



D1.1 TOOLBOX FOR EFFICIENT AND SUSTAINABLE ENERGY USE

WP 1

1/30/2025

Summary Sheet

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Abstract	This report highlights the progress made on Deliverable 1.1 Toolbox for efficient and sustainable energy as it stands in M40 (month 40), which marks the final update for D1.1. The report introduces the task and explains the toolbox functionalities, the toolbox content collection, upload process, and the available content.

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List of Abbreviations

Abbreviation	Definition description
SESA	Sustainable Energy Solutions for Africa; European Union's Horizon 2020 research and innovation programme under grant agreement No. 101037141.
GDPR	General Data Protection Regulation
H2020	European Union's Horizon 2020 research and innovation programme
WP	Work Package: A major sub-division of the (Horizon 2020) project includes several vital tasks and may have specific Milestones and/or Deliverables as output results.
NGO	Non-Governmental Organization
SMEs	Small and Medium Enterprises

Executive Summary

SESA – Smart Energy Solutions for Africa is a collaborative project between the European Union and nine African countries that aims at providing innovative energy solutions using decentralized renewables.

This report **describes the energy-efficient toolbox** that has been developed in Work Package (WP) 1 of the SESA project and is continuously updated. Although the toolbox falls in WP 1, it is intrinsically linked to many activities that are undertaken by all partners within other WPs and are expected to provide valuable insights, tools, **and other relevant output**. Content developed in other WPs is being included (or adapted) and made available in the Toolbox.

The Toolbox is envisioned to be a legacy outcome of the SESA project that can support the development of energy-efficient solutions beyond the scope of the project.

This report explains the process that has been put in place **to manage and monitor the identification and development progress of content** for the Toolbox **as well as the design and functionalities of the Toolbox itself**.

The process aims to minimize complexity, such as the need for all partners to have a sufficient level of technical knowledge of WordPress, while still taking into consideration the need to have checks in place regarding quality, completeness, GDPR (General Data Protection Regulation) and/or sensitive data etc. It allows for all WPs and partners to be involved in (or informed about) the development of content and helps as an additional trigger to identify new and valuable content for the Toolbox. The description of the design and functionalities of the Toolbox ensures the project also has documentation of its more technical details.

Finally, the report also includes a **section** which provides **a summary overview** of the content published in the Toolbox for each **‘update’ moment**, which takes place in **months 12, 18 and 40** of the project’s lifespan, as defined in the Grant Agreement for the SESA project. This report provides an update for **month 40**.

1. Introduction

The *Toolbox for Efficient Energy Solutions* is a scalable and harmonized toolbox for advanced implementation, management, and operation strategies of efficient sustainable energy solutions. The toolbox is the key repository of the project spanning across all the WPs, providing:

- Impact assessment tools (WP 1),
- Capacity building materials (WP 2),
- Summaries of business plans and models (WP 3),
- Summaries of innovations tested in the demonstration actions (WP 4),
- Design, operations, and management tools for different solutions (WP 4),
- Provide information on financing institutions and funding options (WP 5),
- Policy Support for Toolbox (WP 5)

As per the Grant Agreement the toolbox was planned to be divided into two modules: 'Models and Assessments' and 'Planning and Implementation'. During the development process it was decided that dividing the toolbox into two broader categories would be limiting and could mislead the user's interaction with the content. A design decision was taken to streamline the search and filter functions in accordance with the theme of the WP to provide a more user friendly and flexible experience. The categories instead were integrated into the '*building blocks*' (described under 3.1) and '*processes*' (Figure 1).

Additionally, as this Toolbox for Efficient Energy Solutions is deemed to be a vital output of the SESA project, it is envisaged to become an asset even beyond the project lifetime, which will bring techno-economic good and social equity among its diverse users. Therefore, it was decided to give more sustainability and longevity to the toolbox by making sure that access to Toolbox, for the users, is available even after the SESA project ends. To ensure this, a sub-domain (<https://toolbox.sesa-euafrika.eu/>), under the current SESA website domain (<https://sesa-euafrika.eu/>), was created and the continuity of the IT services are guaranteed to be taken up by the SESA project lead coordinator (ICLEI Europe).

Furthermore, this report highlights the target groups who can benefit from the toolbox, the stakeholders involved in creating the toolbox and its content, the toolbox functionalities, how content is created, collected and uploaded and an update on the content so far.

1.1. Target groups

The Toolbox aims to cater for various perspectives and end users who can use the content for implementation and management of efficient sustainable energy solutions. The user groups have been determined based on the expected content in the toolbox based on the focus of the different WPs in the project. The possible uses of the content include policy guidance, capacity building and knowledge sharing, building business models, and scaling existing initiatives among others.

The user groups include but are not limited to: agricultural professionals, citizen initiatives, city officers, educational professionals, drink water professionals, energy professionals, energy authorities, energy providers, entrepreneurs (SMEs / Startups), financing institutions, general public, industry, national governments, NGOs, policy makers, electrical system operator, regional government and researchers.

1.2. Stakeholders

All project consortium partners are stakeholders in the development of the toolbox. The partners are: ICLEI European Secretariat (ICLEI ES); Aalborg University (AAU); Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development, Kumasi (AAMUSTED); Basic Internet Foundation, Kjeller (BIF); Blekinge Institute of Technology (BTH); Energy and Livelihoods for Communities (ELICO) Foundation; F6S Network Ireland (F6S); Green Energy Park (GEP); Going Green (GG); ICLEI e.V.- Local Governments for Sustainability (World Secretariat) (ICLEI WS); ICLEI Africa (ICLEI AS); Technische Universität Berlin (TUB); Leitat Technological Center (LEITAT); Make It Green Solutions (MIGS); Metanogenia, S.L. (MET); Nelson Mandela University – uYilo eMobility Programme (NMU); Namibia University of Science and Technology (NUST); Stiftelsen the Stockholm Environment Institute (SEI); Smart Innovation Norway As (SIN); Siemens Stiftung (SIEMENS); Stichting Cenex Nederland (CENEX NL); RISE Research Institutes of Sweden AB (RISE); Tecnia (TEC); University of Rwanda (UR); United Nations Environment Programme - Copenhagen Climate Centre; UN-Habitat (UNH); Urban Electric Mobility Initiative (UEMI); WE!Hub Victoria Limited (WeTu); and Wuppertal Institute for Climate, Environment and Energy (WI).

Not included in the list above, is Ivan Miljanić who is an external contracted under the general 'project website' contract agreement to support the backend development of the Toolbox. Between M12 and M18, he has been replaced by internal front-end developers from F6S.

As the funder, the European Commission CINEA is also a key stakeholder of the Toolbox.

2. Toolbox functionalities

The Toolbox contains information with the purpose to guide and educate the visitor of the website. The content is created by the SESA partners and uploaded to the toolbox when finished. The visitor can use the search bar, or filter and the content is instantly being filtered down to a relevant selection of content. The Toolbox will also be available on the local server of the InfoSpots, to create accessibility to the Toolbox and its content in remote areas with limited internet availability.

2.1. Toolbox website

The Toolbox is accessible via a link on the official SESA website, but can also be accessed directly via the URL below: <https://toolbox.sesa-euafrika.eu/>

When entering the Toolbox (Figure 1), the visitor can browse through the content that is available. The search bar can be used to search by a specific term.

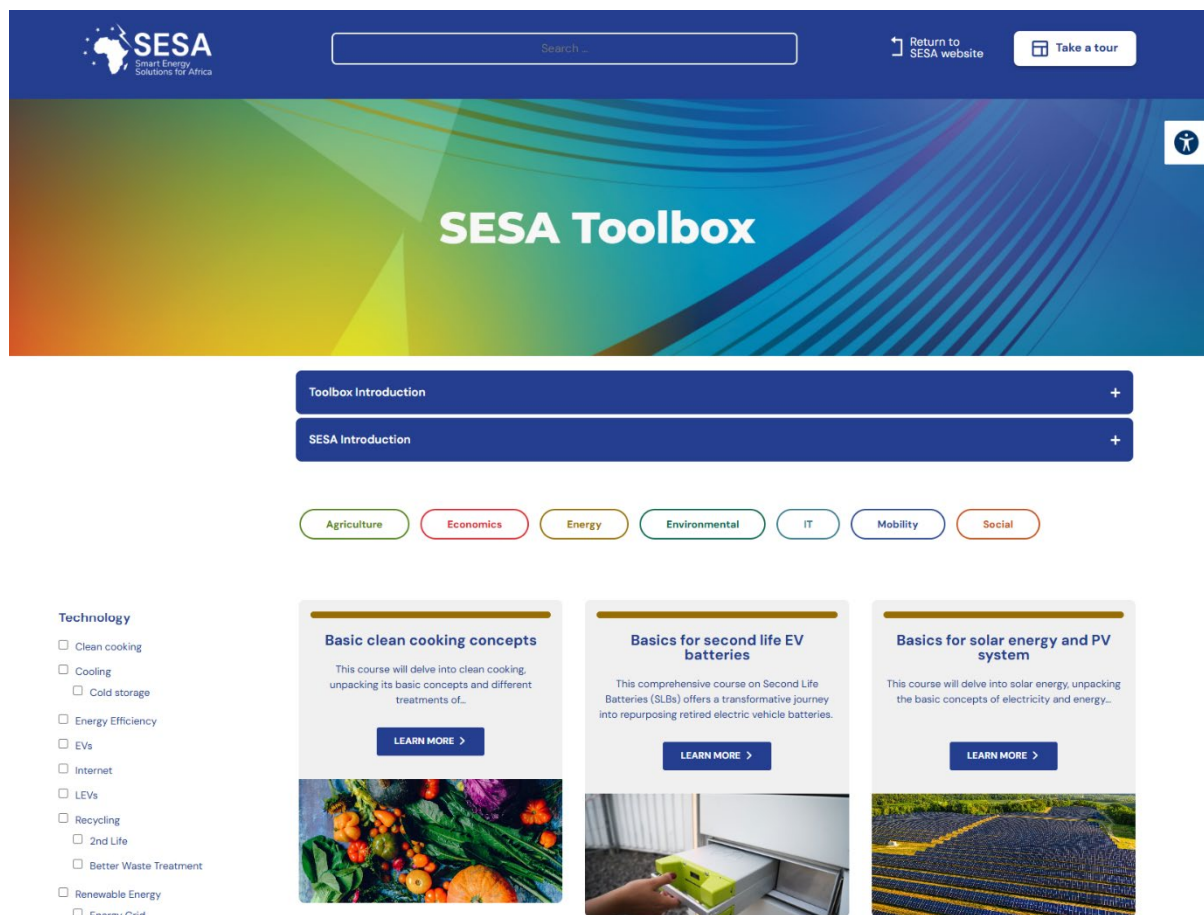


Figure 1 Toolbox landing page

Throughout the website design development, an Accessibility feature has been integrated to enhance usability for a diverse range of users. By clicking the accessibility button, users can customize and adjust various website elements to meet their individual needs (see Figure 2). Additionally, the upper portion of the design will include a brief overview of the project and the Toolbox, allowing users to easily understand the website's purpose and navigate the content effectively. Further details on this update can be found in the section 4.3.2. Toolbox functionality update.

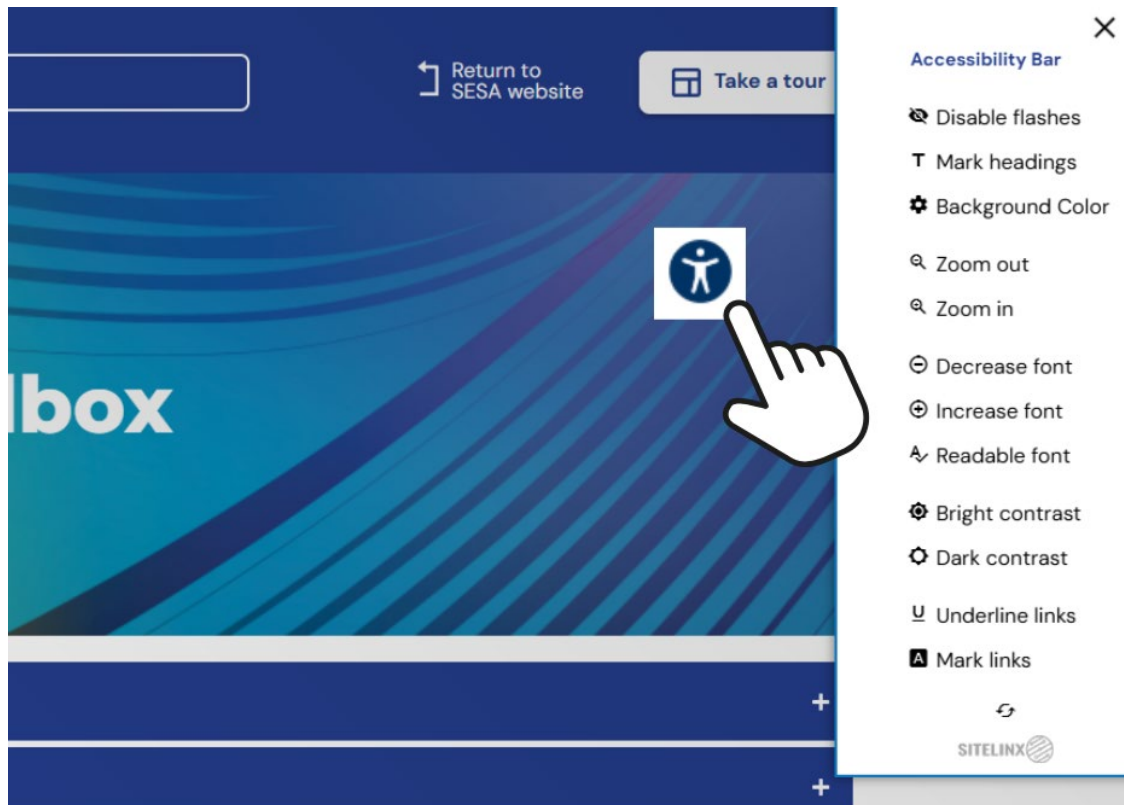


Figure 2 Accessibility function

In the upper row, under the search bar, seven categories are available and colour-coded (Figure 3). Each content box has a corresponding colour flag in the upper right corner of each box. When selecting one or more of these categories, only the corresponding boxes with content will remain visible. However, in M40, it was determined that only one category may be selected at a time during each content post search. Further details are provided in Section 4.3.2.



Figure 3 Toolbox categories

The results can be further refined by selecting filters on the left side of the Toolbox. Initially, the displayed content boxes could be filtered based on categories such as Building Blocks, Process, Technical Solution, and Geographical Context. However, with the latest updates to the content, all shared information from partners now encompasses a broad range of topics, including technology, finance, project models, and more. Consequently, the filters have been updated to reflect the latest developments in technology, design and operation, financing, environmental factors, socioeconomics, and regional focus.

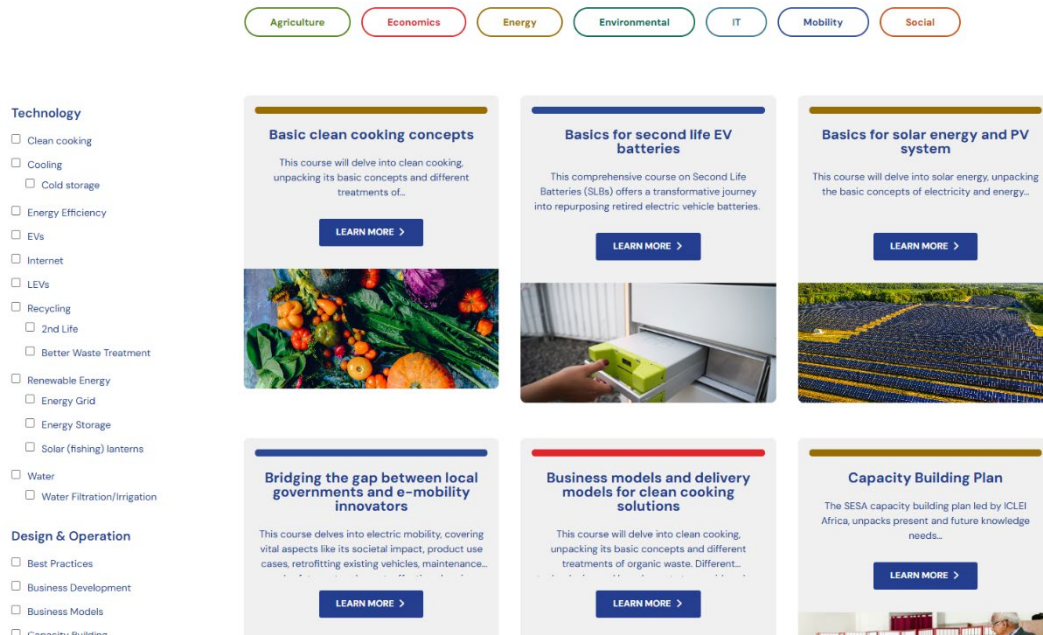


Figure 4 Toolbox Filters

A box of content can be visited by clicking 'learn more'. The website loads the content page, and the main image with its title is loaded (Figure 5). Up to 5 SDGs can be loaded to display what SDGs this specific box of content is addressing. The visitor can navigate through the content by using the left sidebar, reading the description, downloading a file, or seeing a video. To return to the main page, one can simply press the return to 'SESA' button on the top.

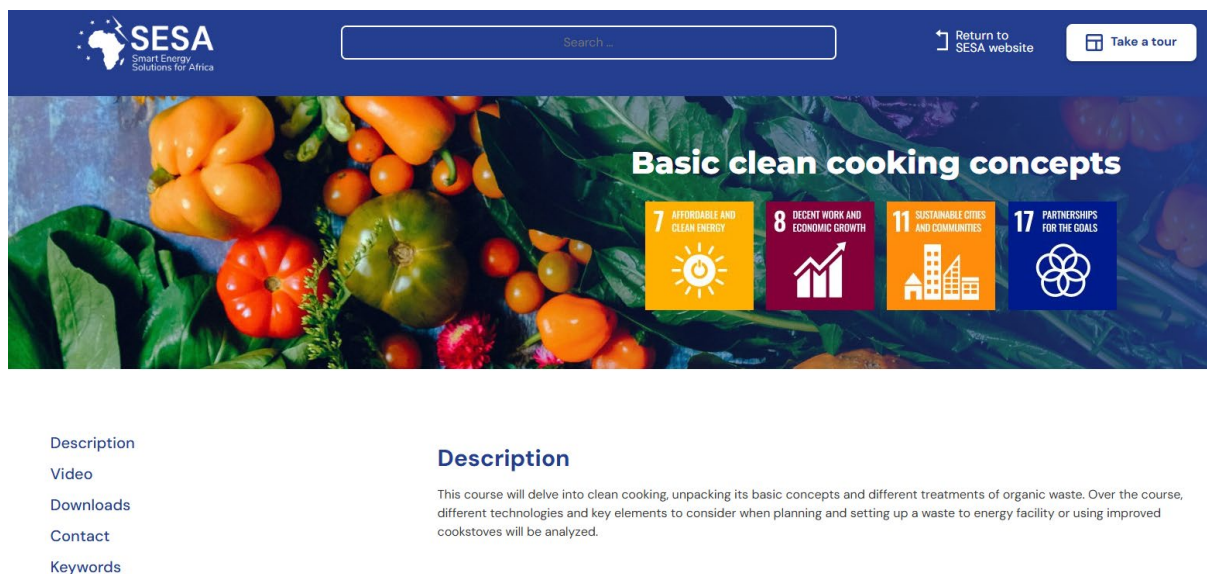


Figure 5 Toolbox Content Page

2.2. InfoSpots

The InfoSpots are little computers that can act as a local server, which is accessible through a Wi-Fi connection using a phone or mobile. The InfoSpots are based on a Raspberry Pi, using a Linux operating system. The Raspberry Pi creates a network and emulates the toolbox as if one would normally be able to visit the website through the internet by entering the URL. Via the Wi-Fi

connected devices, one can navigate to a specific URL to enter the toolbox locally, without using the actual internet.

The initial idea was to directly connect the toolbox website with the Infospots to sync new content and make it available for the users. However, Basic Internet Foundation (BIF) decided to manually load the content of the toolbox on their Raspberry Pi due to the complexity of syncing and the related costs for data transfer in remote locations without cabled internet connections. According to BIF, a total of 22 infospots and 25 additional materials were created. Out of these, 44 were recorded as work within SESA, while 38 were sourced from the SESA toolbox.

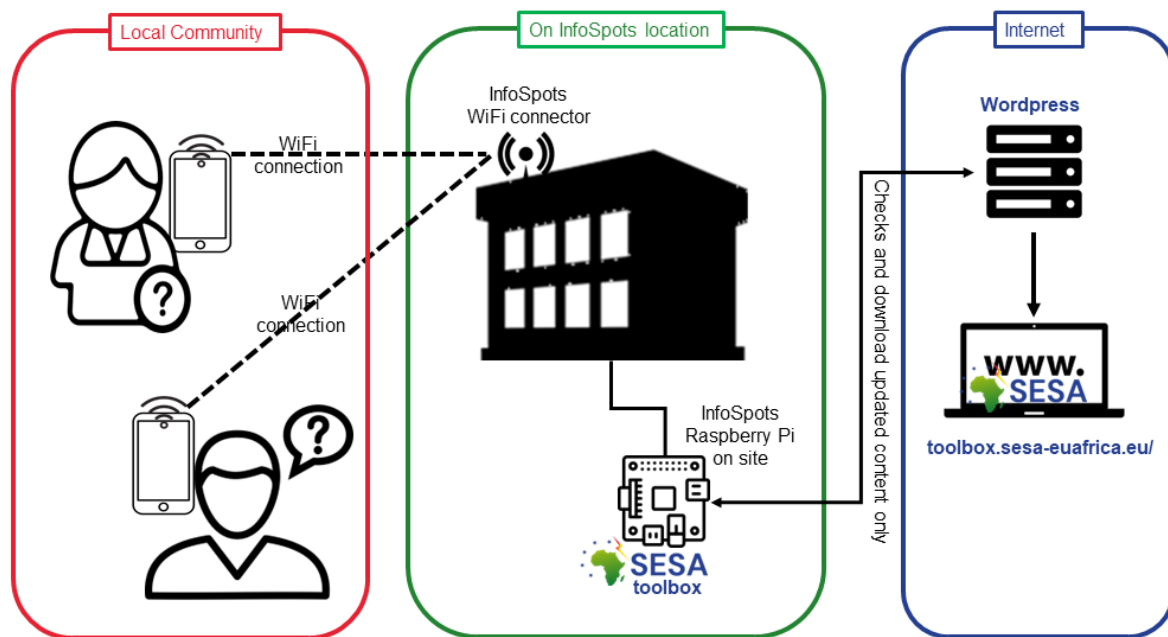


Figure 6 The initial idea to sync Infospots with the toolbox in a simplified Infographic

3. Toolbox content

3.1. Content creation

Project partners are developing content to be included in the toolbox in relation to the work carried out by them. When new potential content (based on partner activities throughout the project) is identified, it is collected in an excel (shown in 3.2), known as the 'Content forecast overview' and its development status is tracked. Once content is considered to be complete, it is reviewed for 'sign-off' and then uploaded to the Toolbox online, where it is publicly available.

During the initial stages of the toolbox design, the content was categorized into 'building blocks' that represented the various themes of the WPs. These themes were identified as follows: Impact Assessment, Capacity Building, Business Models, Innovations, Design and Operation, Finance, and Policy. Following a thorough re-examination of the content between month 18 and month 40, it was determined that the filter function should be revised to better reflect a more refined categorization. The update now includes categories for Technology, Design and Operation, Financing, Environmental and Socioeconomics, and Regional Focus, with options for multiple selections. Applicable filters are shown in Figure 11.

Content associated with a particular WP is categorized under a building block and can be of the following format types: Blueprints, Manual or Guideline, Framework, Installation-based tool, Patents, Technical specification, Visuals, Web-based tool, Factsheets, Web app, Mobile app, Spread sheet, Methodology, Case study and Training videos. Additional characterizations can be linked to the content once it is completed.

Completed content are also accompanied by a 'Content template' before it is considered ready to be uploaded. The information provided in this template include additional information which is necessary to upload the content and allows the content to be found via the Toolbox functionalities.

3.1.1. Content templates

To ensure consistency and appropriate project branding, partners from F6S developed templates compatible with the SESA house style. These can be used for the following types of content: Manual or Guide / Framework / Methodology, Technical Specification, Factsheets, Spread sheet and Case Study.

3.2. Collection process of content

Content is created by the SESA partners and eventually uploaded by WP 1 on the toolbox website. The flowchart below (Figure 6) can be used to follow the steps that need to be undertaken from content creation to uploading the content to the toolbox.

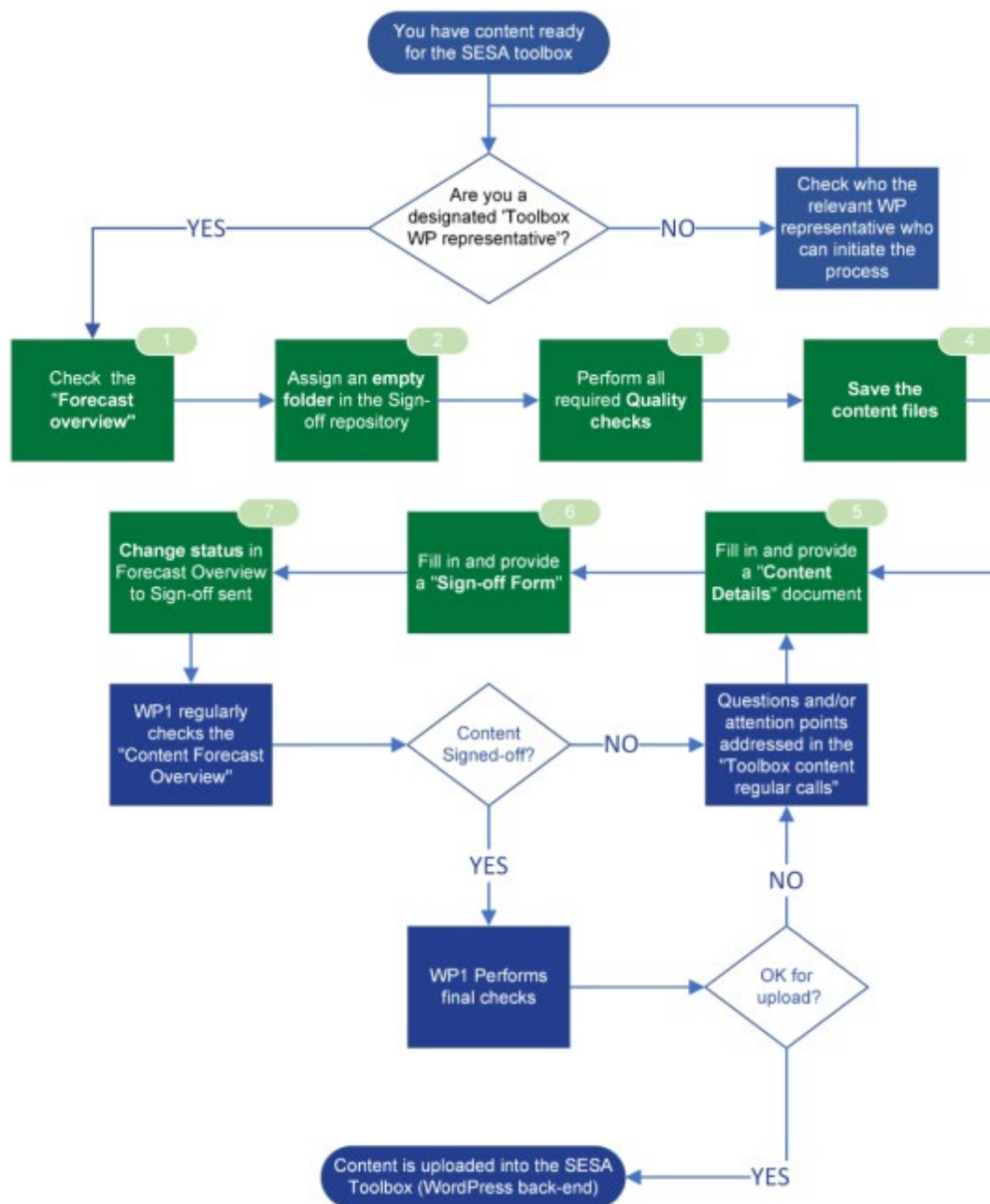


Figure 7 Content Creation Flowchart

3.2.1. Content forecast

First of all, partners agreed that each of the WP leader is the contact point for materials developed within their WP. Via bi-weekly meetings partners keep track of content that is being created with all of the WP leaders (or their alternative contact point).

WP leaders are asked to fill in basic information about the content that they have identified to create, beginning with the subsequent number, what organization and WP it is coming from, and to what building block it belongs to in the 'Content forecast' tracker (Annex 1). Next are the content title, and a short description to understand what it is about. During the bi-weekly meetings, the expected delivery date and status are kept up to date, to follow the progress. The format type is also indicated so that the right format templates are used as described in section 3.1.2.

3.2.2. Content collection

To prevent the public Toolbox from being susceptible to incorrect or inconsistent use or ways of uploading content, a governance procedure was developed to collect, review and upload the content. For this, a 'Sign-off' repository was put in place (see also Deliverable D1.5 - Data storage repository plan). This SESA SharePoint environment is accessible to all partners, but the final 'sign-off' is done by a pre-agreed group. The content created is collected in the WP 1 folder (Figure 8). The content creator needs to create a new folder and rename the folder by starting with the corresponding content number as indicated in the Content Forecast tracker, followed by the organization, WP and content title.

Name
000 - find empty folder to add your (finished) content
001 - ICLEI WS - Workpackage 1- SDG Impact Assessment Tool
002 - ICLEI WS- Workpackage 5 - Mapping IFIs
003 - ICLEI AS - Workpackage 2 - Capacity building plan
004 - Organisation - Workpackage - Content title
005 - Organisation - Workpackage - Content title
006 - Organisation - Workpackage - Content title

Figure 8 Folder structure for toolbox content

After creating the folder, its corresponding 'Content details template' are copied and placed in this folder as well. This word file is found in the WP 1 folder in the SharePoint environment. The 'Content details template' (Figure 9) are filled in by the content creator, adding an image, content title and description, selecting what filters it belongs to etc. See example below:



Content details template for uploading content

The purpose of this document is to help put your tool on the website in the right format. Please follow the instructions below.

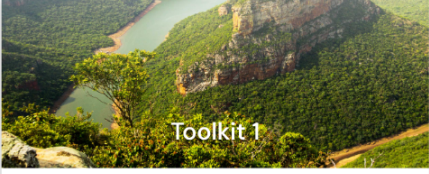
Header image	[Add a nice-looking picture that can be used as a header picture. The title of the content will be projected above it, like in the example below. If you don't have an image, you can look for free images on websites such as: www.pexels.com. You can add the url to the image here, or paste the image] The optimal image size is 1500x540 pixels 
Content Title	[Add the title of the content here]
Content Description	[Add the content description here. Describe what you have created as information and how it can be used/applied. If the content includes an attachment, refer to the downloads section and describe how to use the tool.] [you can add an additional image here]

Figure 9 Content details template

Each content folder should also contain a 'downloads' folder to add the downloadable files, such as word documents, excel files, tools, video's etc.

3.2.3 Governance and quality assurance

As part of the 'sign-off' process and to ensure the creator of the content has completed all the required steps (and put the content in the right SESA format) before uploading, a sign-off form is used. This form ('Sign-Off Repository Guide') contains a guideline of 7 steps which are corresponding to the green boxes in Figure 7, and a checklist to ensure key aspects are reviewed and checked.

Content Sign-Off check includes a verification of whether:

- If the content has been reviewed,
- The content material is complete, error free and the definitive version,
- The file(s) is/are in correct house style/template, liaise with F6S where necessary,
- Content is GDPR compliant and/or does not breach 'data sensitivity' indications,
- If the 'content details document is complete.

After all required checks are performed, the form is signed and stored in the folder accompanying the content. The person who signed off, updates the status in the tracker and informs WP 1, confirming that the content is ready to be uploaded. The designated person for WP1/T1.1 performs a final 'sense-check' before uploading the content into WordPress (i.e. the 'backend' of the Toolbox) to publish the content. WP 1 updates the upload status on the 'content forecast tracker'.

3.3. Uploading process

3.3.1. Creating a new content

In the backend of the Toolbox website (based on WordPress), there is a section labelled 'Projects' (Figure 10). This area serves as a comprehensive repository for all content, allowing easy organization and management. It also includes all relevant filters (see Figure 11) to assist users in sorting through the content efficiently.

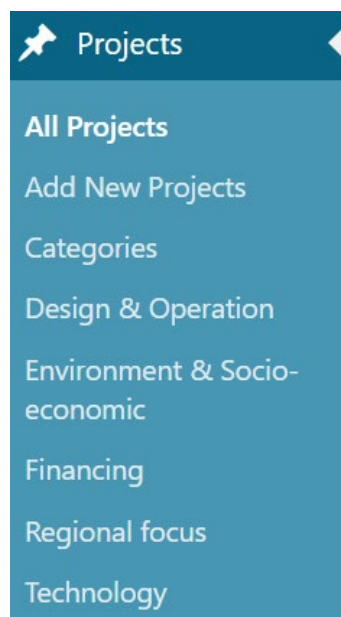


Figure 10 WordPress 'Projects'

In this section, a sample post has been created, which needs to be duplicated by the press of a button. Next, the toolkit can be edited.

3.3.2. Content details

In the 'content details template' that is stored in the sign-off repository in the corresponding toolkit folder, the information is provided that needs to be added on the toolkit page, such as:

- The title,
- The image,
- The SDGs,
- Checking the applicable filters,
- Adding an excerpt for the landing page,
- Adding the video URL,
- Adding a download file,
- Specific keywords,
- Contact details.

Technology ☐ Clean cooking ☐ Cooling ☐ Cold storage ☐ Energy Efficiency ☐ EVs ☐ Internet ☐ LEVs ☐ Recycling ☐ 2nd Life ☐ Better Waste Treatment ☐ Renewable Energy ☐ Energy Grid ☐ Energy Storage ☐ Solar (fishing) lanterns ☐ Water ☐ Water Filtration/Irrigation	Design & Operation ☐ Best Practices ☐ Business Development ☐ Business Models ☐ Capacity Building ☐ Circular Economy ☐ Climate Proofing ☐ Finance & Funding ☐ Impact Assessment ☐ Impact Tools ☐ Innovation & Design ☐ Licensing and Certification ☐ Management ☐ Operation ☐ Policy Support ☐ Test & Simulation ☐ Training ☐ Webinar	Financing ☐ Business Models ☐ Consumer Financing ☐ Funding Opportunity ☐ Procurement ☐ Total Cost of Ownership Environment & Socio-economic ☐ Economic Sustainability ☐ Circular Economy ☐ Energy Security ☐ Environmental Impact ☐ Social Impact ☐ Community Development ☐ Inclusiveness ☐ Public Health ☐ Social Acceptance	Regional focus ☐ African region focus ☐ East Africa ☐ North Africa ☐ South Africa ☐ West Africa ☐ Rural Area ☐ Urban Area
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Figure 11 Applicable filters

When completed, the toolkit can be 'published', which makes it visible as a toolkit on the toolbox website.

3.3.3. Next steps (Updated on the first submission)

There are still a few improvements to be made, which are discussed with the front-end developer of F6S.

- The search function needs a button to that can direct the user back to the landing page.
- The tour guide can be improved by integrating a plugin that provides a tour in multiple steps, showing a textbox at each section per step.
- The download and video text fields are still missing for the toolkits.
- The colour flag corners are requested to get a radius.

The next steps for each update (M12, M18, M40) are reflected in their respective status in Section 4.

4. Status

This chapter is dedicated to the specific updates corresponding to the update-reports in month 12, 18 and 40 as stipulated in the Grant Agreement for Deliverable 1.1. Each section that is included provides an overview of the status regarding content available in the SESA Toolbox. In effect it is a 'snapshot' summary of the Content forecast overview excel.

4.1. Month 12

4.1.1. Toolbox content

For the purpose of quality and progress governance, the process of identification and development of content is managed through an excel sheet known as the 'Content forecast overview' tracker. It is updated regularly and is available internally to all partners.

The following information per content is collected in this tracker:

- Partner / Organization submitting,
- WP,
- Category (based on the building blocks): Impact assessment, Capacity building, Business, models, Innovations, Design & operation, Finance and Policy,
- Title of the content,
- Short description,
- Expected date of delivery,
- Status: Completed, In-progress or identified,
- Internal or External: Internal content refers to content produced by SESA partners. External refers to content not created by SESA partners and included in the toolbox as it is useful,
- Format of the file: Blueprints, Manual or Guideline, Framework, Installation-based tool, Patents, Technical specification, Visuals, Web-based tool, Factsheets, Web app, Mobile app, Spread sheet, Methodology, Case study and Training videos,
- Languages,
- Notes,
- Review Status,
- Upload status.

The table below shows the update of content from every WP that has been added to this tracker excel. The completed items have been highlighted.

Table 1 Content from every WP

WP #	Content from SESA project partners
WP1	• ICLEI WS: SDG Impact Assessment Tool (COMPLETE) • CENEX NL: Toolbox 'Knowledgebase' via InfoSpots
WP2	• ICLEI AS: Capacity building plan (COMPLETE), Infographic on key consideration for capacity building • ICLEI ES: 6 videos (3 min long) on basics of: Solar energy & PV systems, clean cooking, e-mobility, second life EV batteries, smart-micro grid systems and internet access

	ICLEI ES: 18 videos (10 min long) for audience who is familiar with the topic. Topics include the use of different technologies, business delivery models, user manuals and circular design. All 18 are listed in the tracker.
WP3	- WI: 10 factsheets identified under 'Sustainable Energy Solutions Catalogue'. 3 factsheets have been submitted for review. - TECHNALIA: 2 factsheets from task 3.1 (Climate proofing and Smart Microgrids) & 1 report from the outcomes of task 3.2
WP4	BTH: Technical specification documents on the following topics: Electric mobility, Lithium Batteries/EV-batteries, Waste to energy, Off-grid solar energy system, MIG BioCooker, Integrated energy systems and Lithium - ion batteries end of life
WP5	- ICLEI WS: Mapping of International Financial Institutions (COMPLETE), Pre-feasibility studies on selected projects from demo actions. - ICLEI WS in collaboration with WP4: Project concepts based on demo actions

Current status of the Content Forecast

Table 2 Status of content

Total number Completed	3
Total number in progress	12
Total number Identified	37

4.2. Month 18

4.2.1. Toolbox content

Several items listed in the Content Forecast have been completed and uploaded to the Toolbox Website. The details of the uploaded items and completed items are summarized in this section.

The table below shows the content items from every WP that has been uploaded to the website.

Table 3 Content from every WP

WP #	Content from WPs that has been uploaded to the toolbox
WP1	SDG Impact Assessment Tool (ICLEI WS)
WP2	- Capacity building plan (ICLEI AS) - Videos on a self-paced course supporting capacity development (ICLEI ES). Videos that are ready and uploaded include the topics: - Basics for solar energy and PV systems - Sizing of solar electrification systems - Installation and operation of PV systems - Maintenance and Safety of PV systems - Solar energy applications - Suitable conditions for PV installations

	Solar PV system designs exercise
WP 5	- Mapping of International Financial Institutions (ICLEI WS) - Template for a concept note on sustainable energy (ICLEI WS) - Template for a detailed project concept note (ICLEI WS)

Status of the Content Forecast

Table 4 Status of content

Total number uploaded	14
Total number completed	25
Total number in progress	7
Total number identified	28

View the entire list in Annex 1.

4.3. Month 40

4.3.1. Toolbox content

Between months 18 and 40, a total of 58 content items were collected and uploaded to the toolbox. During this period, several issues related to the uploaded content were resolved, including the correction of errors in video links and the updating of files that were not downloading properly as part of ongoing content maintenance activities.

As the project nears its final year, a few minor adjustments to content development were inevitable, along with changes to the content development plan for other WPs. Eleven items were removed or replaced due to issues with overlap, content integration, and adjustments in the development plan. Additionally, six new knowledge products developed from WP 2 and 5 have been added to the content forecast.

Table 5 details the content developed between M18 and M40, with items still in progress or identified but not yet completed by other partners highlighted in italics. For further information on the entire items, please refer to the content forecast overview in Annex 2.

Table 5 content from each WP

WP #	Content from WPs that has been uploaded to the toolbox
WP2	- Various self-paced courses and webinar series supporting capacity-building development, including video and learning materials. (ICLEI ES) Topics covered are: - Basics on clean cooking - Treatment of organic waste - Business model for clean cooking solutions - Sourcing and production of waste to energy system - Technology options for clean cooking solutions - Installation, operation and maintenance for biogas systems - Installation, operation and maintenance for cook stove

- Safety for clean cooking solutions
- Suitable condition for waste to energy installations
- *Implementation and maintenance guide on clean cooking*
- *Implementation and maintenance guide on solar cooking*
- Introduction to E-mobility
- E-mobility in the context of better planning
- E-mobility planning and implementation
- Productive use case in EV rural and urban context
- Retrofitting of fuel-based vehicles to EV and other
- Maintenance and safety of EVs and batteries
- Cost-effective and suitable electric vehicle charging management
- Electric mobility business models and exploitation pathways
- Rural access to information
- Digital inclusion and sustainable development in rural areas
- Competence centre for connectivity and regional inclusion
- Establishing village information spot
- Providing information on energy
- Basics for second life batteries
- Second life batteries uses, in less demanding applications
- Second life battery management, maintenance and safety
- Second life repurposing of lithium-ion electric vehicle batteries
- Safe e-waste handling
- *Circular design and value chain*
- *Battery management*
- *Recycling and repurposing of batteries*
- *Safe e-waste handling. Storage and disposal of e-waste*
- *Smart grid integration models*
- *Technologies and smart micro-grid integration*
- Introduction to smart micro-grid systems
- Technologies and components of smart micro-grid
- Smart grid integration models control and management functionalities and maintenance
- Climate-proofing, resilience and adaptation
- Energy management systems for optimization of profitability of PV electricity
- Tools for the best use and sizing of storage systems
- Existing examples of smart microgrids and future trends
- Webinar 1. Unlocking the potential of solar energy in Africa
- Webinar 2. Enhancing adoption of Waste-to-Energy solutions for Clean Cooking in Africa
- Webinar 3. Increasing access to financing for e-mobility deployment
- Webinar 4. Rural Internet Access - Solving the Challenge
- Webinar 5. Exploring the potential of 2nd life batteries in African countries
- Webinar 6. Harnessing the potential of Smart Microgrid Systems in African countries
- *Implementation and maintenance guide on Solar PV*
- *Implementation and maintenance guide on solar irrigation*

	• Software tool for the assessment of levelized cost of energy of PV systems under historical and climate change conditions (Tecnalia) • <i>Factsheet on solar irrigation and webinar material for innovation in solar irrigation (WI)</i>
WP 5	• <i>5 Templates developed from T5.1. development of concepts and pre-feasibility studies for transformational sustainable energy projects (ICLEI WS)</i> <i>Topics covered are</i> ○ <i>Project idea and scoring sheet templates</i> ○ <i>Developed concept note and scoring sheet templates</i> ○ <i>Pre-feasibility study</i> • <i>SESA policy roadmap (WI)</i>

Table 6 Status of content

Total number Completed	72
Total number in progress	7
Total number Identified	7
Total number of items removed or newly replaced with new content	11

4.3.2. Toolbox functionality update

During the public launch of the SESA toolbox at the 4th SESA project regional event in Marrakesh on October 14, 2024, the toolbox's functionality and key components were introduced to the target audience.

To enhance user interaction, two updates have been made. Firstly, the toolbox and SESA introduction were added by using an accordion function to inform the visitors about the project and the toolbox while remaining on the toolbox website without being diverted to another webpage.

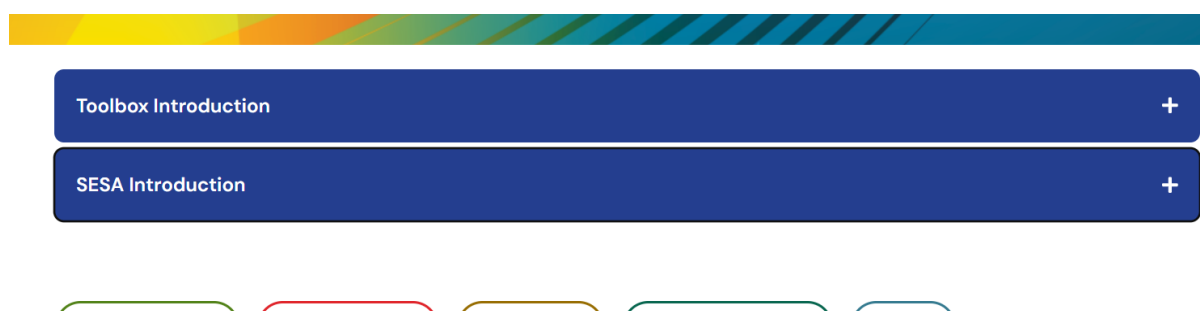


Figure 12 SESA toolbox and project introduction on the website

Additionally, a discussion arose about the functionality of the filter. The original design included an upper layer displaying categories that were color-coded for each post, along with a filter bar on the left side for more detailed filtering options. While categories could contain multiple selections, the default setup displayed the colour code of the alphabetically first marked category, which often resulted in the "energy" category being prioritized due to its position in the alphabet.

After discussions with F65, responsible for the SESA project's IT software management, and input from ICLEI WS as task leader and CENEX NL as WP1 leader, the decision was made to simplify the approach. Users are allowed to select only one category at a time for each content post search, while still being able to filter further by selecting multiple applicant filters. This required

maintenance work on uploaded posts to ensure that the colour coding of each post aligned with the most relevant category. This change was necessary because the website service provider does not offer the capability to prioritize multiple options, which led to the unbalanced colouring coding. However, it is important to note that the filter function can still support multiple choices, making this adjustment more about prioritizing clarity and usability rather than a limitation of the filter function.

4.3.3. Final next steps

The content updates in the report will be completed by M40. However, ICLEI WS will continue to upload 14 items of content that are identified and in progress, as each WP representative shares their results on the toolbox repository until the project period ends. In addition, there will be a few knowledge products developed from the Solar PV Community of Practice from WP 2 planned to be updated.

ICLEI WS will host a webinar in February 2025 (M41) to promote the content shared through the SESA toolbox and support the purpose of the toolbox and content for users. This will be the final step of ICLEI WS's activity on the SESA toolbox content management task.

Annex 1. Content Forecast (M18)

Corresponding number with content folders	Organisation	WP	Category	Unique content title	Short content description	Expected delivery date	Status	Internal/External content	Format type (excel, or video, or etc)	Language(s)	Notes
1	ICLEI WS	WP1	Impact assessment	SDGs impact assessment tool	A simplified tool to assess	31 June 2022	Completed	Internal	Spread sheet		
2	Wuppertal Institute	WP3		Sustainable Energy Solutions Catalogue	The catalogue provides basic facts about sustainable energy solutions. It is not designed to provide in-depth knowledge for specialists in a particular solution, but the catalogue targets practitioners, policy makers and civil society, especially at a local level. The catalogue will contain around 10 factsheets. Each factsheet will cover a specific sustainable energy solution. The factsheets will contain technical information as well as business aspects.	31. December 2022	Progress	External			No Unique content title, Shorter description (suggestion: full catalogue package). No folder with corresponding number, no category, no format type, should external be internal? (content created by SESA)
3	Wuppertal Institute	WP3		Sustainable e-mobility	The factsheet on sustainable e-mobility encompasses a set of solutions in which innovative technologies and business models are combined to improve mobility services in cities, peri-urban and rural areas.	9th June 2022	Progress	External			No Unique content title, No folder with corresponding number, no category, no format type, should external be internal? (content created by SESA) Completed?
4	Wuppertal Institute	WP3		Productive Use of Energy: Solar power for agriculture	The factsheet on Productive Use of Energy (PUE) deals with PUE solutions powered by sustainable energy and introduces different facets of sustainable PUE solutions in Africa and examples of their application.	08. July 2022	Progress	External			No Unique content title, No folder with corresponding number, no category, no format type, should external be internal? (content created by SESA)
5	Wuppertal Institute	WP3		Second-life Lithium-ion batteries	This factsheet reviews the potential use of Lithium-ion (Li-ion) second-life batteries (SLBs) in the context of sustainable energy solutions emerging in the African context. It sums up key technologies, business models and impacts, and presents examples of SLB use across the continent.	08. July 2022	Progress	External			No Unique content title, No folder with corresponding number, no category, no format type, should external be internal? (content created by SESA)
6	Wuppertal Institute	WP3		E-waste from solar off-grid appliances	This factsheet focuses on e-waste from solar off-grid appliances (OGS) in the last stage of the circularity system, the end-of-life stage, when other options such as reuse and repair have been exhausted, it sums up treatment possibilities, business models and impacts, and it presents examples of e-waste treatment of OGS products across the African continent.	02. September 2022	Progress	External			No Unique content title, No folder with corresponding number, no category, no format type, should external be internal? (content created by SESA)
7	Wuppertal Institute	WP3		Solar power and the Water-Energy-Food Nexus	The factsheet on water-energy-food nexus (WEF) aims at presenting different key concepts of solar solutions in the context of the WEF nexus, while giving examples of their deployment in the African context.	02. September 2022	Progress	External			No Unique content title, No folder with corresponding number, no category, no format type, should external be internal? (content created by SESA)
8	Wuppertal Institute	WP3		Clean cooking solutions	The factsheet on clean cooking solutions reviews the potential of clean cooking appliances, in relation to sustainable energy solutions that are currently emerging in the African context. It discusses key technological aspects, business models and impacts as well as examples of clean cooking technology use across the continent.	30. September 2022	Progress	External			No Unique content title, No folder with corresponding number, no category, no format type, should external be internal? (content created by SESA)
9	Wuppertal Institute	WP3		Circularity	The factsheet on circularity focuses on the entire value-chain of energy products, starting from design and manufacture through repair, repurpose and reuse to EoL treatment.	30. September 2022	Progress	External			No Unique content title, No folder with corresponding number, no category, no format type, should external be internal? (content created by SESA)
10	Wuppertal Institute	WP3		Energy efficiency? Smart microgrids? Climate proofing?		30. November 2022		External			No Unique content title, No folder with corresponding number, no category, no format type, should external be internal? (content created by SESA)
11	Wuppertal Institute	WP3				30. November 2022		External			No Unique content title, No folder with corresponding number, no category, no format type, should external be internal? (content created by SESA)
12	Wuppertal Institute / T	WP3		Sustainable Energy Solutions Catalogue	10. Climate Proofing	30. November 2022	Progress	External	Factsheets	English	No Unique content title, No folder with corresponding number, no category, no format type, should external be internal? (content created by SESA)
13	TECNALIA	WP3		Technical and Functional Requirements	Report generated and maintained in T3.2 with a set of Technical and Functional requirements for Innovative Energy to be a reference for the pilots						No category, expected deliver date, internal/external, format type
14	CENEX NL	WP1	Capacity building	Toolbox 'Knowledgebase' via InfoSpots	Lessons and guidance to develop InfoSpots solutions to facilitate access to knowledge and information for low connectivity areas.	Tbd	Identified	Internal	Manual or Guideline		Development of content will be in collaboration with BIF and F&S. Suspect it best fits under Capacity Building Category?
15	TECNALIA	WP3	Capacity building	Smart Microgrids	Factsheet being produced within T3.1 activity						
16	TECNALIA	WP3	Capacity building	Climate Proofing (THIS IS THE SAME DOCUMENT)	Factsheet being produced within T3.1 activity						

17	ICLEI Africa	WP2	Capacity building	Capacity building plan	A capacity building plan detailing the capacity gaps, needs and possible solutions that can be implemented to address the capacity gaps and needs in the partner countries (Kenya, Ghana, Malawi, Morocco, South Africa)	Mid August	Completed	External	Framework	English	The Capacity Building Plan has been finalised & shared with the WP leaders as well as the WP 6 communications team. It can be found on MS teams here: https://icicles.sharepoint.com/:w/r/sites/Sesa/Shared%20Documents/WP%202%20-%20Capacity%20building/Deliverables/_SESA_2.1.%20Capacity%20Building%20Plan_version%20%20updated%20draft_15%20July%202022%20(Proofread).docx?d=w34c4bf10a954067a0885008d294f9de&csf=1&web=1&e=agu04 . There will be an article going out to announce the release of the Capacity building plan
18	ICLEI Africa	WP2	Capacity building	Consideration for capacity building	A communications product showcasing the key considerations (lessons from SESA WP 2.1) to bear in mind for capacity building	30-Sep	Progress	External	Visuals	English	*Format: Infographic / Visual Poster
19	ICLEI Europe	WP2	Capacity building	Basics for solar energy and PV systems	*3 min video for general public to explain the basics of the	Oct-22	Identified	Internal	Training videos	English	Considering to add captions - title and schedule are tentative
20	ICLEI Europe	WP2	Capacity building	Basics on clean cooking	*3 min video for general public to explain the basics of the	Jan-23	Identified	Internal	Training videos	English	Considering to add captions - title and schedule are tentative
21	ICLEI Europe	WP2	Capacity building	Basics on e-mobility	*3 min video for general public to explain the basics of the	May-22	Identified	Internal	Training videos	English	Considering to add captions - title and schedule are tentative
22	ICLEI Europe	WP2	Capacity building	Basics on second life EV batteries	*3 min video for general public to explain the basics of the	23-Sep	Identified	Internal	Training videos	English	Considering to add captions - title and schedule are tentative
23	ICLEI Europe	WP2	Capacity building	Basics on smart-micro grid systems	*3 min video for general public to explain the basics of the	24-Jan	Identified	Internal	Training videos	English	Considering to add captions - title and schedule are tentative
24	ICLEI Europe	WP2	Capacity building	Basics on internet access	*3 min video for general public to explain the basics of the	24-May	Identified	Internal	Training videos	English	Considering to add captions - title and schedule are tentative
25	ICLEI Europe	WP2	Capacity building	Sizing of solar electrification systems	*10 min unit for audience with basic background on the to	Oct-Dec 22	Identified	Internal	Training videos	English	Considering to add captions - title and schedule are tentative
26	ICLEI Europe	WP2	Capacity building	Installations, Operations, maintenance and safety	*10 min unit for audience with basic background on the to	Oct-Dec 22	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
27	ICLEI Europe	WP2	Capacity building	Solar energy applications (Productive uses)	*10 min unit for audience with basic background on the to	Oct-Dec 22	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
28	ICLEI Europe	WP2	Capacity building	Solar PV system designs exercise	*10 min unit for audience with basic background on the to	Oct-Dec 22	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
29	ICLEI Europe	WP2	Capacity building	Technology options for clean cooking solutions	*10 min unit for audience with basic background on the to	Jan-april 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
30	ICLEI Europe	WP2	Capacity building	Business models for clean cooking solutions	*10 min unit for audience with basic background on the to	Jan-april 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
31	ICLEI Europe	WP2	Capacity building	Business delivery models for clean cooking solutions	*10 min unit for audience with basic background on the to	Jan-april 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
32	ICLEI Europe	WP2	Capacity building	Treatment of Organic Waste: Anaerobic Digestion	*10 min unit for audience with basic background on the to	Jan-april 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
33	ICLEI Europe	WP2	Capacity building	E-mobility in the context of better planning: Bridging the gap between local governments and e-mobility innovators;	*10 min unit for audience with basic background on the to	May-Aug 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
34	ICLEI Europe	WP2	Capacity building	Types of EVs	*10 min unit for audience with basic background on the to	May-Aug 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
35	ICLEI Europe	WP2	Capacity building	Charging infrastructure	*10 min unit for audience with basic background on the to	May-Aug 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
36	ICLEI Europe	WP2	Capacity building	User Manuals for EVs and battery management	*10 min unit for audience with basic background on the to	May-Aug 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
37	ICLEI Europe	WP2	Capacity building	Circular design and the value chain	*10 min unit for audience with basic background on the to	Sept-Dec 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
38	ICLEI Europe	WP2	Capacity building	Battery management	*10 min unit for audience with basic background on the to	Sept-Dec 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
39	ICLEI Europe	WP2	Capacity building	Recycling, and repurposing of batteries	*10 min unit for audience with basic background on the to	Sept-Dec 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
40	ICLEI Europe	WP2	Capacity building	Safe e-waste handling: storage and disposal of e-waste	*10 min unit for audience with basic background on the to	Sept-Dec 23	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
41	ICLEI Europe	WP2	Capacity building	Smart grid integration models (net metering, etc)	*10 min unit for audience with basic background on the to	Jan-May 24	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
42	ICLEI Europe	WP2	Capacity building	Technologies and smart micro-grid integration	*10 min unit for audience with basic background on the to	Jan-May 24	Identified	Internal	Training videos	English	Accompanied with FAQ and list of readings
43	ICLEI World Secretariat	WP5	Capacity building	Mapping of International Financial Institutions	A collection of IFIs that focus on Africa, divided into public	31-Aug-21	Completed	Internal	Spread sheet	English	
44	ICLEI World Secretariat	WP5	Capacity building	Pre-feasibility studies	Pre-feasibility studies on the selected projects from the de	Mar-25	Identified	Internal	Technical specificatio	English	
45	ICLEI World Secretariat	WP5	Capacity building	Project concepts	Project concepts based on the demonstration actions (WP	Mar-25	Identified	Internal	Technical specificatio	English	
46	BTH	WP4	Innovations	Electric mobility	Conversion of fuel driven motorcycles to electrical ones		Progress	Internal	Technical specificatio	English	
47	BTH	WP4	Innovations	Lithium Batteries/EV-batteries	Second life batteries and energy storage		Identified	Internal	Technical specificatio	English	
48	BTH	WP4	Innovations	Waste to energy	Waste to biogas plants for cooking, clean and reliable energy for cooking		Identified	External	Technical specificatio	English	
49	BTH	WP4	Innovations	Off-grid solar energy system	Containerised off-grid solar energy system including PV panels in combination with sec		Progress	Internal	Technical specificatio	English	
50	BTH	WP4	Innovations	MIG Bio-Cooker	Commercializing the component and testing new biomass alternatives		Progress	Internal	Technical specificatio	English	
51	BTH	WP4	Innovations	Integrated energy systems	Off-grid solar energy network coupled with lithium batteries		Identified	Internal	Technical specificatio	English	
52	BTH	WP4	Innovations	Lithium-Ion batteries end of life	Lithium batteries end of life management explored via R&D		Identified	Internal	Technical specificatio	English	
53	ICLEI Africa	WP2	Capacity building	Recurring themes/focus areas found in the C	A visual representation of the recurring themes/focus areas	07-Oct-22	Progress	External	Visuals	English	*Format is an infographic
54	TECNALIA	WP1	Impact assessment	Climate information	Information / Data on climate variables (historical and future projections) in pilot sites					English	First proposal to be discussed
55	TECNALIA	WP2	Capacity building	Guidelines on climate-proofing of infrastru	General guidelines and methodologies to be applied in planning and design processes to make them more resilient				Factsheets	English	First proposal to be discussed

26	TECHNICAL	WBT	Design & engineering	Project management & implementation	Deployment of systems and infrastructure				Design	Deployment of systems and infrastructure
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Annex 2. Content Forecast (M40)

	Organisation	WP	Category	Unique content title	Status	Internal (SE)	Format type (excel, or video, or other)	Language(s)
1	ICLEI World Secretariat	WP1	Impact assessment	SDGs impact assessment tool	Completed	Internal	Spread sheet	English
2	ICLEI World Secretariat	WP5	Capacity building	Mapping of International Financial Institutions	Completed	Internal	Spread sheet	English
3	ICLEI Africa	WP2	Capacity building	Capacity building plan	Completed	Internal	Framework	English
4	Wuppertal Institute	WP3	Capacity building	Factsheet: Sustainable e-mobility	Completed	Internal	Factsheets	English
5	Wuppertal Institute	WP3		Sustainable Energy Solutions Catalogue	Completed	Internal	Factsheets	English
6	Wuppertal Institute	WP3	Business models	Factsheet: Productive use of energy: Solar power for agriculture	Completed	Internal	Factsheets	English
7	Wuppertal Institute	WP3		Factsheet: Second-life Lithium-ion batteries	Completed	Internal	Factsheets	English
8	Wuppertal Institute	WP3		Factsheet: E-waste from solar off-grid solutions	Completed	Internal	Factsheets	English
9	Wuppertal Institute	WP3		Factsheet: Solar power and the water-energy-food nexus	Completed	Internal	Factsheets	English
10	Wuppertal Institute	WP3		Factsheet: Clean cooking <i>content title: clean cooking solutions</i>	Completed	Internal	Factsheets	English
11	Wuppertal Institute	WP3		Factsheet: Circularity and sustainable energy	Completed	Internal	Factsheets	English
12	Wuppertal Institute/TECNALIA	WP3		Factsheet: Solar minigrids	Completed	Internal	Factsheets	English
13	Wuppertal Institute	WP3		Factsheet: Energy efficiency for sustainable energy solutions <i>content title: energy efficiency</i>	Completed	Internal	Factsheets	English
14	Wuppertal Institute / TECNALIA	WP3		Factsheet: Climate-proofing sustainable energy solutions	Completed	Internal	Factsheets	English
15	TECNALIA	WP3	Innovations	Technical and Functional Requirements	Completed	Internal	Technical specification	English
16	CENEX NL	WP1	Capacity building	Toolbox 'Knowledgebase' via InfoSpots	Progress	Internal	Manual or Guideline	
17	ICLEI World Secretariat	WP5	Capacity building	Template Twopager Project Idea	Completed	Internal	Manual or Guideline	English
18	ICLEI World Secretariat	WP5	Capacity building	Template Project Concept Note	Completed	Internal	Manual or Guideline	English
19	ICLEI Africa	WP2	Capacity building	5 important considerations for capacity building	Completed	External	Visuals	English
20	ICLEI Africa	WP2	Capacity building	Renewable energy capacity building needs in Africa	Completed	External	Visuals	English
21	ICLEI Europe	WP2	Capacity building	Basics for solar energy and PV systems	Completed	Internal	Training videos	English
22	ICLEI Europe	WP2	Capacity building	Basics on clean cooking <i>content title: Basic clean cooking concepts</i>	Completed	Internal	Training videos	English
23	ICLEI Europe	WP2	Capacity building	Introduction to E-mobility. E-mobility in the sustainable development paradigm	Completed	Internal	Training videos	English
24	ICLEI Europe	WP2	Capacity building	Implementation and maintenance guide on Solar cooling	Identified	Internal		English
25	ICLEI Europe	WP2	Capacity building	Implementation and maintenance guide on Clean cooking	Progress	Internal		English
26	ICLEI Europe	WP2	Capacity building	<i>Maintenance guide on topic to be defined</i>	Identified	Internal		English
27	ICLEI Europe	WP2	Capacity building	Sizing of solar electrification systems	Completed	Internal	Training videos	English
28	ICLEI Europe	WP2	Capacity building	Installation and operation of solar system <i>content title: Installation and operation of PV systems</i>	Completed	Internal	Training videos	English
29	ICLEI Europe	WP2	Capacity building	Maintenance and Safety of solar system <i>content title: Solar maintenance and safety</i>	Completed	Internal	Training videos	English
30	ICLEI Europe	WP2	Capacity building	Solar energy applications (Productive uses)	Completed	Internal	Training videos	English
31	ICLEI Europe	WP2	Capacity building	Suitable conditions for PV installations	Completed	Internal	Training videos	English
32	ICLEI Europe	WP2	Capacity building	Solar PV system designs exercise	Completed	Internal	Training videos	English
33	ICLEI Europe	WP2	Capacity building	Treatment of Organic Waste. Anaerobic Digestion	Completed	Internal	Training videos	English
34	ICLEI Europe	WP2	Capacity building	Business models for clean cooking solutions <i>content title: Business models and delivery models for clean cooking solutions</i>	Completed	Internal	Training videos	English
35	ICLEI Europe	WP2	Capacity building	Sourcing and production of waste-to-energy system	Completed	Internal	Training videos	English
36	ICLEI Europe	WP2	Capacity building	Technology options for clean cooking solutions	Completed	Internal	Training videos	English
37	ICLEI Europe	WP2	Capacity building	E-mobility in the context of better planning: Bridging the gap between local governments and e-mobility innovators;	Completed	Internal	Training videos	English
38	ICLEI Europe	WP2	Capacity building	E-mobility Planning and Implementation	Completed	Internal	Training videos	English
39	ICLEI Europe	WP2	Capacity building	Productive use cases in EV. Rural and Urban context	Completed	Internal	Training videos	English
40	ICLEI Europe	WP2	Capacity building	Retrofitting of fuel based vehicles to EV and other	Completed	Internal	Training videos	English
41	ICLEI Europe	WP3	Capacity building	Circular design and the value chain	Identified	Internal	Training videos	English
42	ICLEI Europe	WP3	Capacity building	Battery management	Identified	Internal	Training videos	English
43	ICLEI Europe	WP3	Capacity building	Recycling and repurposing of batteries	Identified	Internal	Training videos	English
44	ICLEI Europe	WP3	Capacity building	Safe e-waste handling: storage and disposal of e-waste	Identified	Internal	Training videos	English
45	ICLEI Europe	WP3	Capacity building	Smart-grid integration models (net metering, etc)	Identified	Internal	Training videos	English
46	ICLEI Europe	WP3	Capacity building	Technologies and smart micro-grid integration	Identified	Internal	Training videos	English
47	BTH	WP4	Innovations	Electric mobility	Completed	Internal	Technical specification	English
48	BTH	WP4	Innovations	Lithium Batteries/EV-batteries	Identified	Internal	Technical specification	English
49	BTH	WP4	Innovations	Waste to energy	Identified	Internal	Technical specification	English
50	BTH	WP4	Innovations	Off-grid solar energy system	Identified	Internal	Technical specification	English
51	BTH	WP4	Innovations	MIG Bio-Cooker	Identified	Internal	Technical specification	English
52	BTH	WP4	Innovations	Integrated energy systems	Identified	Internal	Technical specification	English
53	BTH	WP4	Innovations	Lithium-Ion batteries end of life	Progress	Internal	Technical specification	English
54	TECNALIA	WP4	Impact assessment	Climate information	Progress	Internal	Manual or Guideline	English
55	TECNALIA	WP2	Capacity building	SW tool for LCOE assessment	Completed	Internal	Factsheets	English

56	TECNALIA	WP1	Design & operation	Climate proofing of PV project	Identified		Installation-based tool	English
57	ICLEI Europe	WP2	Capacity building	Installation, operation and maintenance for Biogas systems	Completed	Internal	Training videos	English
58	ICLEI Europe	WP2	Capacity building	Installation, operation and maintenance for cook stoves	Completed	Internal	Training videos	English
59	ICLEI Europe	WP2	Capacity building	Safety for clean cooking solutions	Completed	Internal	Training videos	English
60	ICLEI Europe	WP2	Capacity building	Suitable condition for waste to energy installations	Completed	Internal	Training videos	English
61	ICLEI Europe	WP2	Capacity building	Maintenance and Safety of Evs and batteries	Completed	Internal	Training videos	English
62	ICLEI Europe	WP2	Capacity building	Cost-effective and suitable EV charging management	Completed		Training videos	English
63	ICLEI Europe	WP2	Capacity building	Electric Mobility Business Models and Exploitation Pathways	Completed		Training videos	English
64	ICLEI Europe	WP2	Capacity Building	Rural Access to Information	Completed	Internal	Training videos	English
65	ICLEI Europe	WP2	Capacity Building	Digital inclusion and sustainable development in rural areas	Completed	Internal	Training videos	English
66	ICLEI Europe	WP2	Capacity Building	Competence centre for connectivity & regional inclusion	Completed	Internal	Training videos	English
67	ICLEI Europe	WP2	Capacity Building	Establishing village Information Spot	Completed	Internal	Training videos	English
68	ICLEI Europe	WP2	Capacity Building	Providing information on energy	Completed	Internal	Training videos	English
69	ICLEI Europe	WP2	Capacity Building	Basics for second life batteries (SLB)	Completed	Internal	Training videos	English
70	ICLEI Europe	WP2	Capacity Building	Circular design and the value chain	Completed	Internal	Training videos	English
71	ICLEI Europe	WP2	Capacity Building	Second life batteries uses, in less demanding applications	Completed	Internal	Training videos	English
72	ICLEI Europe	WP2	Capacity Building	Second life battery management, maintenance and safety	Completed	Internal	Training videos	English
73	ICLEI Europe	WP2	Capacity Building	Second life repurposing of lithium-ion electric vehicle batteries	Completed	Internal	Training videos	English
74	ICLEI Europe	WP2	Capacity Building	Safe e-waste handling. Collection and disposal of e-waste	Completed	Internal	Training videos	English
75	ICLEI Europe	WP2	Capacity Building	Introduction to smart micro grid systems	Completed			
76	ICLEI Europe	WP2	Capacity Building	Technologies and components of smart micro-grid	Completed			
77	ICLEI Europe	WP2	Capacity Building	Smart grid integration models control and management functionalities and maintenance	Completed			
78	ICLEI Europe	WP2	Capacity Building	Climate-proofing, resilience and adaptation	Completed			
79	ICLEI Europe	WP2	Capacity Building	Energy management systems for optimisation of profitability of PV electricity selfconsumption	Completed			
80	ICLEI Europe	WP2	Capacity Building	Tools for the best use and sizing of storage systems	Completed			
81	ICLEI Europe	WP2	Capacity Building	Existing examples of smart microgrids and future trends	Completed			
82	ICLEI Europe	WP2	Capacity Building	Webinar I Unlocking the potential of solar energy in Africa	Completed	Internal	Training videos	English
83	ICLEI Europe	WP2	Capacity Building	Webinar II Enhancing adoption of Waste-to-Energy solutions for Clean Cooking in Africa	Completed	Internal	Training videos	English
84	ICLEI Europe	WP2	Capacity Building	Webinar III Increasing access to financing for e-mobility deployment	Completed	Internal	Training videos	English
85	ICLEI Europe	WP2	Capacity Building	Webinar IV Rural Internet Access - Solving the Challenge	Completed	Internal	Training videos	English
86	ICLEI Europe	WP2	Capacity Building	Webinar V Exploring the potential of 2nd life batteries in the Africa countries	Completed	Internal	Training videos	English
87	ICLEI Europe	WP2	Capacity Building	Webinar VI Harnessing the potential of Smart Microgrid Systems in African countries	Completed	Internal	Training videos	English
88	ICLEI Africa	WP2	Capacity building	Developing a project concept note for accessing climate finance	Identified	External	Manual or Guideline	English
89	ICLEI Europe	WP2	Capacity Building	Implementation and maintenance guide on Solar PV	Progress			
90	ICLEI Europe	WP2	Capacity Building	Implementation and maintenance guide on Solar irrigation	Identified			
91	Wuppertal Institute	WP2	Capacity Building	Factsheet: Solar irrigation	Progress		Factsheets	English
92	Wuppertal Institute	WP2	Capacity Building	Webinar: Innovations in Solar Irrigation - Peer to peer exchange with lessons from Nigeria, Tanzania, and Namibia	Progress			English
93	ICLEI WS	WP5	Business Models	Stage 3 prefeasibility studies Pre-Feasibility Study Template	Completed	Internal	Manual or Guideline	English
94	Wuppertal Institute	WP5	Capacity Building	Developing a Policy Roadmap	Progress	Both	Factsheets	English
95	ICLEI WS	WP5	Business Models	Stage 2 concept note development. SESA developed concept note and its scoring sheet template	Completed	Internal	Manual or Guideline	English
96	ICLEI WS	WP5	Business Models	Stage 1 call for ideas. SESA project idea and scoring sheet templateSESA project idea and its scoring sheet template	Completed	Internal	Manual or Guideline	English



