



D2.3 PEER-TO-PEER EXCHANGE ON SUSTAINABLE ENERGY INNOVATION

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Abstract	This document outlines the SESA project's peer-to-peer exchanges aimed at enhancing knowledge sharing on sustainable energy solutions. Between October 2022 and 2024, 10 exchanges engaged 127 participants from businesses, NGOs, and local and national governments, focusing on the technologies that have been tested in the SESA projects, as well as relevant aspects such as business models, policies, partnerships and lack of technical knowledge. The exchanges took place mainly in Africa but also in Europe, fostering collaboration, addressing local challenges, and supporting the implementation of smart energy solutions. The document also includes lessons learned and insights for improving future knowledge transfer activities within the project.

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List of abbreviations

SESA	Smart Energy Solutions for Africa
ICLEI ES	ICLEI European Secretariat
AAMUSTED	Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development, Kumasi
LEITAT	Leitat Technological Center
D	Deliverable
SDGs	Sustainable Development Goals

Executive Summary

This document presents the activities carried out by the SESA project to enhance peer-to-peer exchanges. Whilst the concept can indicate more or less formalized ways of knowledge transfers, and both have been undertaken in the project, the scope of this document is to give relevance and present the exchanges that took place between practitioners engaged in the implementation of smart and sustainable solutions for energy access, mainly in the African countries targeted by SESA but not only, via the engagement of other African countries as well as some European countries.

Learning and knowledge sharing has been one of the central pieces of this EU-funded project that, between October 2022 and October 2024, organized 10 peer exchanges, engaging a total of 127 representatives of small and medium-sized businesses, NGOs and local governments. The exchanges, created with, by and for the partners involved and the local stakeholders they work with, took place both in Africa, as a key component of the regional events, and in Europe, thanks to the European Study Visits.

The activities touched upon technologies and methodologies which have either high transferability potential of adopting the same -or similar- approach elsewhere, or inspirational effect to unlock innovation and out-of-the-box thinking, directly contributing to the SESA project's objectives by advancing clean and smart energy access solutions in Africa supporting local value creation.

The peer-to-peer exchanges within the SESA project have been a valuable tool for enhancing knowledge transfer and fostering collaboration across diverse regions and sectors. These interactions allowed stakeholders to explore key topics, such as clean cooking solutions, circular economy models, and business models for energy solutions, while addressing local challenges. The exchanges emphasized the importance of partnerships among cities, governments, and the private sector and highlighted the role of local context in the successful implementation of climate and energy strategies.

1. Introduction

The SESA project has employed peer-to-peer exchanges as a mechanism for fostering collaboration and capacity building among stakeholders across Africa and with Europe. These exchanges provide opportunities for local representatives, project partners, and SMEs to share experiences, discuss common challenges, and explore innovative solutions to accelerate climate action, with a focus on smart energy technologies and sustainable development. The peer-to-peer exchanges span multiple countries and cities, facilitating diverse learning environments tailored to the specific needs of each region.

1.1. About the SESA Project

The Smart Energy Solutions for Africa (SESA) project addresses critical energy challenges across Africa, including access to affordable, reliable electricity and clean cooking solutions. This 4-year initiative promotes a sustainable energy transition by leveraging Africa's abundant renewable resources, such as solar energy. It fosters collaboration between European and African partners to develop scalable, innovative energy solutions tailored to diverse socio-economic and geographic contexts.

The project's main objective is to provide innovative, replicable energy technologies and business models that promote economic development, social cohesion, and environmental sustainability. To do so, SESA integrates technical and financial innovations to address local energy needs, focusing on renewable energy, energy efficiency, storage solutions, and sectoral linkages in rural and urban contexts across Africa. The initiative also prioritizes the development of local capacity to ensure the sustainability of solutions, fostering cross-regional knowledge transfer and building resilience against energy-related challenges.

1.2. About this report

This document, which forms part of the project deliverable (2.3), aims to present a comprehensive overview of the peer-to-peer exchange activities carried out within the SESA project under Task 2.3, titled 'Peer-to-Peer Exchange.' The document begins with a general introduction to the concept of peer-to-peer exchanges, followed by a detailed exploration of how this concept was applied within the context of the SESA project. It also outlines the key steps taken from the initial draft stage to the successful realization of the 10 peer-to-peer exchanges that were organized (Part 1).

The central part of the document (Part 2) is dedicated to providing a clear and concise overview of each of the 10 peer-to-peer exchanges, offering a quick insight into the context, discussions, and outcomes of these activities. Finally, in Part 3, a set of lessons learned has been compiled to provide guidance for improving the future organization of peer-to-peer exchanges as an effective mechanism for knowledge transfer and collaboration. This section also highlights some of the persisting gaps in capacity building in Africa (but in most cases, also applicable to the EU cities engaged) that remain.

2. Peer-to-peer exchanges

2.1. The concept

Peer-to-peer exchanges are a proven way to enhance the knowledge and understanding of individuals by exposing them to who is similar with regard to one or more specific traits that are relevant to the type of knowledge that the exchanges aim to enhance. According to the objective, the target group can be defined for example by position held at the workplace, age, geographical location or the set of skills in the same field. This general approach is underlying to existing practices such as experts congress, where attendees all belong to the same profession, but has also been increasingly used in different declination to complement more classical and formal ways of learning such as frontal classes and seminars with a more inclusive perspective, that highly values relations and experiences, going beyond the academic products.

The wide array of possibilities for peer exchanges is well mirrored in the SESA where capacity building has been pursued at many different levels. In fact, whilst the many Universities and educational institutions that are part of the project consortium

collaborated and contributed to create scientific outputs such as joint papers, SESA provided participants with more informal exchanges that acknowledge local action and endeavours.

Whatever form it takes, peer-to-peer is effective. The similarities between participants can facilitate the knowledge transfer. In particular:

- The language is likely to be similar and therefore easier to understand
- The similar conditions and common jargon favour the creation of and welcoming of an open environment
- It is more likely to have less fear in posing questions, intervening and asking to repeat concepts
- It increases the rate of participation of all participants, due to the possibility for them to directly relate to similar situations, roles or functions.

Additionally, engaging in peer exchanges with stakeholders who are not typically seen as experts' values experience- and culture-based knowledge, empowering those individuals who may not have high formal education or roles to become active agents. All the benefits mentioned above could be observed in different proportions in all the peer exchanges organized within SESA.

2.2. Peer-to-peer exchanges in SESA

The complexity of the SESA project, the many different locations engaged, technologies tested, and stakeholders engaged, influenced the approach taken to organize the peer exchanges. With the ultimate objective to create as much added value as possible, the exchanges were mindful of the great diversity across geographies, solutions and sectors.

- **Geographical:** taking advantage of the 9 African countries engaged in the SESA project, exchanges were organized to allow stakeholders from all countries to visit and learn at least once with and from their peers. At the same time, 5 European cities were also engaged in the exchange activities (Barcelona, Spain; Cascais, Portugal; Alba Iulia, Romania; Larissa, Greece; Gothenburg, Sweden) hosting and joining site visits organized in some of the African countries under focus, with the overall aim to pursue a south-south together with a south-north-south directions of exchange.
- **Technological:** SESA has been testing many different solutions including electric mobility, improved cookstoves, biodigesters, e-waste repurposing, solar photovoltaic and its applications to water purification, cooling, lanterns charge, and water pumping. A good engagement of stakeholders made the knowledge transfers dense and diverse, bringing together experiences and expertise on them all. Cross-solution was also possible in a few instances, where more than one technology was discussed in the same event.
- **Sectorial:** Individuals from a great variety of fields participated in the exchanges, from academics and research institutes to representatives of local and national governments as well as entrepreneurs and NGOs and foundations. Civil society was the least represented stakeholder group for the exchanges directly organized at the project level.

2.3. Organizing the peer-to-peer exchanges from A to Z

To make peer-to-peer exchanges successful, it is not sufficient to bring participants together. This simple concept, when realised, requires thought preparation to build a favourable setting, create a clear framing, secure the suitable participants and ensure its relevance for them, all in an integrated fashion in the project activities. Therefore, in SESA, all these aspects have been central to the project itself and, as such, the backdrop of the definition of peer-to-peer exchanges too. Advancing in their organization, the relevant partners from the project consortium followed a process that could be synthesised in 4 key steps: scoping, mapping, readjusting and organizing.

2.3.1. Scoping of knowledge

The first step was to understand the existing knowledge, its gaps related to the deployment of innovative and smart energy solutions and the perceived needs of stakeholders in the countries where SESA living labs are, namely Kenya, Ghana, Morocco, Malawi and South Africa. This analysis was informed by desktop research, engagement with local project partners, interviews and an interactive focus group session which was completed in the first months of the project (Task 2.1 *Building SESA's capacity development framework* assessment) with results reported in the D 2.1 Capacity building plan, published on June 2023. This first step underlined the development of the whole capacity-building activities within the project, including the peer-to-peer activities.

The main areas of interest identified by African stakeholders are: policy and legal gaps that should be addressed to further support the energy solutions implementation, stakeholders and community knowledge and awareness, limited human capacity and technical skills to either use, monitor, service and/or upscale the energy solutions as well as limited access to finance to enhance and/or update sustainable energy solutions.

Although the project's activities primarily focus on Africa, particularly in terms of implementation, European cities have been involved as counterparts for certain activities, including the peer-to-peer exchanges. A similar scoping exercise, although on a smaller scale, was also carried out with representatives from the European cities to identify the areas of expertise and the ones in which there is a desire to increase knowledge. Following a first introductory meeting, EU city representatives were asked to fill in a questionnaire to gather the information that would have helped in their engagement.

2.3.2. Mapping of opportunities for peer-to-peer exchanges

Many benefits come from bringing the peer-to-peer together with a different set of project activities such as events, workshops and roundtables. The joint organization reduces the burden on participants who can contribute to many activities by responding to one single invite. It can also help in making the agenda more appealing by enlarging the proposed offer and having a positive impact on attendance from different

stakeholder groups. Also, from the logistic perspective, joint organization maximizes the use of resources. At the same time, the complexity of the project itself required great coordination to align the different streams of work and keep the overall consistency of the project offer.

The most relevant project activities considered in order to identify suitable moments and contexts in which to organize a peer-to-peer exchange were:

- Regional trainings (see D 2.4 for more details);
- Regional events (see D 2.6 for some insights);
- Status of advancement of the implementation in the living labs (see D 4.2 and 4.3 for more details), including the selection of SMEs

Moreover, a great opportunity for peer-to-peer exchange has been the European Study visit, which as a standalone activity, brought together for over a week, representatives from all LL and SESA selected SMEs in validation countries (Ghana, Malawi, Morocco and South Africa) with a great variety of stakeholders in the three European cities of Cascais, Barcelona and Gothenburg. The Study Visit was an exceptional occasion for the continuous sharing of knowledge and experiences.

2.3.3. Readjusting the initial concept to the context

Following the first two steps, the team decided to slightly deviate from the initial idea of the peer-to-peer exchange as initially conceived in the project. Instead of creating pairings between living labs and EU cities, it was decided to keep the exchange opportunities more open and flexible. The matrix (Table 1) was created to cross interests and needs and showed recurrent interests across the participants.

Table 3: Level of interest of participants' sites to exchange on SESA technologies

	e-mobility	Solar PV/mini grid / and productive use of energy	Biogas/bioethanol/clean cooking	Second-life batteries / e-waste/circularity of energy solutions	Energy & adaptation /climate proofing of technologies	Water-energy-food nexus
Kenya	High	High	Low	High		High
Ghana	Low	High	High	Medium		Medium
Malawi	Low	Medium	High	Low		Medium
Morocco	High	High	Low	High		Low
Rwanda	Medium	High	Medium	High		High
South Africa	High	High	Low	Medium		Medium
Cascais	High	Medium	Low	Medium	High	Low
Barcelona	High	High	Medium	Medium	High	n/a
Larissa	High	Medium	Low	Low	High	Medium
Alba Iulia	High	High	Medium	Low	High	Medium
Gothenburg	High	Medium	Low	High	High	n/a

The team decided therefore to create the opportunities based on the needs rather than limit them to the originally planned pairings. The small number of entities engaged made it possible to keep the size of the exchange group sufficiently small to still be effective. Moreover, this facilitated the scheduling of activities and helped prevent cancellations due to last-minute unforeseen circumstances that could have made one of the participants unavailable or delayed the implementation of the living labs, as might be expected in SESA given the project's experimental nature.

2.3.4. Organizing of the peer-to-peer exchanges

Once needs, opportunities and fit-for-purpose framework have been investigated and finalized, the SESA team proceeded by pinpointing the most convenient possibilities for peer-to-peer exchanges to happen and defining for each of the exchanges its objective, potential participants and a suitable time.

Preparatory discussions

In order to bring from general to specific topics or themes that can be discussed in the peer-to-peer exchanges, discussions took place with the interested parties, namely the local partners and project partners supporting the organization. These helped to better understand the opportunities offered by each geographical context, the existing challenges and interests related to the identified topic to exchange on, as well as the ecosystem of stakeholders. These exchanges were also crucial to understanding the cultural aspects which need to

be taken into consideration for the organization of such exchanges, ranging from etiquette to overall timing and order of speakers.

Implementation

A greater part of the exchanges took place in person with only one case where a hybrid connection had to be set due to the difficulties for a participant to travel (more details in the next section). Dedicated rooms were prepared to host the exchanges even when the exchanges included a site visit. All peer-to-peer exchanges have been supported on-site by a small group of organizing partners who, in a few instances also facilitated the conversation.

Government officials of different levels, researchers and SMEs were the main categories of stakeholders engaged, each bringing their perspectives as well as sharing practical examples and case studies. In all the exchanges, the spirit was rather informal, direct and pragmatic.

3. SESA peer-to-peer exchanges: an overview

Between October 2022 and October 2024, a total of 10 exchanges were organized in 9 locations. In table 2 is a synthetic overview of all exchanges, followed by a short description of each of them.

Table 4: Overview of peer-to-peer exchanges organized by SESA project

Date	City, Country	Topic of the exchange	Types of participants
27 Oct 2022	Kisumu, Kenya	e-mobility; productive use of energy discussion based on the actions at Kenya demo site	Living representatives, Labs SESA partners.
10 Oct 2023	Accra, Ghana	Waste to energy	Living representatives, Labs SESA partners, local governments Reps from EU and India.
13 Oct 2023	Kumasi, Ghana	Monitoring action, KPIs	Living representatives, Labs SESA partners, local governments Reps from EU and India.
8-9 May 2023	Cascais, Portugal	Link between energy and adaptation; mainstreaming climate action; coop with civil society; hydrogen and e-vehicles for waste collection	Living representatives, Labs SESA partners, local governments Reps from Kenya LG, SESA SMEs

10-11 2023	May	Barcelona, Spain	Circularity, R&I on energy, citizens engagement, financing climate action	Living representatives, partners, researchers, local governments Reps from Kenya LG, SESA SMEs.	Labs SESA
12-13 2023	May	Gothenburg, Sweden	R&I on energy	Living representatives, partners, researchers, local governments Reps from Kenya LG, SESA SMEs.	Labs SESA
24 April 2024		Kigali, Rwanda	Visit to ECOGREEN	Living representatives, partners, SESA SMEs.	Labs SESA
25 April 2024		Kigali, Rwanda	SMEs role in climate action	Living representatives, partners, local governments Reps from EU (online), SMEs	Labs SESA
11 Sept 2024		Malawi	Clean cooking	Living representatives, partners, national and local governments, SESA SME.	Labs SESA
16 Oct 2024		Morocco	e-mobility & civil society uptake	Living representative, partner, researchers, local governments Reps from National Gov, SESA SMEs, Reps form EU.	Labs SESA

Implementations

3.1.1. Kisumu, Kenya

The first peer-to-peer exchange took place as part of the first SESA regional event held in Kenya between 25 and 28 October 2022, representing the first opportunity for Living Lab representatives and all partners to meet in person. The agenda of the event comprised SESA's first General Assembly, the launch of the Katito Living Lab and a policy dialogue with representatives from local and national governments. The peer-to-peer was scheduled on the afternoon of the third day, and it saw the exchange between LL representatives as well as project partners to discuss the state of the art from practitioner and academic perspectives on the technologies to be implemented in the project. The

discussion unfolded around the practical case of the Kisumu living lab and the several applications of solar energy tested there.



Figure 1: Picture from the peer-to-peer exchange in Kenya

Participants shared similar challenges, especially in the identification of a suitable business model in rural contexts and with low-income households, the suitability of technological solutions to the local context and some challenges related to the supply chain.

3.1.2. Cascais, Portugal

The Portuguese city of Cascais has been the first stop of the European Study Visit that took place between 8 and 13 May 2023. One representative per each living lab as well as selected SMEs were welcomed by the municipality representative at the NOVA School of Business where participants could learn and discuss local climate action planning and how sustainable innovation could be mainstreamed in education. On the following day, a set of site visits brought the group to discover a passive public building that hosts a museum on coastal restoration and a waste collection facility with electric and hydrogen-powered trucks.



Figure 2: Participants of the EU Study Visit Tour at the waste collection facility

Participants discussed the importance of political endorsement and collaboration with the public sector to create favourable conditions for new energy technology uptake. The exchange with NOVA University opened a conversation regarding the role of energy transition in favouring the achievements of other objectives, linked with the Sustainable

Development Goals (SDGs), and how this approach could also be mainstreamed at an academic level, linking curricula with the SDGs. Other aspects under focus were the need to consider also adaptation when planning energy measures and the possibility of engaging citizens, especially the vulnerable households in energy projects.

3.1.3. Barcelona, Spain

In Barcelona, participants visited the LEITAT research centre, experienced in industrial innovation and the local initiative [Circular Vallès](#), a pioneering initiative established in 2017, which promotes the circular economy with the support of 23 municipalities, numerous businesses, and social and environmental organizations. Finally, there has been also the opportunity to meet representatives from the city of Barcelona who shared insights on citizens' engagement in energy production, financing schemes to support sustainable businesses as well as the city climate and energy plan.

Highlights from the meeting were the potential of a circular economy, the importance of integrated waste management systems and their connection with energy production; the key role of partnerships and the difficulty of finding common ground between sectors e.g. research and businesses, research and innovation and the relations between; the potential for municipalities to create favourable environment to new businesses to grow when aligned with the city climate strategy.

3.1.4. Gothenburg, Sweden

The final stop of the study visit was in Gothenburg, Sweden. Here participants met municipality representatives, visited the Johannesburg Science Park, exchanged with researchers active on the African continent, met peers from the ENERGICA sister project, saw and tested the prototype of MIGs cookstove, discussed business models as well as the usability of the InfoSpots.



Figure 3: Participants of the EU Study Visit tour at the Johannesburg Science Park

This last stop was the opportunity to see yet a different approach to testing, experimenting and partnering. In the meetings there was the opportunity to discuss integrated energy systems, the central role of user assessment and research, as well as the common challenges in finding suitable pricing for some energy services. There was

also a general reflection on the EU Study Visit as a whole where participants expressed their satisfaction with the inspiring experiences, they could learn of but also the need to have more examples which could be easily replicated in their context.

3.1.5. Accra, Ghana

The regional event in Ghana provided the opportunity to organize more than one peer-to-peer exchange. The event took place from 9-13 October 2023 between Accra and Kumasi, encompassing a policy dialogue, 3 site visits and a capacity-building session. Within this dense programme, the first peer-to-peer exchange was organized on the 10 October and connected to the visit of the Waste to Energy plant at Safisana, which stands as West Africa's pioneer waste-to-energy plant, located in Ashaiman on the outskirts of Accra. Following a tour of the plant, where representatives of 5 local government officials from the Accra Great Metropolitan Area.

Exchange with SESA LL representatives as well as a representative from the city of Alba Iulia about common challenges and innovative solutions for waste management and energy production as well as how to surmount the obstacles hindering the development of similar projects. The exchange was enriched also by the participation of a representative from the Indian city of Pune, India whose participation was facilitated by the [UrbanShift project](#).

Key insights highlighted the indispensability of partnerships and emphasized that local governments can and should play a proactive role in fostering connections to bolster waste management initiatives, which are of paramount importance given the escalating global waste crisis.

3.1.6. Kumasi, Ghana

The second opportunity for peer-to-peer exchange in Ghana was provided by the capacity-building session organized at the AAMUSTED Campus in Kumasi on 13 October. The whole-day event started in a plenary format and then split into parallel rooms, one of which was dedicated to the peer-to-peer exchange. There, representatives from Alba Iulia and Pune discussed with counterparts from the local government represented by Ga-North Municipal Assembly, Ashaiman Municipal Assembly, Atwima Nwabiagya South Municipal Assembly, Kpone-Katamanso Municipal Assembly and Adenta Municipal Assembly as well as SESA project partners the importance of monitoring the implementation of smart energy solutions. Following the site visit in Accra (see point above) and the official launch of the Living Lab in Kumasi on the day before, participants shared their experiences on how to build a strong impact measurement framework.



Figure 4: Participants to the capacity building session in Ghana

The exchange was an opportunity to share the common challenge of monitoring local climate action and the need for further support in the identification of suitable KPIs that would allow for effective tracking and evaluation of policies. Different approaches were mentioned, naming local universities as well as political endorsements as strong contributing factors toward the improvement of monitoring.

3.1.7. Kigali, Rwanda

Kigali hosted the 3rd SESA regional event from 22 to 26 April 2024. The three-day event included a business model workshop for the beneficiary start-ups from the SESA Call for Entrepreneurs 2023, a procurement & investment summit, a policy dialogue and a capacity-building session. Two opportunities for peer-to-peer were created, the first one was combined with the site visit at the ECOGREEN facility where participants learned and discussed clean cooking technologies.

It was the opportunity to share challenges regarding the sustainability of clean technologies and the difficulties in changing existing consumption habits, despite some important benefits such as better health.

3.1.8. Kigali, Rwanda

The second opportunity took place in the afternoon of April 25th, and, leveraging the presence of many SESA SMEs, it explored how cooperation with local businesses can accelerate climate action. The discussion focused on the private sector's role in supporting local ambition and gave the opportunity to exchange with representatives from the city of Kigali, the city of Larissa, Greece (online), the SESA Living Labs and 5 of the businesses selected by SESA to receive seed funds.



Figure 5: Participants at the peer-to-peer exchange on the last day of the Regional event in Rwanda

The discussion started with the existing collaboration between cities and the private sector to identify the main barriers that limit this collaboration. Among the key obstacles are the limited technical capacity at the local level, existing policy gaps or lack of coherence across regulation and ultimately the limited resources available to invest in big projects.

3.1.9. Lilongwe, Malawi

The study of the barrier analysis to the uptake of clean cooking solutions was the basis to organize a policy dialogue and peer-to-peer exchange session in Lilongwe. The exchange was held between national and local government representatives from Lilongwe City Council and other non-governmental organizations involved in the clean cooking sector in Malawi as well as representatives from the Ugandese government to discuss together how both countries of Malawi and Uganda can better integrate clean cooking into their NDCs and access carbon financing opportunities.



Figure 6: Participant to the capacity-building and peer-to-peer exchange in Malawi

Malawi and Uganda representatives agreed that further work is needed for better coordination and implementation. Both countries acknowledged the growing role of carbon markets and the need to involve the private sector in scaling clean cooking solutions. Uganda shared their experience with a dedicated clean cooking unit, which Malawi is considering enhancing coordination. A key discussion also focused on how carbon finance could support clean cooking interventions and help achieve NDC targets.

3.1.10. Marrakesh, Morocco

The 4th and last SESA regional event was organized in Morocco from 14-16 October 2024. City representatives from Cascais (Portugal) and Barcelona (Spain) joined the SESA Living Labs representatives and project partners in a capacity-building session, a policy dialogue and a demonstration of e-scooters which is part of the implementation action in the Moroccan Living Lab. The peer-to-peer exchange was organized on the morning of the last day, and it also included a representative from the national government of Morocco as well as the Moroccan SME engaged to implement the e-mobility solution. Together, participants had the opportunity to share common challenges, learn from each other's experiences and discuss tested strategies to increase renewable energy by leveraging the potential of the local ecosystem for e-mobility solutions and energy production and consumption (e.g. self-consumption, energy-sharing and shared mobility).



Figure 7: Participants at the peer-to-peer exchange in Morocco

Participants discussed in depth the factors to consider for the successful uptake of e-sharing mobility solutions and community engagement. The role that local governments can have but also the critical role of an enabling framework that allows start-ups to sprout.

4. Lessons learned

Over the past two years, the many peer-to-peer exchanges conducted within the framework of the SESA project have fostered cross-cultural collaboration, the sharing of best practices, and the development of innovative strategies to address the unique energy challenges faced by African communities and beyond. The exchanges have also provided invaluable insights which are summarized below for the benefit of any future initiatives working in Africa on sustainable energy solutions that will also consider leveraging on the power of peer-learning.

CULTURE

- Do not underestimate cultural differences between Europe and Africa but also across different countries in both continents. How comfortable are people in taking the floor? How direct questions may be taken?

STAKEHOLDERS

- Consider the full spectrum of stakeholders to be invited:
 - Representatives from the local authorities that are involved in the implementation process at the city level.
 - Private sector involvement can present needs from the market perspective.
 - Civil society can also bring relevant input and contribute to identifying possible problems of social acceptance.

TIMING

- Dedicate a good time to the presentation of practical examples and pictures to stimulate discussions
- Balance presentation with time for the discussion to follow up on topics and allow deepening them. Discussion should be the core part and take most of the time at

disposal. Build buffer time in the agenda, if the session has a slow start this avoids cutting it shortly after it sparked.

- Informal talks are also a good opportunity to continue the discussion, allow time for coffee break for people to reach out 1-1 to other peers.
- Administrative aspects can distract and create stress and distract from the purpose of the meeting, make sure a dedicated slot is ready for that.

SETTING

- The setting matter: Gather in a smaller room, preferably sitting around a roundtable or L-shaped table setting.

PREPARATION of PARTICIPANTS

- Preparing participants ahead of the exchange both on the topics that will be dealt with as well as the format, makes it more effective. A request for heavy preparation (e.g. answering questions, preparing documents, reading reports) should be motivated by a high value provided by the exchange.

Looking more at the specificity of the SESA project and the topics discussed, the peer-to-peer exchanges focused on several key issues. Technologically, participants discussed the challenges of adapting clean energy solutions, like solar and clean cooking technologies, to local contexts and needs, with specific challenges regarding rural areas. Business model development for these solutions, including the role of public-private partnerships, was a key topic, that needs to be further explored to secure sustainable, financially viable models. Carbon market also attracted quite some attention.

Policy and regulatory gaps were also highlighted, with discussions centred on the need for stronger alignment of regional and national policies with national climate goals. Participants also emphasized the critical importance of capacity building, particularly in technical skills and action monitoring, to ensure the success of energy projects.

A common theme was the need for better community engagement, especially in rural or low-income areas, to ensure local adoption and sustainability of technologies.

Conclusions

The peer-to-peer exchanges conducted throughout the SESA project have proven to be an effective means of enhancing knowledge transfer and collaboration across diverse regions and sectors. These interactions have provided valuable insights and fostered relationships among stakeholders who share common goals but face distinct local challenges. Key topics such as the integration of clean cooking solutions, the promotion of circular economy models, and the development of effective business models for energy solutions were explored in depth across multiple cities. The exchanges have not only highlighted the importance of partnerships between cities, governments, and the private sector but also emphasized the role of local context in shaping the successful

implementation of climate and energy strategies. The flexibility of the peer-to-peer exchange format, as well as its ability to adapt to the evolving needs of participants, has been instrumental in ensuring the success of these activities.

These peer-to-peer exchanges directly contributed to the overarching objectives of the SESA project of advancing toward clean and smart energy access new solutions. By facilitating cross-cultural learning and knowledge exchange, these exchanges worked toward filling the knowledge gaps identified in the first stage of the project (see D 2.1 The SESA capacity building plan) and reinforced the project's capacity-building efforts in response to it. The exchanges were an opportunity to inspire innovative approaches and share solutions and challenges on which to reflect together.

By encouraging the involvement of a wide range of stakeholders—including government representatives, SMEs, and researchers—these exchanges also supported establishing relationships across local and national stakeholders for a long-term, sustainable impact.

More has to be done, and the clear recurrence of knowledge gaps around capacity building, business models, and policies just confirms the strong need, but hopefully, the lessons learned included in this document could be a small contribution toward fair clean technologies for the energy transition.

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