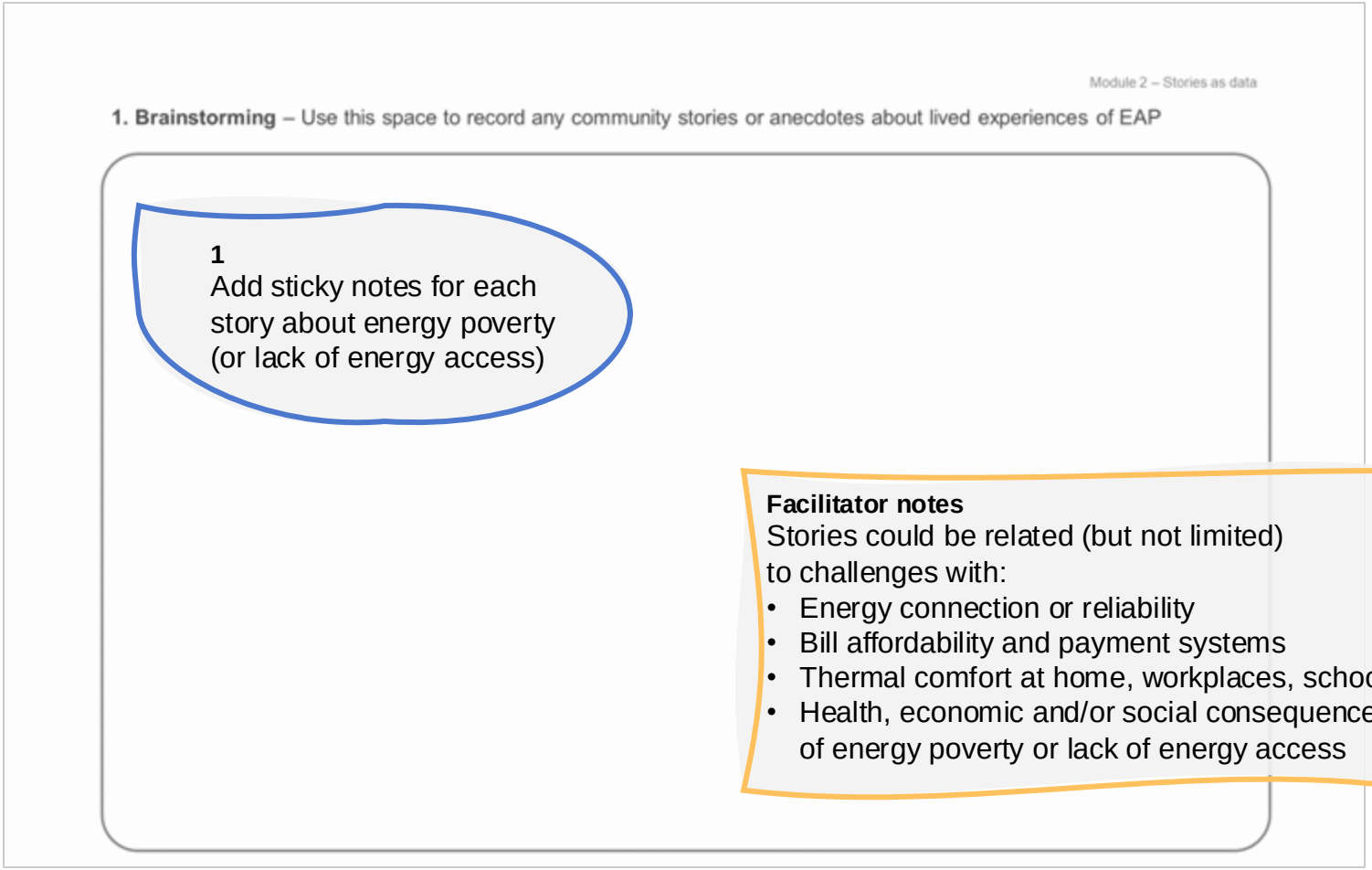
- Local government departments related to energy infrastructure and regulation, social support, city planning
- Community organisations
- Representatives of "hard-to-reach" communities

Suggested set-up and logistics

Worksheets can be printed as posters, or added to a virtual whiteboard for use with sticky notes.

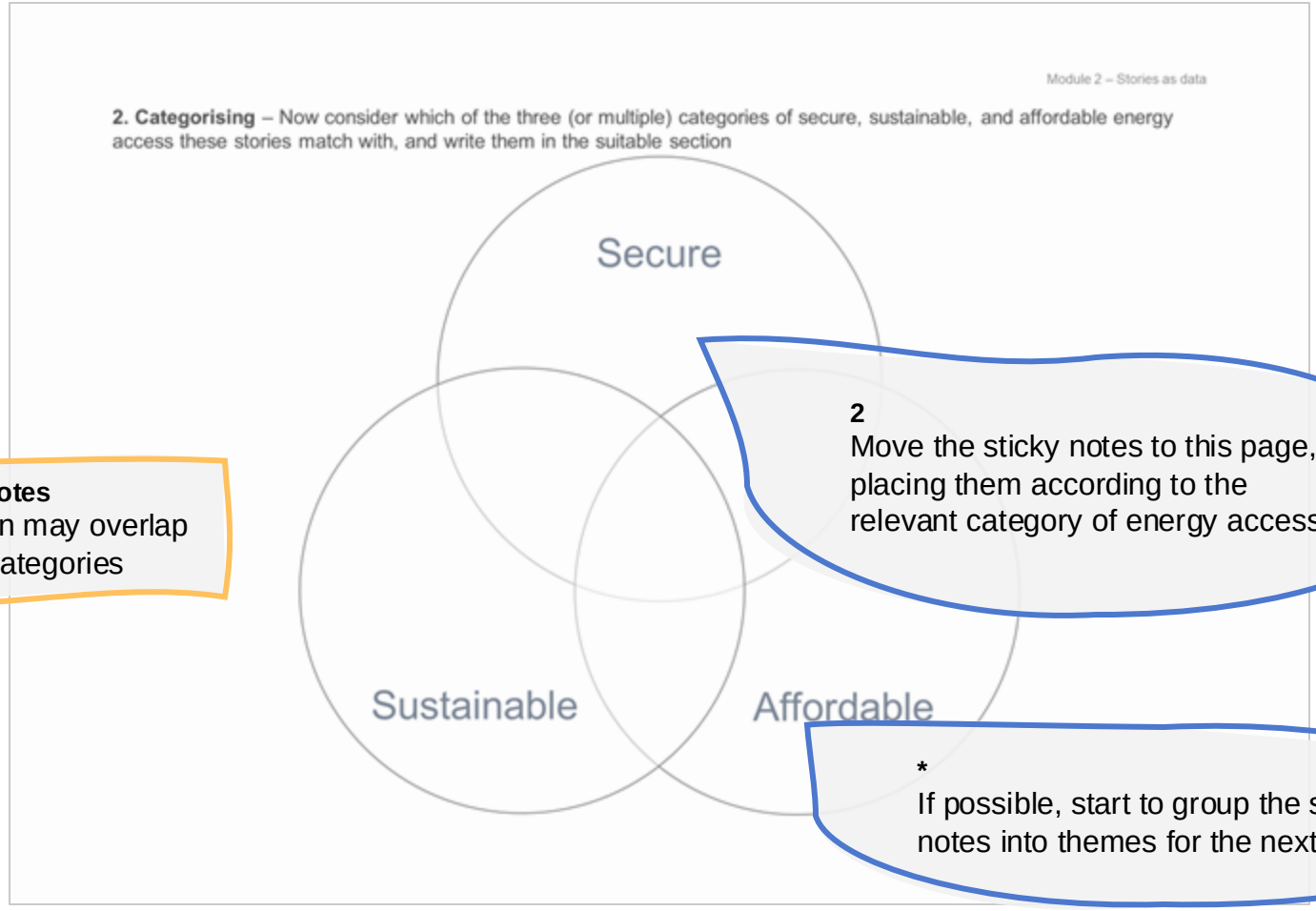
Tool & facilitation guide

Stories brainstorming



Tool & facilitation guide

Categorising into secure, sustainable and affordable energy



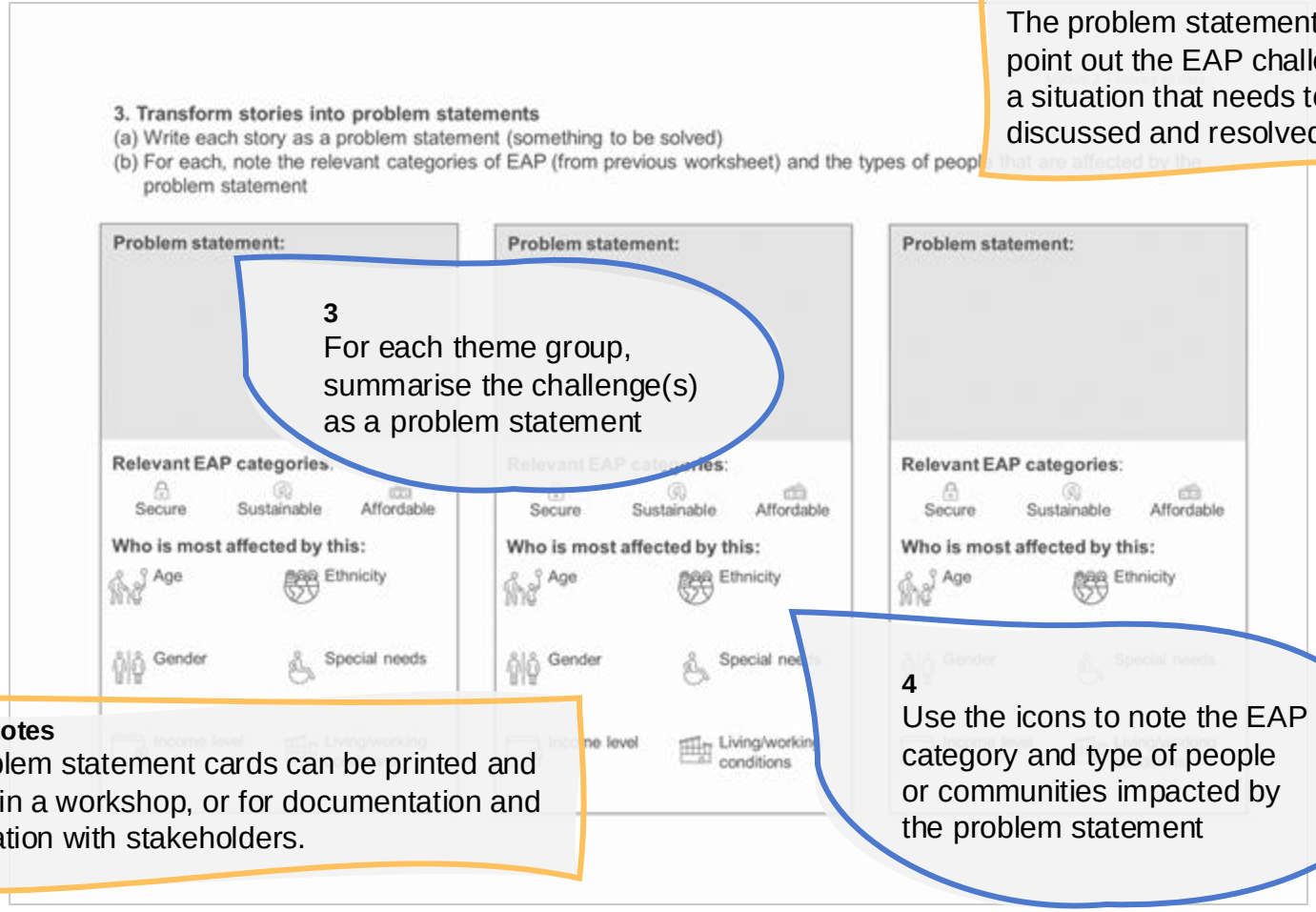
Facilitator notes
Some action may overlap 2 or more categories

2
Move the sticky notes to this page, placing them according to the relevant category of energy access

*
If possible, start to group the sticky notes into themes for the next step

Tool & facilitation guide

Problem statements



Facilitator notes
The problem statement should point out the EAP challenge as a situation that needs to be discussed and resolved

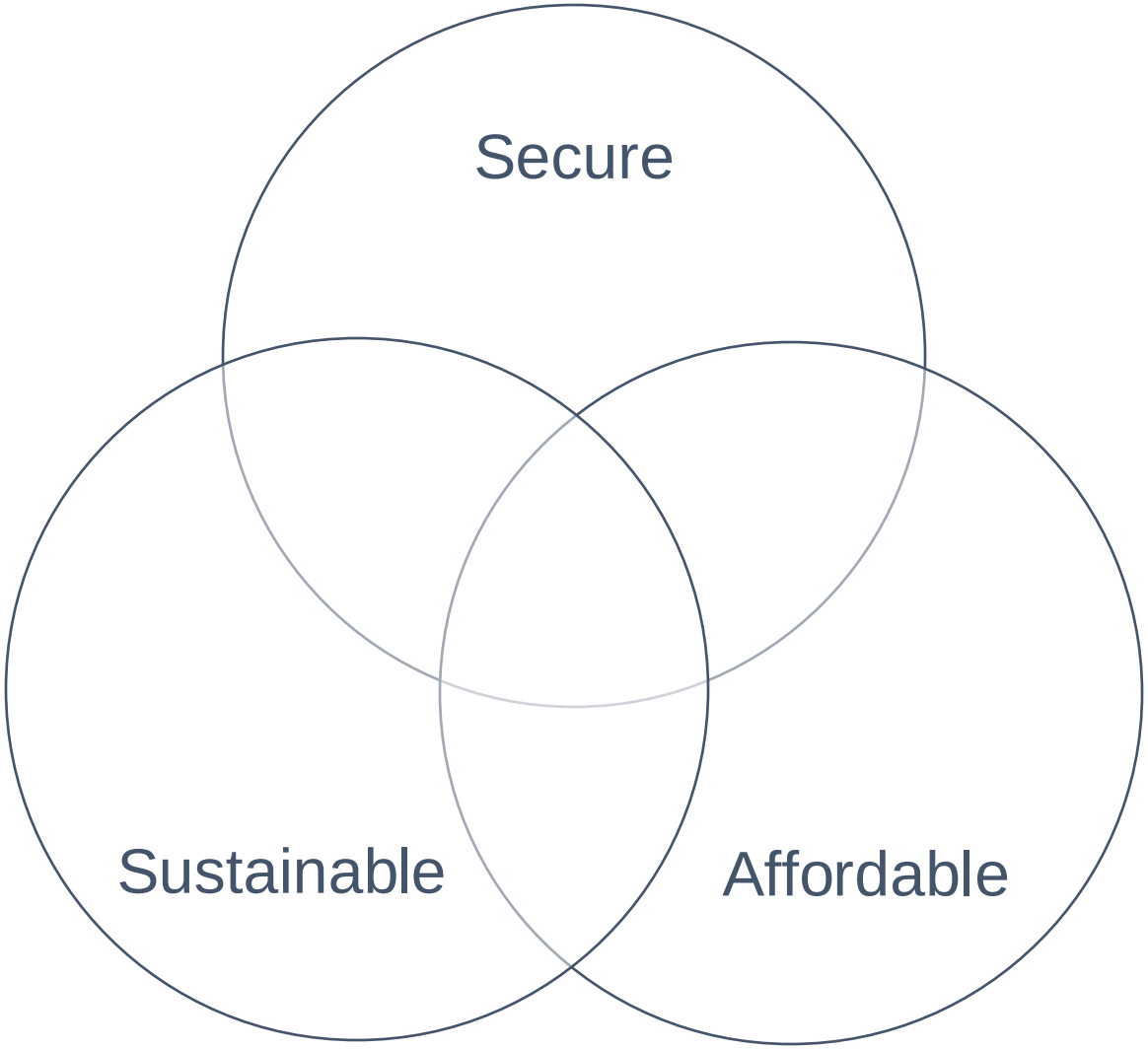
3
For each theme group, summarise the challenge(s) as a problem statement

4
Use the icons to note the EAP category and type of people or communities impacted by the problem statement

Facilitator notes
These problem statement cards can be printed and completed in a workshop, or for documentation and communication with stakeholders.

1. Brainstorming – Use this space to record any community stories or anecdotes about lived experiences of EAP

2. Categorising – Now consider which of the three (or multiple) categories of secure, sustainable, and affordable energy access these stories match with, and write them in the suitable section



3. Transform stories into problem statements

(a) Write each story as a problem statement (something to be solved)

(b) For each, note the relevant categories of EAP (from previous worksheet) and the types of people that are affected by the problem statement

Problem statement:

Relevant EAP categories:

Secure Sustainable Affordable

Who is most affected by this:

Age Ethnicity

Gender Special needs

Income level Living/working conditions

Problem statement:

Relevant EAP categories:

Secure Sustainable Affordable

Who is most affected by this:

Age Ethnicity

Gender Special needs

Income level Living/working conditions

Problem statement:

Relevant EAP categories:

Secure Sustainable Affordable

Who is most affected by this:

Age Ethnicity

Gender Special needs

Income level Living/working conditions

Health-check worksheet

Stories as data

What are the most prominent EAP stories in your local communities?	What are the key problems to be solved?	What does the story tell you about potential solutions?

Module 3
Mapping available local data

Mapping available local data

The indicators in the EAPP address the three key energy access attributes and assess the degree to which energy is secure, sustainable, and affordable.

EAP is a complex and multi-faceted challenge that is contextual and unique to each local government. A combination of factors including local energy prices, local housing stock, household income, household energy needs, and local climate together contribute to specific experiences and contexts of EAP.

Energy poverty is a direct expression of deprivation in a city's every-day life. It is both background context and an impact experienced by individuals, households, and communities.

The tool in this module will help guide you to understanding how to map which data you have and how this aligns with the EAPP's indicators.

Module objectives

- Map what data is useful and crucial to understand, communicate and monitor EAP in your local government area
- Understand what quantitative data is and is not available to local governments, and action to collect data

Other useful resources

- World Bank Open Data
- International Energy Agency (IEA) annual data
- United Nations Sustainable Development Goal 7 (SDG 7) tracker
- World Bank Regulatory Indicators for Sustainable Energy (RISE)
- *Region-specific public datasets are also suggested in this module's Excel-based tool*

Why are indicators important?

Tracking progress against the indicators in the EAPP is part of the reporting requirements for all GCoM signatories, designed to help local governments understand your EAP contexts and act towards a more sustainable future.

The indicators in the EAPP are split between mandatory and non-mandatory, and global and regional. Local governments are expected to report against at least one mandatory indicator for each energy access attribute relevant for your region. You are also encouraged to report global and regional non-mandatory indicators.

Local governments are well-placed to improve energy access and alleviate energy poverty due to your ownership of the collection, analysis, and communication of data, and proximity to local contexts, stories and lived experiences. Many local governments have ownership of the collection, analysis, and reporting of local socioeconomic data. This is an area of both accountability and opportunity.

We can ask ourselves:

- How can data be aggregated and communicated in sensitive and constructive ways?
- How can data collection involve the local community more directly in sharing their lived experiences?
- How can data be used to coordinate local stakeholders on solutions for energy access and energy poverty, and advocate for policy and programmes with regional and national governments?

Utilities as data sources

Utility companies as EAP stakeholders

Local utilities can provide a lot of the useful data that is covered in the global mandatory, non-mandatory and regional non-mandatory indicators. Utility companies, might have relevant data, but may not be keen on sharing it with the municipality they operate in. It is thus important to advocate for utility companies to share this data with local governments. Local governments should also look at utility companies for collaboration to access the data that they own.

Whilst small utilities may not be able to paint a full picture from their data, they are able to contribute to the understanding of EAP within the local boundary.

Examples of EAP indicators that utility companies can help respond to:

- Source mix of thermal energy (heating and cooling) consumed in your city
- Average number of electric supply interruptions in a typical month (or year)
- Total installed energy capacity within local boundary
- Electricity bill collection rate
- Population able to/willing to pay for electricity

Etc…

EAP indicators database tool

This tool will enable you to identify and document which EAP indicators are most relevant to your local government. A library of links to public datasets is also provided to support data collection and reporting to GCoM's Common Reporting Framework via the CDP-ICLEI Track.

In order to prioritise the data, you can use the information collected from module 1 to identify what data you need based on the stories uncovered.

The datapoints can be related to the stories from Module 2, serving as "qualitative data" for measuring the mandatory, non-mandatory and regional indicators of the EAPP.

Download this Excel-based tool here

When to use this Tool

You can use this tool when you need to report against mandatory, non-mandatory and regional indicators as a part of the GCoM's CRF.

Who should be part of the conversation

- Local government departments related to energy infrastructure and regulation, social support, city planning
- Local utility companies

Suggested set-up and logistics

This tool is presented in an Excel workbook with four separate sheets. The worksheet for the second part of this tool can be printed large and used to guide and inform discussions to make the case for energy access.

Tool & facilitation guide

Indicator database

Indicators database

Last updated: 14/02/2024

This database suggests online and open data sources as a starting point for local governments

EAPP Indicator				Source				
No.	Type	EAP Categor	Indicator	Name	Description	Region	Scope	Link
M.01	Mandatory	Secure Energy	Percentage of municipality population or households with access to electricity	World Bank	Access to electricity, power transmission and losses, power consumption	Global	Country-level	World Bank Open Data
M.02	Mandatory	Secure Energy	Average duration of available electricity	IRENA	Renewable energy	Global	Country-level	IRENA
M.03	Mandatory	Secure Energy	Average yearly energy consumption per capita	International Energy Agency	Clean cooking, renewable energy	Global	Country-level	IEA
M.04	Mandatory	Sustainable Energy	Installed capacity of renewable energy sources within local boundary	Office of National Statistics	Expenditure on energy	European Union & Western Europe	United Kingdom	ONS
				IRENA	Renewable energy	Global	Country-level	IRENA
				International Energy Agency	Clean cooking, renewable energy	Global	Country-level	IEA
				Energy Institute	Renewable energy, generation by fuel, consumption	Global	Country-level	Energy Institute
M.05	Mandatory	Sustainable Energy	Total energy generated from renewable energy source within local boundary	World Bank	Access to electricity, power transmission and losses, power consumption	Global	Country-level	World Bank Open Data
				IRENA	Renewable energy	Global	Country-level	IRENA
				International Energy Agency	Clean cooking, renewable energy	Global	Country-level	IEA
				Office of National Statistics	Expenditure on energy	European Union & Western Europe	United Kingdom	ONS
				IRENA	Renewable energy	Global	Country-level	IRENA
				International Energy Agency	Clean cooking, renewable energy	Global	Country-level	IEA
M.06	Mandatory	Sustainable Energy	Energy consumption from renewable energy sources	World Bank	Access to electricity, power transmission and losses, power consumption	Global	Country-level	World Bank Open Data
				IRENA	Renewable energy	Global	Country-level	IRENA
				International Energy Agency	Clean cooking, renewable energy	Global	Country-level	IEA
				Office of National Statistics	Expenditure on energy	European Union & Western Europe	United Kingdom	ONS
				Energy Institute	Renewable energy, generation by fuel, consumption	Global	Country-level	Energy Institute
				European Environment Agency	Renewable energy consumption	European Union & Western Europe	Country-level	EEA
M.07	Mandatory	Sustainable Energy	Source mix of thermal energy (heating and cooling) consumed within local boundary	Energy Institute	Renewable energy, generation by fuel, consumption	Global	Country-level	Energy Institute
M.0					Access to electricity, power transmission and losses, power consumption	Global	Country-level	World Bank Open Data
					Clean cooking, renewable energy	Global	Country-level	IEA
					Renewable energy, clean cooking	South Asia, Eastern Europe & Central		
M.0					Expenditure on energy			
					Expenditure on energy			

1

The GCoM EAP Pillar indicators are organised (and can be filtered) by:

- Mandatory and non-mandatory indicators
- EAP category (secure, sustainable, affordable

2

The suggested public datasets are detailed and linked – most of these are for national- or regional-level data

Tool & facilitation guide

Indicator mapping worksheet

An additional template is included, as a workshop or planning tool to map relevant datapoints to problem statements found in Module 2.

No.	Stories of local experiences with energy poverty or lack of energy access	Who is affected	Secure energy access			Sustainable energy access			Affordable energy access			Non-mandatory regional indicators			Other local indicators			Other notes
			Suitable indicator	Data owner	Do we have access?	Suitable indicator	Data owner	Do we have access?	Suitable indicator	Data owner	Do we have access?	Suitable indicator	Data owner	Do we have access?	Suitable indicator	Data owner	Do we have access?	
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

For each EAP category, note:

1. What indicator is useful?
   (The indicator database sheet and/or findings from Module 2 may be helpful)
2. Where is this data collected and/or managed by your local government or external stakeholders?
3. Do you and/or your team currently have access to this? What are the steps to obtain this data?

Health-check worksheet

Mapping available local data

What quantitative data do you collect or have access to?	Where is this data held in your administration?

What quantitative data do you not collect or have access to?	Which sources of data can you use from the tool?

Module 4
Developing an EAP baseline

Developing an EAP baseline

Modules 2 and 3 bring together different perspectives on EAP and enable cities and local governments to develop your understanding of contextual issues.

Developing and understanding your local government's specific EAP baseline is important, as this baseline will layout the local context of energy access and poverty. It provides a way to compare the "before" and "after". This first step will enable the planning of appropriate interventions for local governments.

Module objectives

- Draft a definition of EAP in your local government area that is easy to communicate and understand across a diversity of stakeholders

Baselining tool

This tool will help you to formulate the EAP baseline for your context, based on the stories and quantitative data about EAP in your local government area. This EAP baseline will likely be unique, taking into consideration the multiple factors which provide a holistic overview of EAP in your households and communities.

As a first step to this tool, you will record key quantitative data points and key lived experiences on sticky notes. These sticky notes can then be sequenced to complete the worksheet, guiding you to a baseline as a short paragraph.

You can complete as many versions of this worksheet as you need to be able to capture the baseline for your context.

When to use this Tool

To build a definition of EAP that is specific to your local government's context. Findings from modules 1 and 2 (or equivalent) are key inputs.

Who should be part of the conversation

- Local government departments related to energy infrastructure and regulation, social support, city planning
- Community organisations

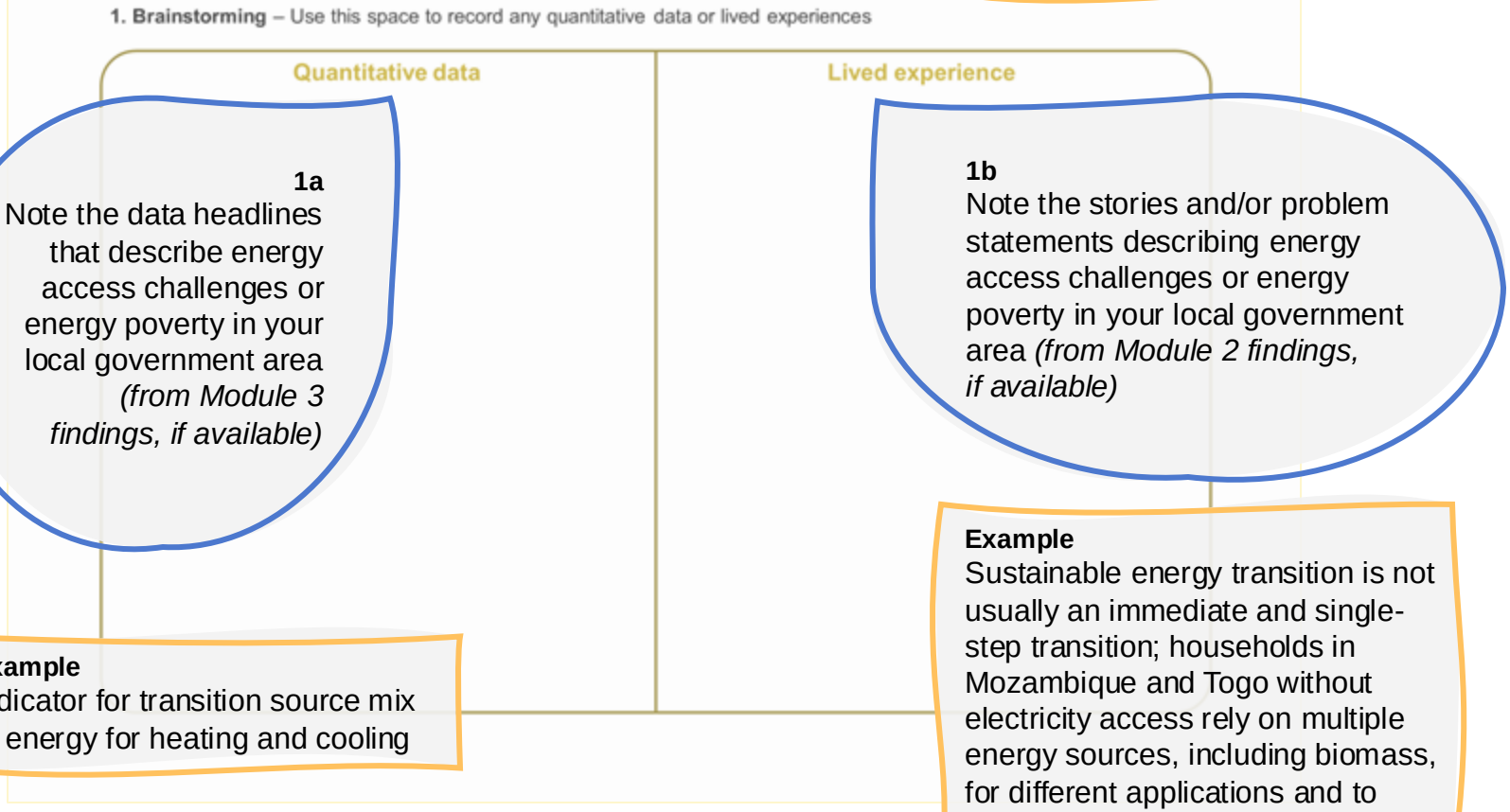
Suggested set-up and logistics

Worksheets printed as posters or placed on virtual whiteboard. Sticky notes will be helpful, where each note should have 1 story or quantitative data point.

Tool & facilitation guide

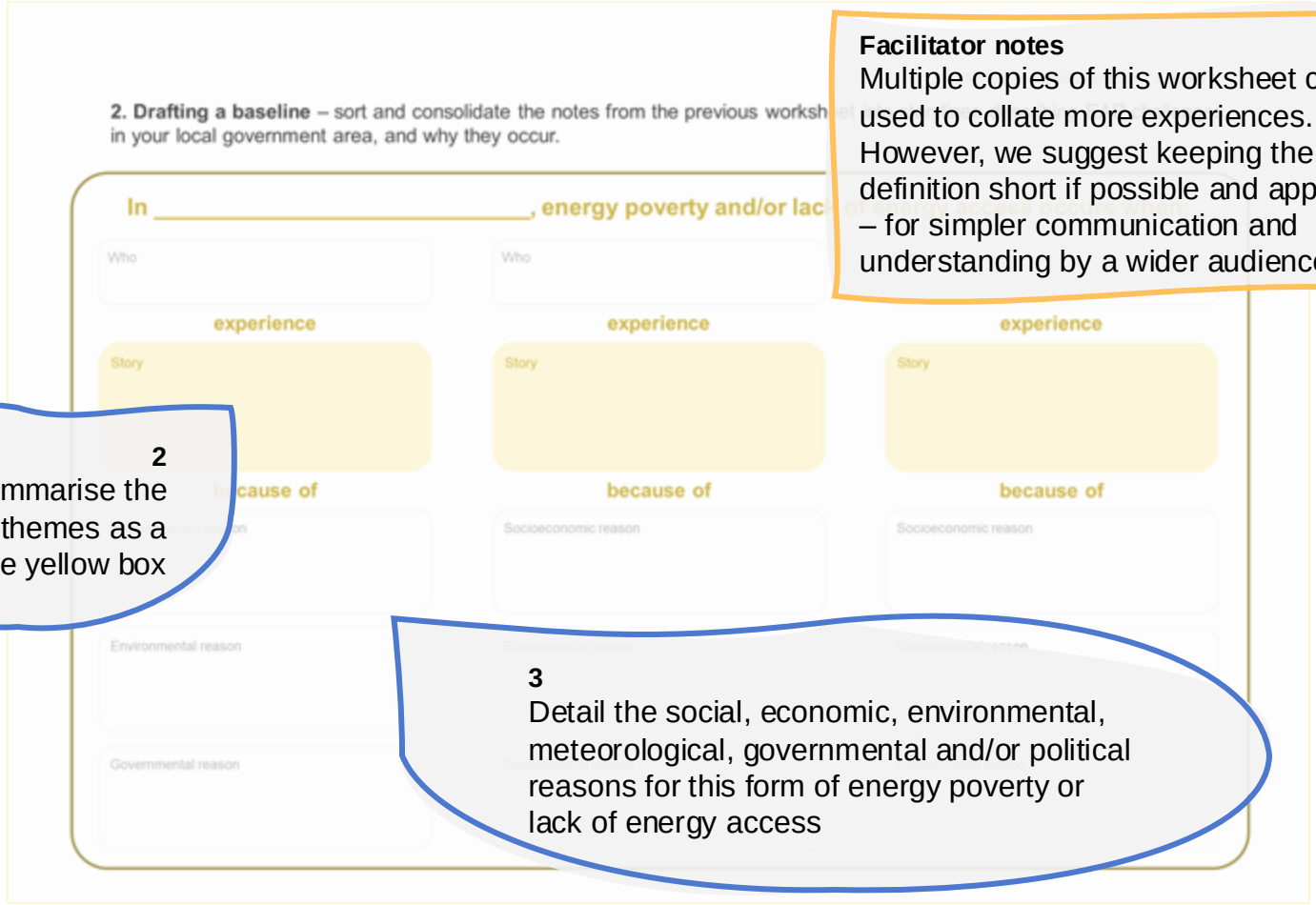
Collating stories & quantitative data

Facilitator notes
Where possible, start grouping themes across data and stories during this discussion



Tool & facilitation guide

Collating stories & quantitative data



Facilitator notes
Multiple copies of this worksheet can be used to collate more experiences. However, we suggest keeping the definition short if possible and appropriate – for simpler communication and understanding by a wider audience.

2
Summarise the grouped themes as a title in the yellow box

3
Detail the social, economic, environmental, meteorological, governmental and/or political reasons for this form of energy poverty or lack of energy access

1. Brainstorming – Use this space to record any quantitative data or lived experiences

Quantitative data	Lived experience

2. Drafting a baseline – sort and consolidate the notes from the previous worksheet into storylines describing EAP challenges in your local government area, and why they occur.

In _____, energy poverty and/or lack of energy access occurs when:

Who	Who	Who
experience	**experience**	**experience**
Story	Story	Story
because of	**because of**	**because of**
Socioeconomic reason	Socioeconomic reason	Socioeconomic reason
Environmental reason	Environmental reason	Environmental reason
Governmental reason	Governmental reason	Governmental reason

Health-check worksheet

Developing an EAP baseline

What is your challenge area summary?

Module 5
Understanding local barriers

Understanding local barriers

Exploring local governments' barriers and powers uncover the complexity they work within, as a starting point to map potential ways forward. Exposing such barriers can help to identify opportunities to innovate solutions; within their administrations or by collaborating with relevant community, private sector, regional and national stakeholders.

Module objectives

- Self-identify what are the key barriers experienced as local government staff in addressing energy poverty or improving energy access
- Discuss which of these barriers are obvious and tangible, due to gatekeeping by other actors, and/or narrative blocks around what is possible for residents and communities
- Discuss which barriers are interrelated within EAP, or other local issues and forms of deprivation

Why think about barriers?

Make sense of every-day experiences of local government staff in progressing EAP solutions

Despite being very aware of and committed to facilitating energy access and addressing energy poverty, many local governments face specific barriers in their planning and implementation.

Understanding the local challenges experienced by local government staff in approaching EAP is crucial to understand where efforts need to be directed. Mapping and analysing barriers to EAP enable understanding as to how and why local governments' planning – and the efficacy of their efforts – might be limited.

Focus solutions and resources

Exposing EAP barriers can help to identify opportunities to innovate solutions. This could be within local government administrations or by collaborating with relevant community, private sector, regional and national stakeholders.

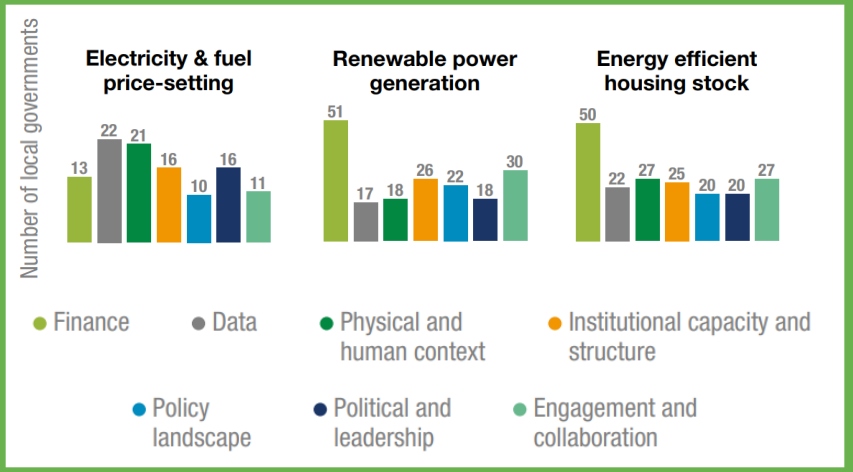
Energy access barriers in cities

Barriers found in 2023 research

There are seven categories of barriers identified by local governments on EAP:

1. Financing solutions
2. Institutional capacity and structure to deliver
3. Lack of knowledge and understanding of physical and human context
4. Navigating policy landscapes
5. Engagement and collaboration with stakeholders
6. Availability of data
7. Lack of political leadership

Barrier types can change according to different areas of EAP. Some examples of EAP action areas can include renewable power generation, energy efficient housing stock, low carbon heating/cooling or electricity & fuel price-setting just to name a few. Whilst finance could be a main driver for many of these action areas, other barriers such as data are more prevalent in EA aspects like electricity & fuel price-setting.



The graph above is from the 2023 Research Report, Unlocking Urban Energy Access and Poverty where 74 GCoM signatories completed an online survey and data analysis on their barriers, local government powers and initiatives in improving energy access and alleviating energy poverty. This graph outlines the barriers named by respondents as most significant to different energy access action areas.

Barrier types

Finance	Barriers relating to accessing funding and financing from public, private and IFI sources for the development and deployment of schemes to improve energy access.
Institutional capacity and structure	Challenges relating to limited capacity to provide policy and business services support to develop and manage schemes to improve energy access, as well as barriers created by the distribution/devolution of relevant powers amongst different levels of government.
Physical and human context	Challenges that relate to a city or community's geographical location and demographic characteristics that can affect the viability of schemes to improve energy access, including historical land use planning.
Policy landscape	Policies and regulations create barriers to market entry or do not create a supportive policy environment for improved energy access, for example limiting the ability of small-scale energy projects to establish economically viable schemes.
Engagement and collaboration	Lack of effective engagement and collaboration with communities, private sector and other important stakeholders such as higher-tier government.
Data	Challenges that relate to a local government's ability to access information and acquire knowledge required to take effective decisions.
Political and leadership	Challenges related to prevailing political ideologies or priorities, governance typologies, or the strength of leadership from key actors.

Identifying your barriers

This tool will guide you to identify the barriers to EAP in your local context, recognise the relationships and interconnectedness between these barriers, and note other issues in your context that are related.

Understanding your barriers is important to select appropriate interventions and implement them effectively. In contrast to the stories of local experiences in Module 1, these are about the challenges in your every-day work as local government officers in policy and solution implementation to address EAP.

If you have completed previous modules it is useful to reflect back on the first module to revisit the stories you have found and understand why these stories are present, and what the barriers are that create these stories.

When to use this Tool

You can use this tool when you understand what EAP looks like in your context and are ready to identify which barriers you face. This should focus more on barriers in your EAP work, instead of barriers to access in the communities you work with.

Who should be part of the conversation

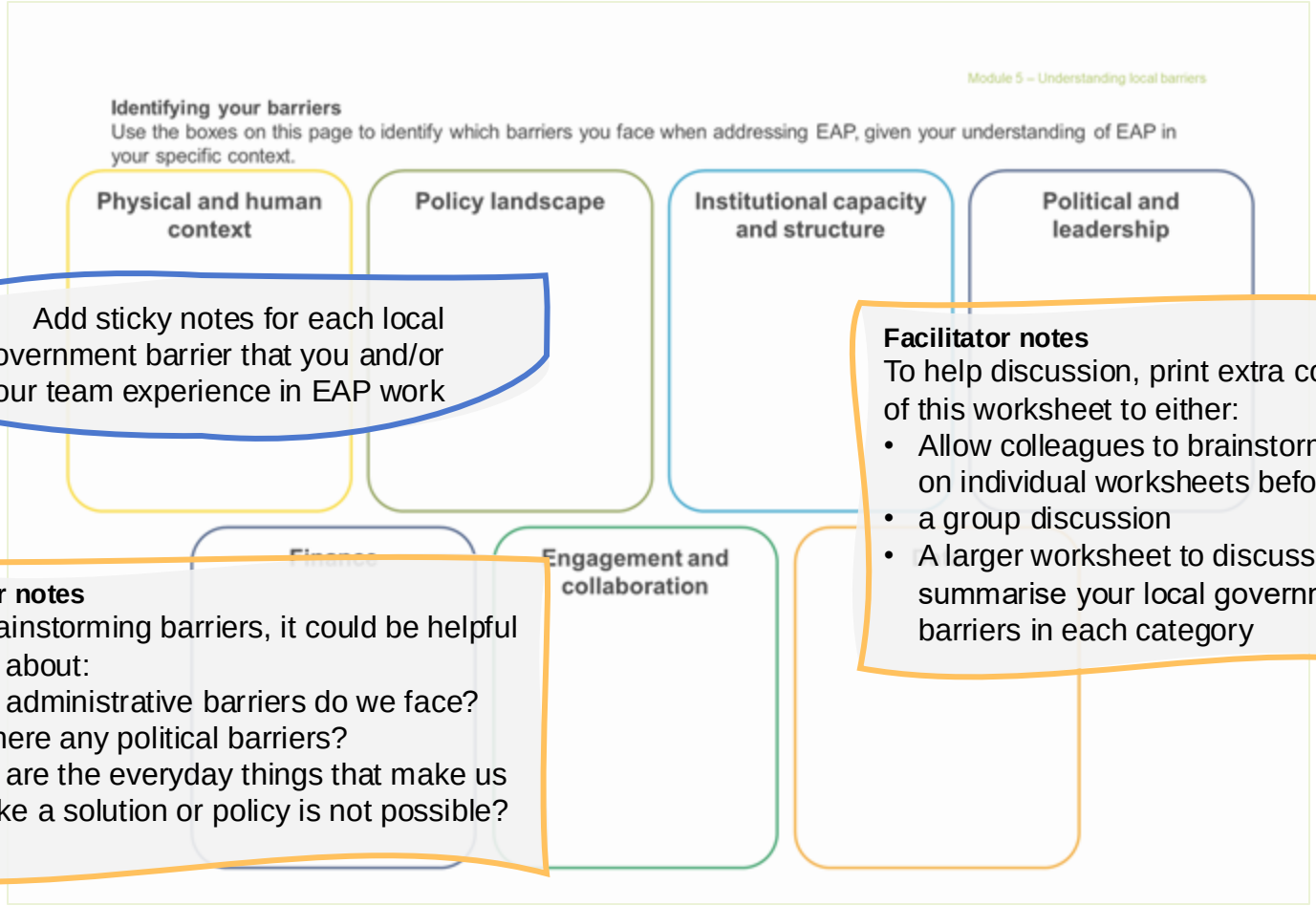
Local government staff who have an overview of EAP in your city's context.

Suggested set-up and logistics

The following pages can be printed as large posters. Use post-its or pens to complete the work sheets.

Tool & facilitation guide

Identifying local government barriers



Add sticky notes for each local government barrier that you and/or your team experience in EAP work

Facilitator notes
When brainstorming barriers, it could be helpful to reflect about:

1. What administrative barriers do we face?
2. Are there any political barriers?
3. What are the everyday things that make us feel like a solution or policy is not possible?

Facilitator notes
To help discussion, print extra copies of this worksheet to either:

- Allow colleagues to brainstorm on individual worksheets before
- a group discussion
- A larger worksheet to discuss and summarise your local government's barriers in each category

1. Identifying your barriers

Use the boxes on this page to identify which barriers you face when addressing EAP, given your understanding of EAP in your specific context.

Physical and human context

Policy landscape

Institutional capacity and structure

Political and leadership

Finance

Engagement and collaboration

Data

Health-check worksheet

Understanding city barriers

What are the key barriers you experience in addressing energy poverty or improving energy access?	Which is the most challenging barrier type for your local government?	Which barriers are related to other issues (or forms of deprivation) in your context?

Module 6
Maximising available local powers

Maximising available local powers

Targeting actions within available powers and resources

Local governments often have limited direct powers to control the urban assets and functions that generate and supply energy. Understanding where different levels of government, utilities, and wider stakeholders do have powers can support local governments to take effective and efficient action through targeted collaboration.

Module objectives

- Self-identify the EAP assets in which local governments have full, shared or no powers to influence policy and implement solutions
- Reflect and brainstorm how and where local governments have convening and advocacy powers

Other useful resources

- Resource pack on city powers to advance a just energy transition in Europe through relief, retrofits and renewables by C40 Cities

Local government powers in EAP sectors

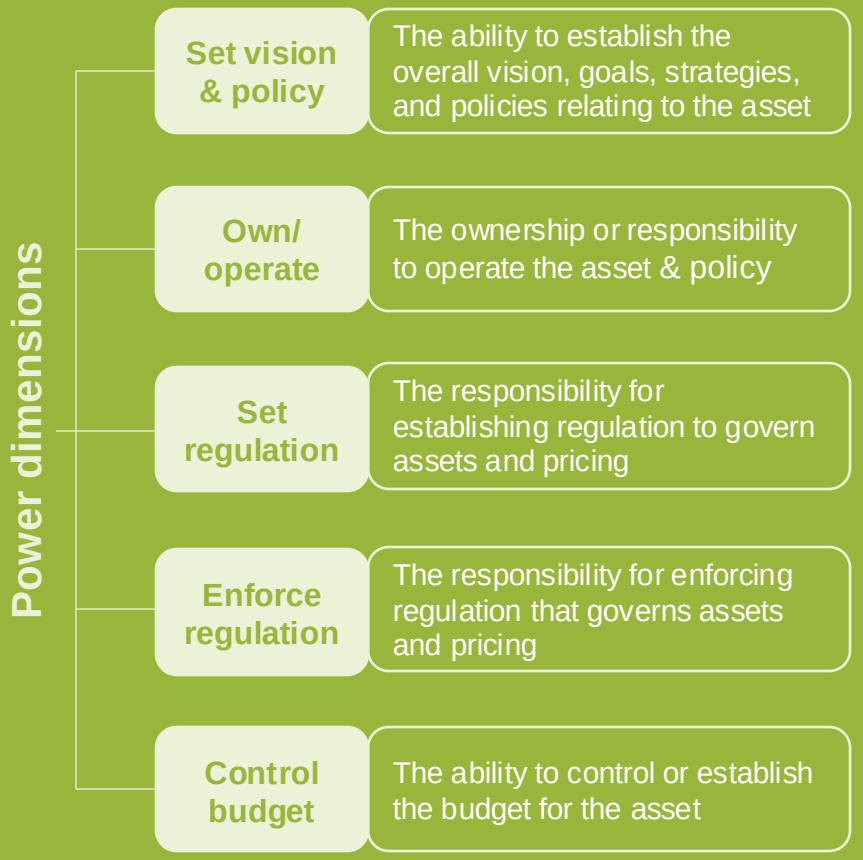
Knowing where decision-making authority is owned, shared, or unavailable

The extent of local government powers over the urban assets and functions important to support energy access and alleviate energy poverty vary strongly by national context and asset type. Characterising these differences will help you to understand where there are opportunities to act.

Powers over EAP assets can be categorised into five main dimensions, which each address a different way in which local government can exert power and influence.

Correlation of powers with barriers

Based on available capacity and powers, local governments can use different approaches to address their barriers (Module 5) to energy access by maximising their available powers via collaboration.



Identifying your powers

Understanding the dimensions of power that you have in your national and local context is important to identify appropriate approaches to addressing EAP: the power to set vision and policy, the power to own/operate assets, the power to set regulation, the power to enforce regulation, and the power to control budget spend.

This tool will enable you to map your powers – unpacking the complexity across:

- **Convening** powers (stakeholder engagement and collaboration)
- **Advocacy** powers (with national government and other regional/global bodies)
- **Direct** powers (local government control)

When to use this Tool

This tool is especially useful with a baseline understanding of what EAP looks like in your context (from modules 1 to 5).

Who should be part of the conversation

Local government staff who have an overview of the findings from modules 1 to 5, and any other city staff who work with EAP.

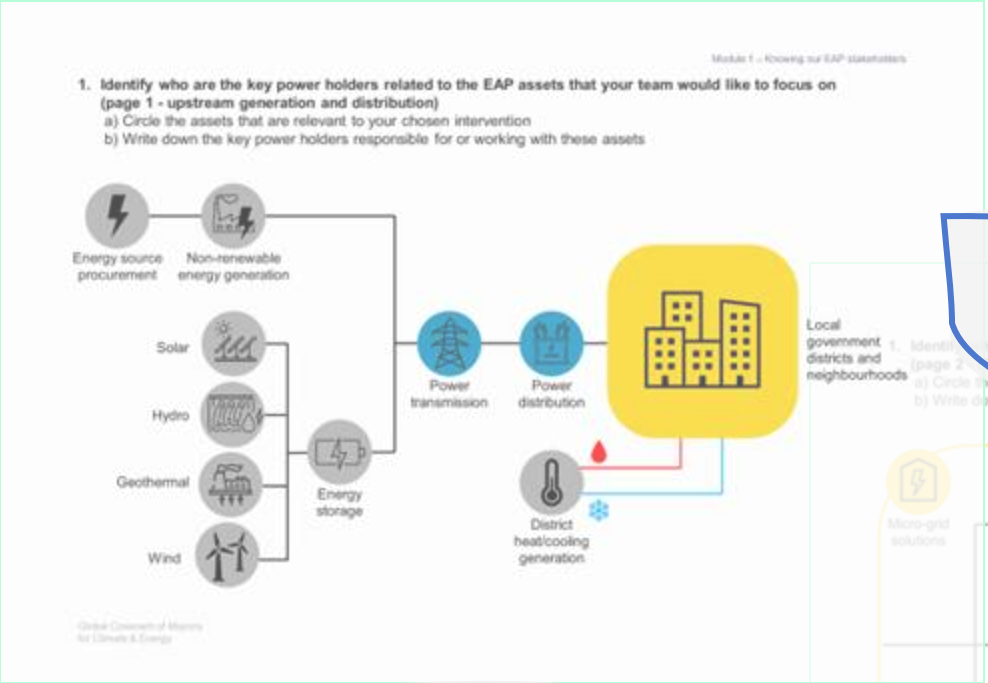
Suggested set-up and logistics

- Print the powers grid as a large poster to identify your city's powers in each dimension.
- You can use three different colours of sticky notes to mark the degree of powers for each area of convening, advocacy or direct powers.

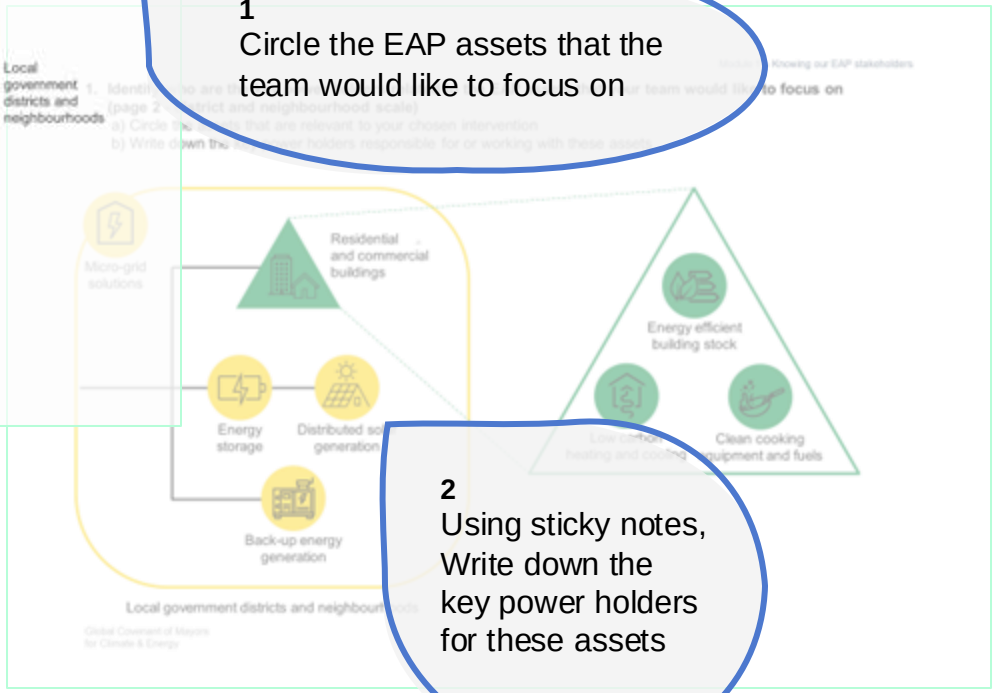
Tool & facilitation guide

EAP asset and scope identification

Facilitator notes
This step is optional, especially if you have done this exercise in module 1 and have the same focus.



1
Circle the EAP assets that the team would like to focus on



2
Using sticky notes, Write down the key power holders for these assets

Facilitator notes
Use different colour sticky notes or pens to note if the powers are to convene, advocate, or directly control.

Tool & facilitation guide

Powers analysis

Module 6 – Maximising available local powers

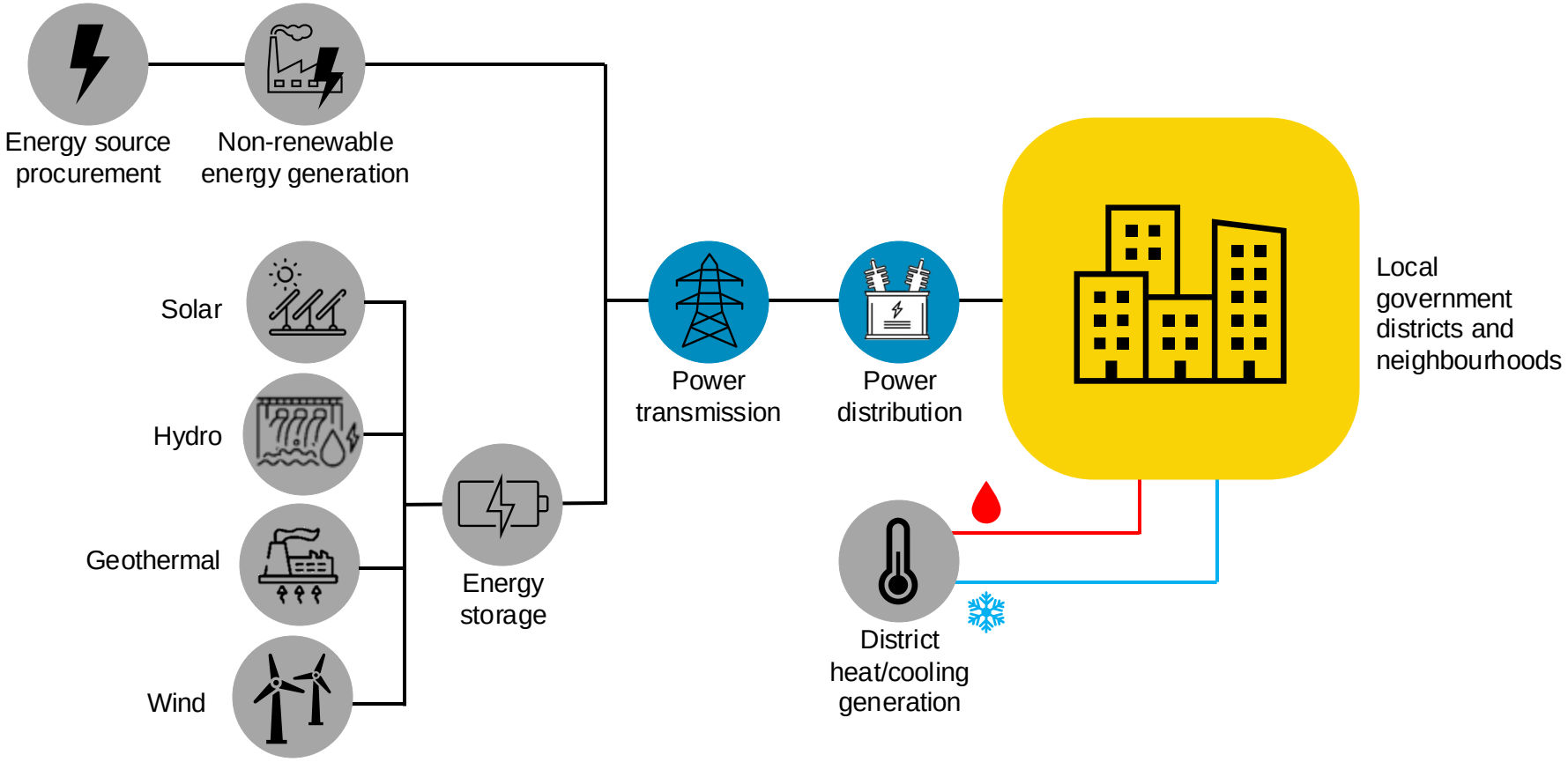
2. Now you have identified the key power holders, add them to the correct category according to the type and level of powers.

	Own/operate	Set vision and policy	Control budget	Enforce regulation	Set regulation
High Powers					
Shared powers					
Low powers					
No powers					

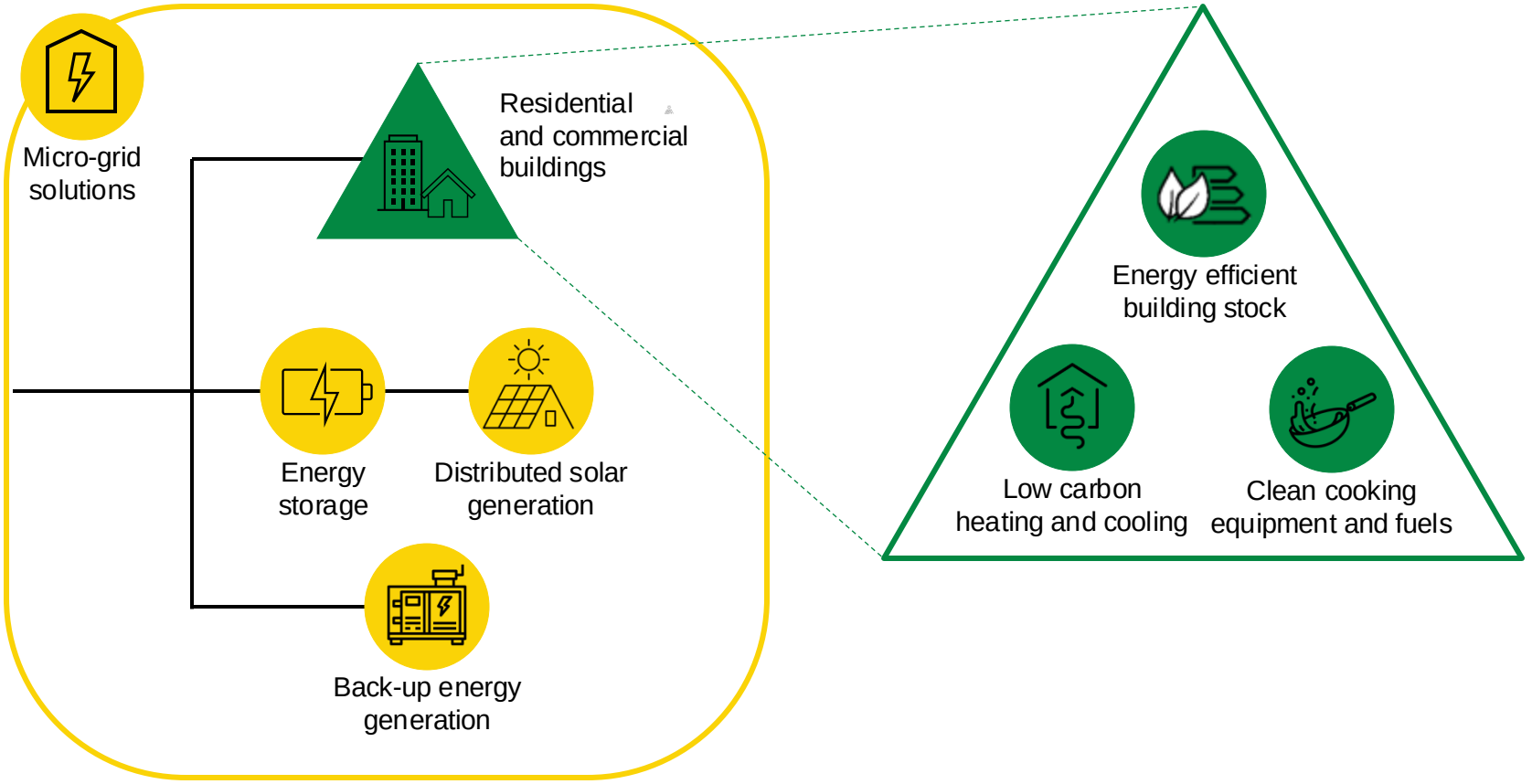
Place sticky notes for each organisation to note their level and type of powers for the aspect of control over EAP assets

You might have to add more than one sticky note for one organisation if they control more than one aspect of an EAP asset

1. **Identify who are the key power holders related to the EAP assets that your team would like to focus on (page 1 - upstream generation and distribution)**
   a) Circle the assets that are relevant to your chosen intervention
   b) Write down the key power holders responsible for or working with these assets



1. **Identify who are the key power holders related to the EAP assets that your team would like to focus on (page 2 - district and neighbourhood scale)**
   a) Circle the assets that are relevant to your chosen intervention
   b) Write down the key power holders responsible for or working with these assets



2. Now you have identified the key power holders, add them to the correct category according to the type and level of powers.

	Own/operate	Set vision and policy	Control budget	Enforce regulation	Set regulation
High Powers					
Shared powers					
Low powers					
No powers					

Health-check worksheet

Maximising available city powers

Which EAP assets do you have full, shared, or no powers to influence policy and implement interventions?

Full Powers to influence	**Shared Powers to influence** Who do you share these powers with?	**Low Powers to influence** Which stakeholders do have powers?

Module 7
Designing EAP interventions

Designing EAP interventions

There are five different interventions which local governments can employ to improve energy access and reduce energy poverty:

1. Policies & regulation
2. Stakeholder collaboration
3. Internal capacity building & data collection,
4. Investment & securing finance
5. City-led programmes.

It is important to note that these interventions are influenced by the barriers and power structures they operate in. This relationship will be explored in the tool for this module.

These interventions are based on the 2023 Research Report on Unlocking Energy Access, from desk research and an online survey completed by 74 GCoM signatories that enquired about initiatives in improving energy access and alleviating energy poverty. These interventions are referred to as levers, but the word intervention is a better representative between the evidence base and the actual action you will get to.

Module objectives

- Reflect on your local government's appetite for specific interventions based on time horizon, current capacity, and powers available
- Self-identify which interventions are prioritised and suitable for your local government and residents
- Detail interventions and break them down into smaller steps

Other useful resources

- International Energy Agency's energy efficiency policy toolkit
- REN21's Mini-grid Policy Toolkit

EAP interventions

The approaches can be concretely demonstrated in the types of interventions that local governments use to address energy poverty and advance energy access.

Local governments can refer to these different interventions as a starting point to understand where they are in their energy access journeys.

These interventions can also be used as inspiration for potential actions. They should be adapted to reflect your local government's unique context.

Policies & regulation	Interventions in this category are focused on establishing policies and regulation to enable local government interventions, private sector innovation, and community stakeholder development
Stakeholder collaboration	Local government actions to engage with communities, the private sector, as well as other tiers and branches of government towards data collection and implementing energy access solutions
Internal capacity building & data collection	Interventions to increase the technical and resource capacities of local governments, as well as establishing clear monitoring, evaluation and reporting
Investment & securing finance	Interventions to secure local, national, and international funding for solutions in implementing energy access policies and programmes
City-led programmes	When energy access solutions do not have cost or administrative effectiveness for large-scale programmes and diverse infrastructure and assets, local governments can directly undertake programmes and projects.

Approaches to designing EAP interventions

Shifting our perspective on taking action

When identifying and developing interventions based on unique contexts and limited resources, we suggest that local governments reflect on the three approaches listed on the right to address their barriers to energy access.

This is a change in how we talk about, prioritise, and evaluate actions. This is especially important when the results of energy access planning and implementation may not be immediate or obvious. The benefits may also not be appreciated by those less concerned about energy poverty.

These approaches can be iteratively and increasingly introduced to governance, policies and programmes, and reporting. They also overlap and reinforce each other – serving not only communities' increased energy access, but also other local government priorities in sustainability, social equity, and beyond.

Identifying key interventions

Understanding which interventions are appropriate for your local government given your unique governance structure, challenges of EAP, and other contextual factors is an important step to being able to address EAP in your area.

This tool will help you to identify which interventions you can use, and to understand when outcomes are delivered, the level of local government capacity needed, and powers to be maximised to successfully implement the intervention.

This tool will also guide you in how to define your chosen interventions as smaller and actionable steps.

The worksheets in this section set out suggested interventions and have space where you can identify how they could be applied in your context.

When to use this Tool

Use this tool when you are ready to understand which interventions your local government can take to address EAP.

Who should be part of the conversation

Local government staff can use this tool, recognising that the key stakeholders to involve in chosen interventions may extend beyond specific city departments.

Suggested set-up and logistics

The worksheets in this section list suggested interventions. Use the check boxes to indicate which interventions you are interested in. There is space for you to record your notes and to indicate how the intervention could be implemented in your context.

The second worksheet can be used as a demonstrator for interventions that you would like to progress and implement.

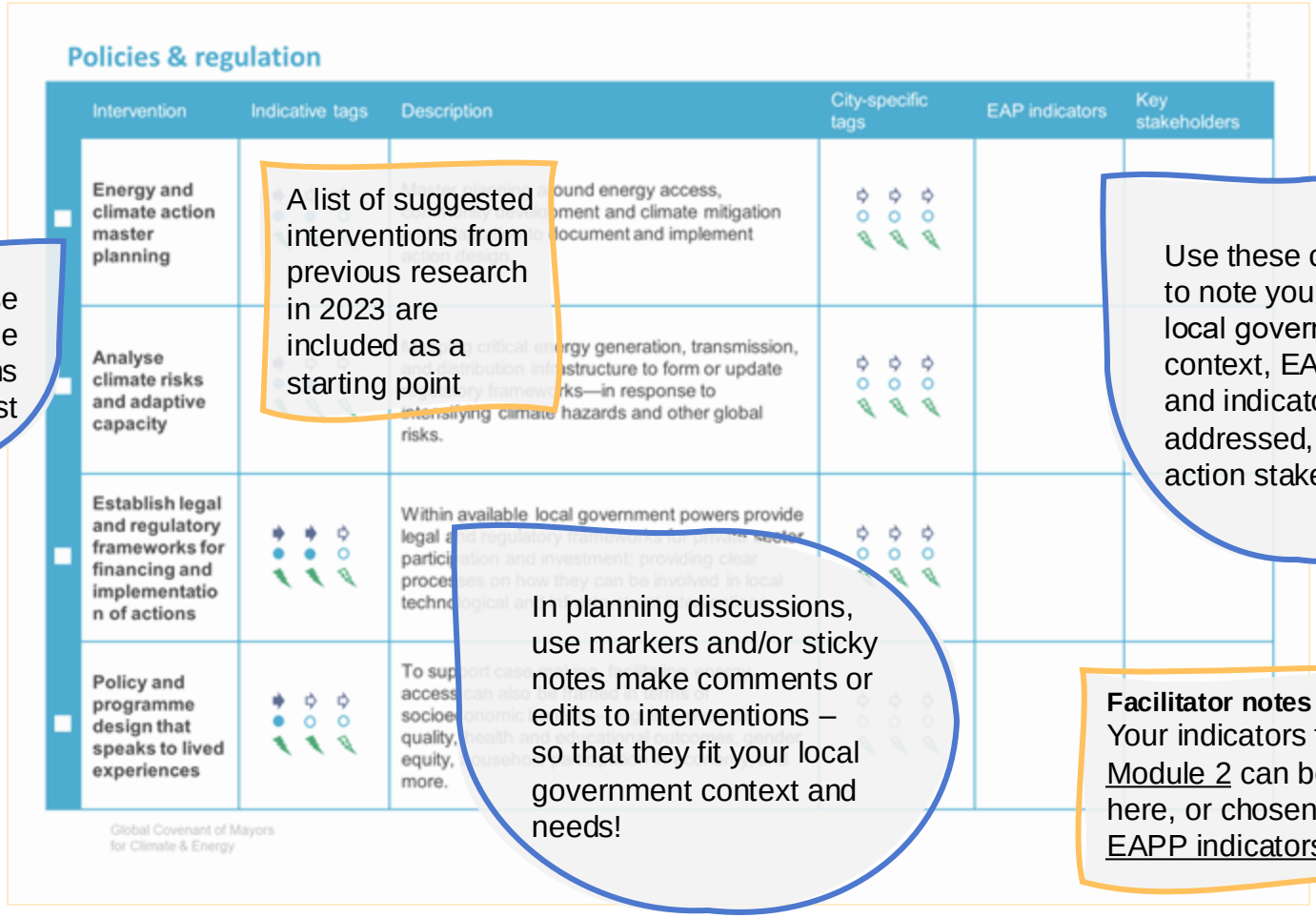
Intervention tags

The interventions in this section are presented with “tags”, which suggest the time horizon, the resource and capacity demand, and the powers needed to implement the intervention. However, every context is different, and therefore there is also space to record the specific tags relevant to your situation.

Time horizon for which outcomes will be more visible and tangible	The level of demand on local government capacity and resources	Local government powers that the intervention will apply and maximise
Short-term 1-3 years	**Easy-win** Feasible with existing resources	**Sole powers** Local governments have sole authority
Medium-term 3-10 years	**Collaborative action** Includes engagement with internal & local stakeholders	**Shared powers** Local governments have sole or shared authority
Long-term More than 10 years	**Extensive collaboration** Includes engagement with regional & national actors	**Limited Powers** Local governments have shared or no authority

Tool & facilitation guide

Identifying and customising local interventions



Check these boxes if the interventions are of interest

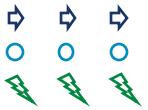
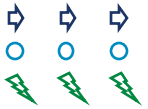
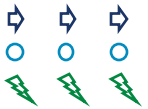
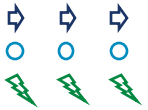
A list of suggested interventions from previous research in 2023 are included as a starting point

Use these columns to note your own local government's context, EAP needs and indicators addressed, and key action stakeholders

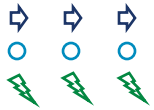
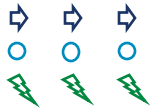
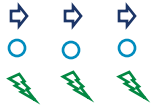
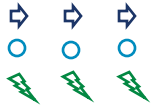
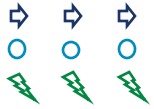
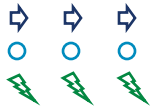
In planning discussions, use markers and/or sticky notes make comments or edits to interventions – so that they fit your local government context and needs!

Facilitator notes
Your indicators from Module 2 can be used here, or chosen from the EAPP indicators.

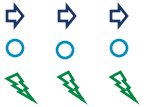
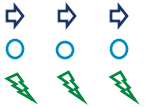
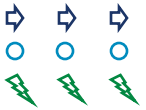
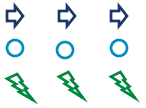
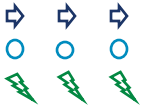
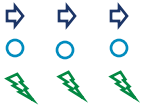
Policies & regulation

Intervention	Indicative tags	Description	City-specific tags	EAP indicators	Key stakeholders
Energy and climate action master planning		Master planning around energy access, community development and climate mitigation and adaptation to document and implement action design.			
Analyse climate risks and adaptive capacity		Mapping critical energy generation, transmission, and distribution infrastructure to form or update regulatory frameworks—in response to intensifying climate hazards and other global risks.			
Establish legal and regulatory frameworks for financing and implementation of actions		Within available local government powers provide legal and regulatory frameworks for private sector participation and investment: providing clear processes on how they can be involved in local technological and infrastructural interventions.			
Policy and programme design that speaks to lived experiences		To support case-making, facilitating energy access can also be framed in terms of socioeconomic benefits— e.g. improved air quality, health and educational outcomes, gender equity, household participation in economy, and more.			

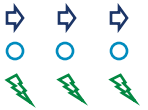
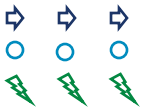
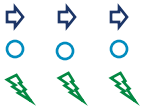
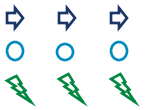
Stakeholder collaboration

Intervention	Indicative tagging	Description	City-specific tagging	EAP indicators	Key stakeholders
Community-led data collection programmes		Facilitate the collation and documentation of both quantitative and qualitative data of lived experiences, led by local leaders and residents.			
Co-design solutions with local communities that speak to specific contexts and needs		Embed analytical and stakeholder engagement steps in the policy and programme design processes to ensure they are informed by and apply to specific lived experiences in communities and households.			
Engage with private sector and academia		Tap into private sector and academic know-how to design technical solutions, and implement projects, and provide community training opportunities.			
Transparent and documented processes		To support case-making, facilitating energy access can also be framed in terms of socioeconomic benefits— e.g. improved air quality, health and educational outcomes, gender equity, household participation in economy, and more.			
Engage with national and regional energy access actors		Connect with national and regional bodies and energy supplier to advocate for infrastructural, legislative, or financial solutions			
Coordinate stakeholders and data for national engagement		Connecting and facilitating local and regional stakeholders to make a concerted case for implementing national actions.			

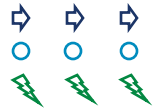
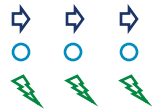
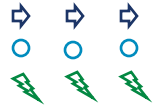
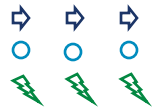
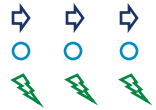
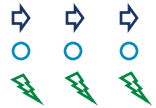
Internal capacity building & data collection

Intervention	Indicative tagging	Description	City-specific tagging	EAPP indicators	Key stakeholders
Central working group for energy access		Create and mandate a single coordinating municipal entity to lead ownership, coordination and buy-in of local government departments, relevant regional and national political actors, and relevant private sector and community stakeholders.			
Joining regional and international platforms		Participate in regional and international platforms on energy access to discuss common challenges; enabling opportunities to share best practices, develop common solutions, and form advocacy coalitions.			
Data-collection networks and infrastructure		Build networks between local government departments and relevant external agencies or private sector partners to collate datasets on energy poverty and energy access. This should be supported by a central data repository for energy access towards further analysis and case making for policies, programmes, and vertical integration.			
Data analysis and case-making		Curate evidence-base that provides coherent and systemic methodology to legitimise energy access solutions for policy and financing case-making— pinpointing infrastructural gaps in transmission and distribution, quantitative and qualitative data on household energy consumption, addressing uneven negative consequences of energy poverty, and promoting equitable energy access benefits in the community.			
Monitoring, evaluation and reporting frameworks to support planning		Establish cost- and resource effective strategies within strategic, policy and programme planning to monitor and evaluate energy access circumstances and the efficacy of interventions. Framework should also specify review and update process based on new information/progress.			
Building local technical knowledge and capacity		Provide opportunities for staff to exchange technical knowledge with other local governments, as well as private and academic stakeholders. Involvement in cross-departmental data analysis and master planning provides further opportunities for multi-disciplinary and co-designed interventions.			

Investment & securing finance

	Intervention	Indicative tagging	Description	City-specific tagging	EAP indicators	Key stakeholders
☐	**Financing energy access programmes**		Provide grants for, subsidise, or fund interventions—e.g. in residential electrification and energy efficiency retrofits, distributed renewable energy generation, tariff subsidies for low-income households. Co-financing schemes can also be used to encourage ownership and education.			
☐	**Analysis and innovation of funding models**		Explore innovative finance models to improve cost-parity of solutions and attract large-scale investors, especially in clean energy and district heating/cooling solutions.			
☐	**Energy performance contracting (EPC)**		Contract an Energy Service Company (ESCO) to deliver energy efficiency retrofits with committed reduction targets; where the intervention costs are paid off via the energy savings made.			
☐	**Engage with potential funders**		Engage with local, regional, and international funders to support and finance local interventions and interventions, in both hardware and soft data infrastructure.			

Programmes led by local governments

	Intervention	Indicative tagging	Description	City-specific tagging	EAP indicators	Key stakeholders
☐	**Energy data infrastructure and audit analysis**		Install smart metering to monitor energy consumption of residential or social housing buildings; process data for energy audits to target energy efficiency interventions.			
☐	**Local community training**		Conduct training with local community leaders and residents to raise awareness of energy efficiency solutions to ensure expenditure is maximised in improving living conditions and thermal comfort.			
☐	**Energy efficiency retrofits**		Retrofits to increase energy efficiency of fittings and technology, improve thermal insulation and convert cooking and heating appliances to low carbon alternatives. Local governments can target social housing and other assets under their management.			
☐	**Distributed renewable energy generation**		Install rooftop or micro solar PV systems to offset or subsidise energy consumption. Local governments can target social housing, administrative buildings, and other assets under their management			
☐	**Financial support for households to improve energy affordability**		Make energy more affordable by direct reviews of energy and fuel pricing, bill subsidies, or easing the overall financial burden of households via other support such as rent ceilings and employment opportunities.			
☐	**Municipal energy procurement**		As individual—or a group of— local government(s) sign power purchase agreements with energy providers with secure supply uptimes as well as renewable generation sources.			

Health-check worksheet

Designing EAP interventions

Which interventions are you interested in using?	
What are the smaller, actionable steps you can take to implement these interventions?	

Module 8
Making the case for Energy Access

Making the case for Energy Access

Using the last seven modules in this Toolkit and your local studies, plans and input, it is now important to consolidate the available information. This information is crucial to support advocacy, planning and action financing that is effective and efficient.

To maximise the case for EAP, it is helpful to also be able to recommend synergies with other climate actions and co-benefits. This allows you to gather more expertise, existing and planned solutions, as well as advocacy voices.

Module objectives

- Enable cities to make the case for a suite of interventions based on communities' lived experience

Other useful resources

- Climate Toolkits: For Infrastructure PPPs by the World Bank
- Asian Development Bank's Microsoft Excel-Based Tool Kit for Planning Hybrid Energy Systems

Telling your EAP action story

Who do we advocate to, and why?

- **Local citizens**
  To develop solidarity across community groups and provide transparency on the focus of local government resources towards EAP
- **Technical experts and financial investors**
  Providing data-driven EAP baseline and community-specific goals signal to non-governmental actors where their research and capital should be focused
- **Regional and national government**
  To lead the way with similar and neighbouring local governments to justify systemic or infrastructural changes needed to progress energy access or address energy poverty

What makes a strong story

- A clear target group for intervention with justification via data and/or community experiences of EAP
- Meaningful stakeholder engagement to co-design and/or sense-check EAP solutions, and documentation of this
- A vision of the intended outcomes, benefits, and distribution of these benefits for specific demographic groups
- Highlights of possible synergies and co-benefits across other aspects of climate action and poverty alleviation

Action storytelling tool

Understanding the co-benefits and being able to identify synergies between EAP interventions is a key part of making the case for EAP.

There are two parts to this tool:

1. A co-benefits matrix, where you can review suggested co-benefits of the interventions outlined in Module 7
2. A "storytelling" worksheet to combine the understanding and knowledge from your local government (and previous modules) to make your case for energy access interventions

Download this Excel-based tool here

When to use this Tool

The first part of this tool builds upon your understanding of which interventions you are interested in using (Modules 7, and any other action-specific analyses), and the second part consolidates your understanding from all the previous modules.

Who should be part of the conversation

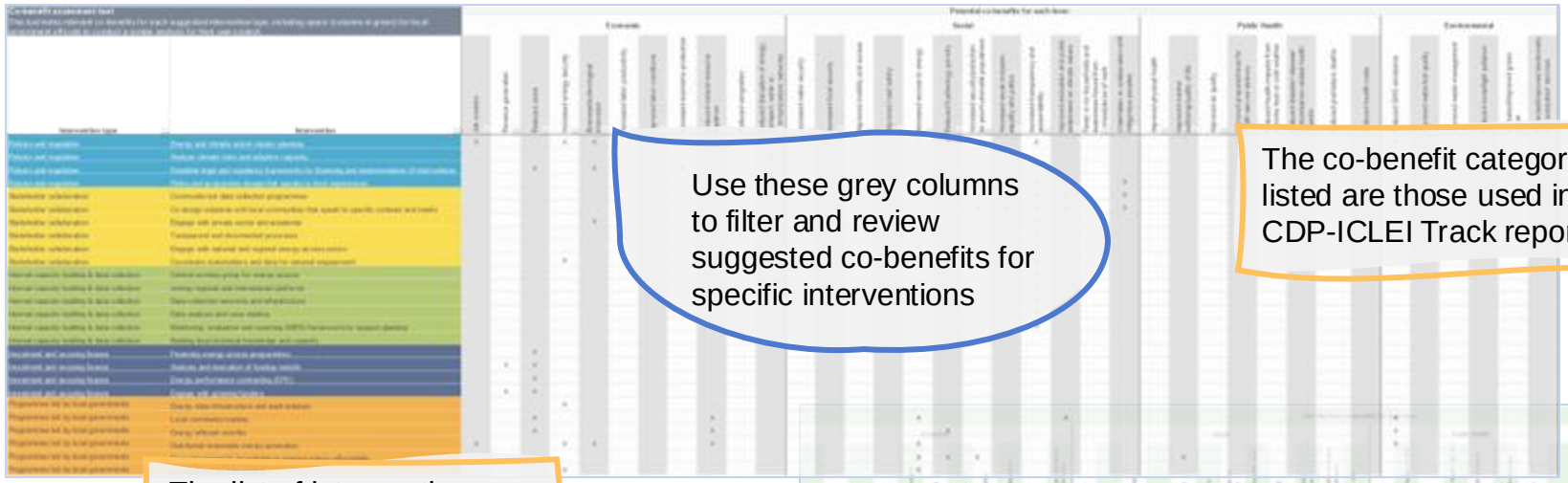
City staff who have an overview of the findings from previous modules.

Suggested set-up and logistics

The first part of this tool is a matrix presented in an Excel workbook. The worksheet for the second part of this tool can be printed large and used to guide and inform discussions to make the case for energy access.

Tool & facilitation guide

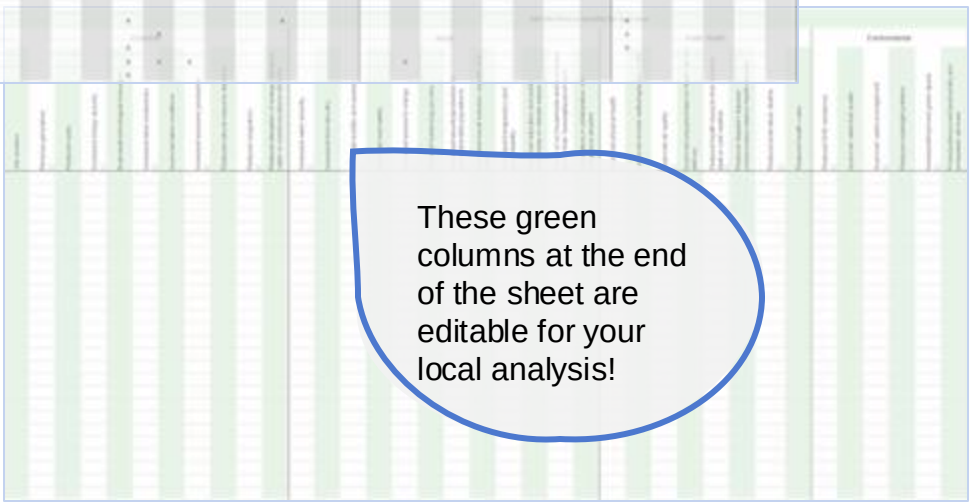
Co-benefits assessment tool



Use these grey columns to filter and review suggested co-benefits for specific interventions

The co-benefit categories listed are those used in CDP-ICLEI Track reporting.

The list of interventions are the same as those listed in Module 7, from previous research in 2023



These green columns at the end of the sheet are editable for your local analysis!

Tool & facilitation guide

Storytelling worksheet

This worksheet is meant for one single action at a time!

Storytelling worksheet
This worksheet is for local g… …g and implementation. The worksheet can be used in discussions or individual planning - to support advocacy, engag… …, and finance applications.

Information category	Prompt	Related Toolkit module	Detail *Note any relevant details, stakeholder input and documents here*	Headline *Summarise details into a sentence to share easily with stakeholders*
Intervention	Describe the EAP intervention being planned	6		
EAP challenge(s) addressed	What form of energy poverty / lack of energy access does this interv…			
Who experiences this EAP challenge	What are the identi… local government a… energy poverty / lac…			
Relevant EAPP indicator(s)	Which EAPP indicators … intervention?			
Local government barriers	What are the previous and current barriers preventing local government action?	5		
Local government powers	What are the policy or implementation areas where your local government has control or influence?	6		
Implementation steps	What are the steps to design and/or implement this intervention?			
Stakeholders	Who are the stakeholders to be involved in this …tion? How should they be involved in the …nd/or implementation?	1		
	… the visible results of this intervention?			
	… happen because of this intervention?			
	…this intervention increase energy access …s energy poverty?			
	…receive the benefits of this intervention?			
Co-benefits	…e the other socioeconomic benefits of this intervention?			

Respond to each information category and prompt to define the action

Write a short headline that can be easily communicated to and understood by external stakeholders

This can be used as an action planning worksheet, and also a database to extract relevant information to communicate with stakeholders

Health-check worksheet

Making the case for Energy Access

What are the outcomes of energy access action in my local government?

What are the direct outcomes?	Which community groups receive these outcomes & benefits?	Are there any other benefits related to emissions reduction, climate adaptation, or other forms of deprivation?

Governance and regulation needed to encourage these outcomes and benefits	Data and monitoring needed to encourage these outcomes and benefits

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GCoM Regional and National Covenants