



# D1.1 TOOLBOX FOR EFFICIENT AND SUSTAINABLE ENERGY USE

WP 1  
9/16/2022

## Summary Sheet

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Abstract	This report highlights the progress made on Deliverable 1.1 Toolbox for efficient and sustainable energy from work package 1. The report introduces the task, explains the toolbox functionalities, the toolbox content collection and upload process and the content available so far.

## Legal Disclaimer

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## List of abbreviations

<i>Abbreviation</i>	<i>Definition description</i>
<i>SESA</i>	Sustainable Energy Solutions for Africa; European Union's Horizon 2020 research and innovation programme under grant agreement No. 101037141.
<i>GA</i>	Grant Agreement
<i>H2020</i>	European Union's Horizon 2020 research and innovation programme
<i>WP</i>	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.
<i>NGO</i>	Non-Governmental Organization
<i>SMEs</i>	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 1 of the SESA project and is continuously updated. Although the toolbox falls in the work package 1, it is intrinsically linked to many activities that are undertaken by all partners within other work packages and are expected to provide **valuable insights, tools and other relevant output**. Content developed in other work packages will be included (or adapted) to be 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 and/or sensitive data etc. It allows for all work packages 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 take place in **months 12, 18 and 40** of the project's lifespan, as defined in the Grant Agreement for the SESA project.

# 1. Introduction

The *Toolbox for Efficient Energy Solutions* will be a scalable and harmonized toolbox for advanced implementation, management, and operation strategies of efficient sustainable energy solutions. The toolbox will be the key repository of the project spanning across all the work packages, 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 work package 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 work packages 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, 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); Tecnalia (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.

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



## 2. Toolbox functionalities

The Toolbox will contain content 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 will be accessible via a link on the official SESA website, but can also be accessed directly via the URL below:

SESA toolbox website

<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.

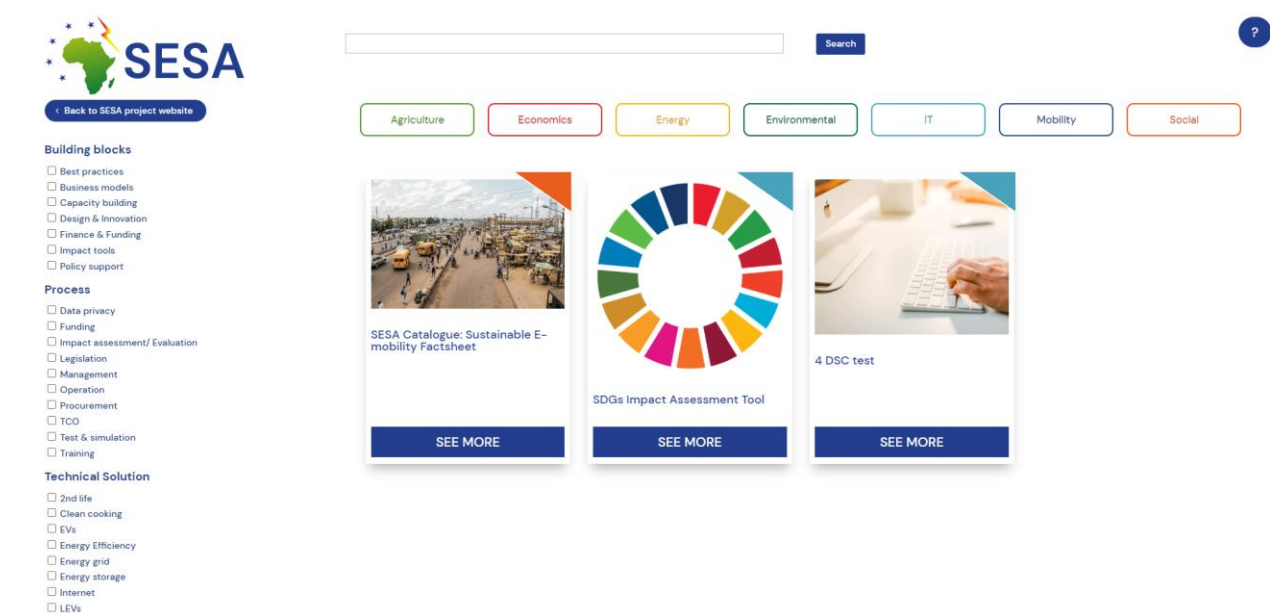


Figure 1 Toolbox landing page

The question mark button in the upper right corner can be clicked upon which a (semi-transparent) over-lay appears (Figure 2) on top of the webpage to help the visitor better understand how key features of the Toolbox can be used.

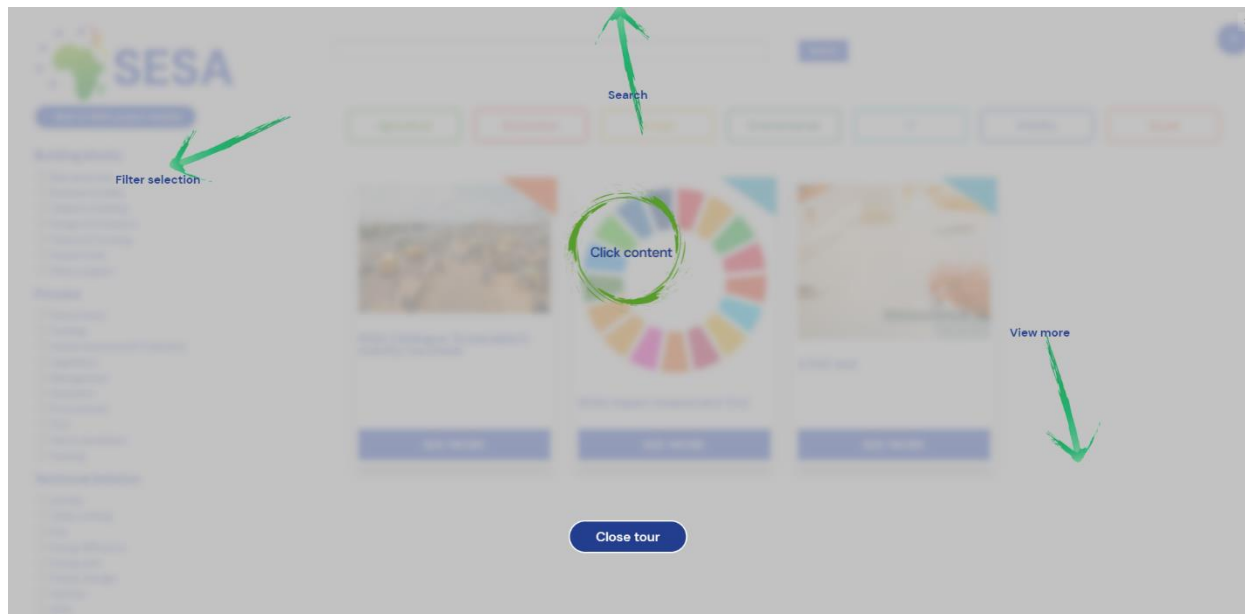


Figure 2 Navigation overlay

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 pieces of content will remain visible.

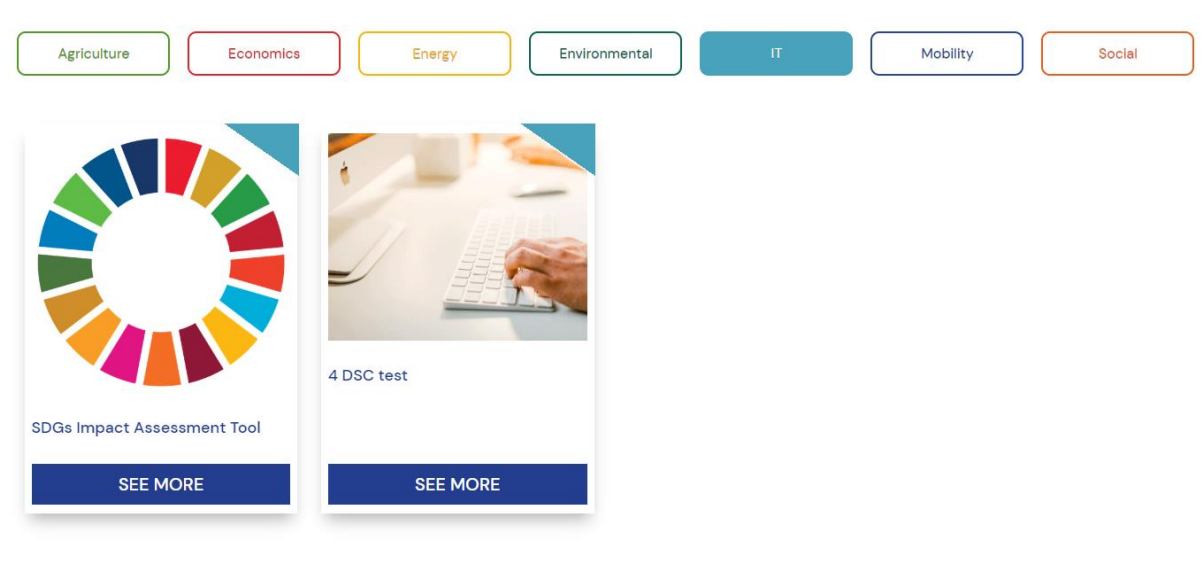


Figure 3 Toolbox Categories

If there are still too many results available, the results can be filtered down further by selecting filters on the left side of the Toolbox (Figure 4). Currently, the content pieces shown, can be filtered down further based on: Building blocks, Process, Technical Solution and Geographical context.

#### Building blocks

- ☐ Best practices
- ☐ Business models
- ☐ Capacity building
- ☐ Design & Innovation
- ☐ Finance & Funding
- ☐ Impact tools
- ☐ Policy support

#### Process

- ☐ Data privacy
- ☐ Funding
- ☐ Impact assessment/ Evaluation
- ☐ Legislation
- ☐ Management
- ☐ Operation
- ☐ Procurement
- ☐ TCO
- ☐ Test & simulation
- ☐ Training

#### Technical Solution

- ☐ 2nd life
- ☐ Clean cooking
- ☐ EVs
- ☐ Energy Efficiency
- ☐ Energy grid
- ☐ Energy storage
- ☐ Internet
- ☐ LEVs
- ☐ Recycling
- ☐ Renewable energy
- ☐ Water

#### Geographical context

- ☐ Rural
- ☐ Urban

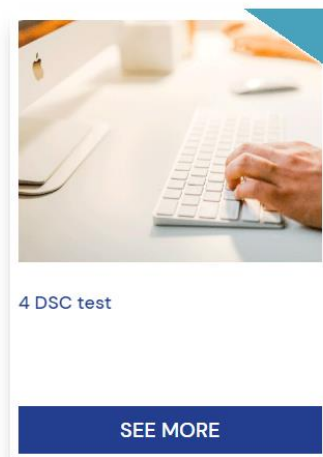


Figure 4 Toolbox Filters

A piece of content can be visited by clicking 'see more'. The website will load 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 piece of content is addressing. The visitor can navigate through the content by using the left sidebar, reading the description, download a file, see a video or get in touch with the person who produced the content. To go back to the main page, one simply can press the 'go back' button on the top.

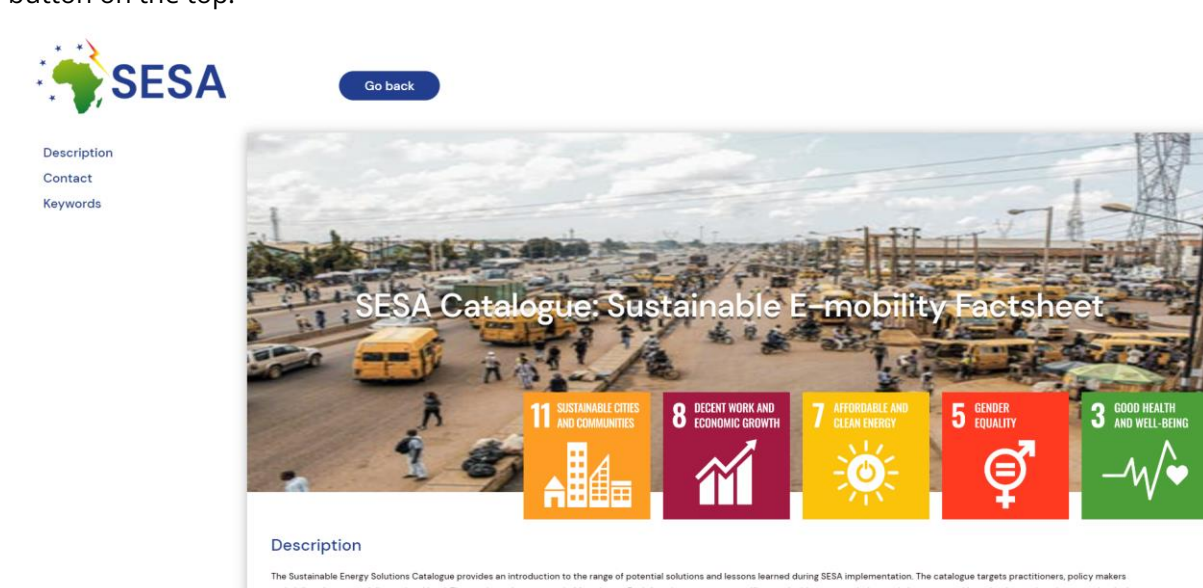


Figure 5 Toolbox Content Page

## 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 de Wi-Fi connected devices, one can navigate to a specific URL to enter the toolbox locally, without using the actual internet.

In order to keep the toolbox up to date, the Raspberry Pi will be able to sync the toolbox files (only the files that have been added or changed) from the live server once in a given timeframe. A script is being written to create this bridge between the live server and the Raspberry Pi (InfoSpots) which will have only limited internet available each month.

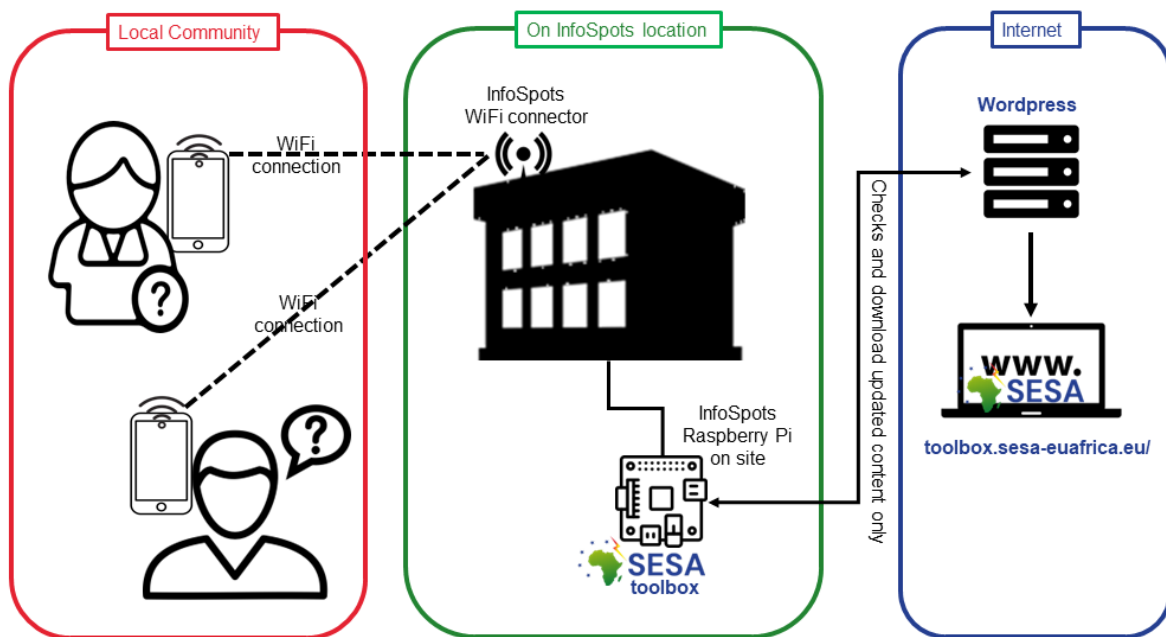


Figure 6 Simplified InfoSpots Infographic

## 3. Toolbox content

### 3.1 Content creation

Project partners will develop 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 a 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.

Content is initially categorised in '*building blocks*' reflecting the different themes of the work packages and have been identified as follows: Impact assessment, Capacity building, Business models, Innovations, Design & operation, Finance and Policy.

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

#### 3.1.2 Content templates

To ensure consistency and appropriate project branding, our partners from F6S are currently developing 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 Work package 1 on the toolbox website. The flowchart below (Figure 7) can be used to follow the steps that need to be undertaken from content creation to uploading the content to the toolbox.

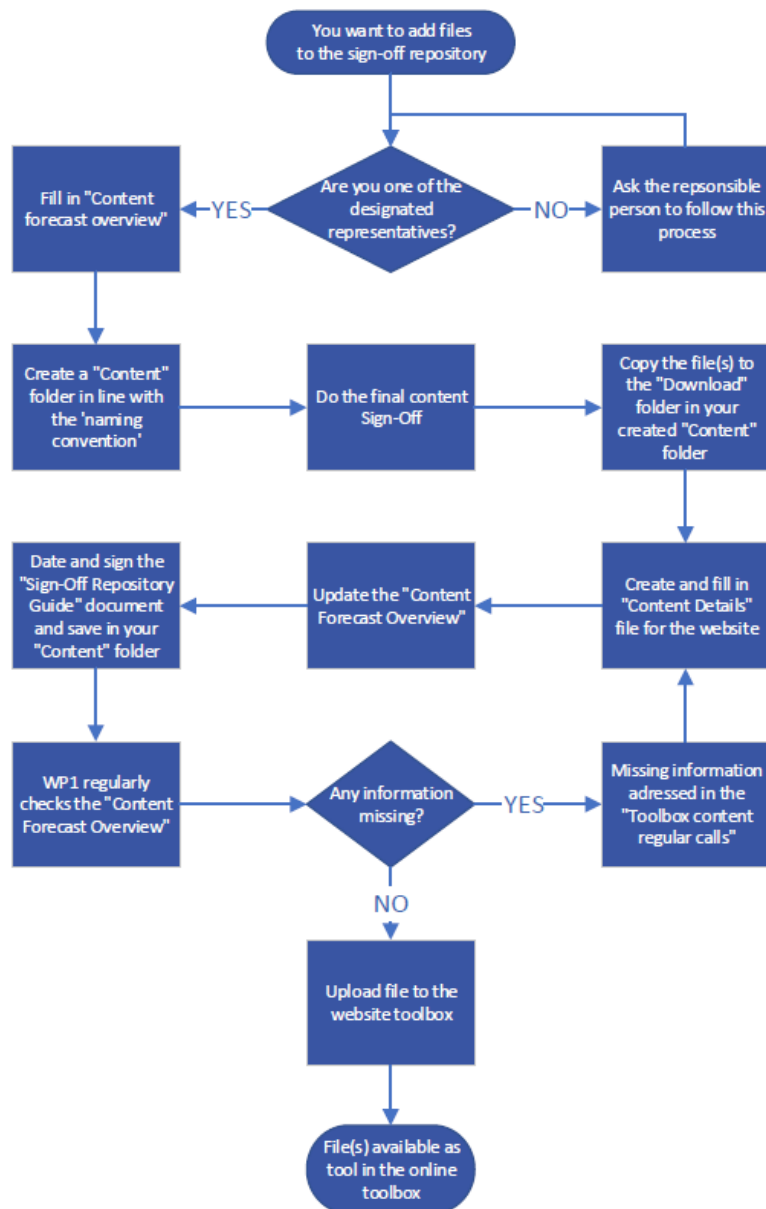


Figure 7 Content Creation Flowchart

### 3.2.1 Content forecast

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

Work package 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 work package 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 should also be 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 Work package 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, work package 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' should be copied and placed in this folder as well. This word file is found in the work package 1 folder in the SharePoint environment. The 'Content details template' (Figure 9) should be 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.


<b>Header image</b>	<p>[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: <a href="http://www.pexels.com">www.pexels.com</a>. You can add the url to the image here, or paste the image]</p> <p>The optimal image size is 1500x540 pixels</p> 
<b>Content Title</b>	[Add the title of the content here]
<b>Content Description</b>	<p>[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.]</p> <p>[you can add an additional image here]</p>

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, 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 of 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 and checklist to ensure key aspects are reviewed and checked.

Content Sign-Off check includes a verification of whether:

- 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

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 work package 1 that said 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. The tracker is updated again.

## 3.3 Uploading process

### 3.3.1 Custom Post type

In the backend of the Toolbox website (based on WordPress) there is new Post Type called: My Toolkits (Figure 10). In Categories part you will find all 'building block' Categories (Figure 11).

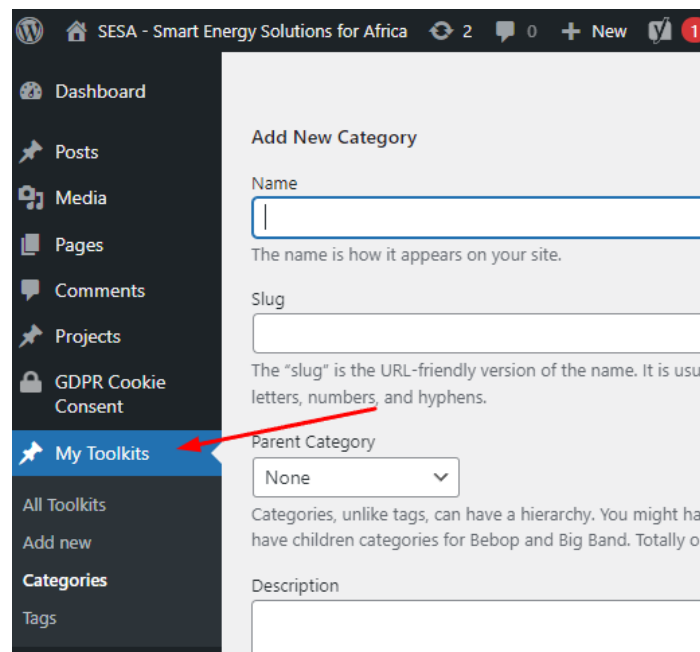


Figure 10 My Toolkits



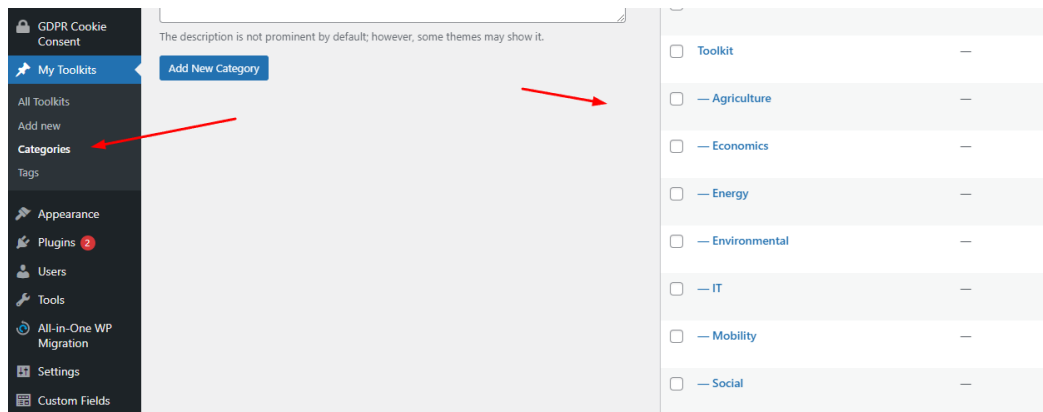


Figure 11 Toolkit Categories

### 3.3.2 Custom Fields

The following custom fields were created, which correspond to the filters that can be used by those visiting the Toolbox to help then find the content on the toolbox which is relevant for their search (Figure 12). These listed filters are also corresponding with the filters that can be found in the 'content details template' so content creators can indicate which filters are applicable to their content. Subsequently, when uploading the content, they can be checked in the backend of the toolbox. In addition to the 'building block' categories, the Toolbox currently holds the following filter subcategories (including their individual selection options):

1. Building blocks / CheckBox – multichoice \*  
(Impact tools, Capacity building, Business models, Best practices, Design & Innovation, Finance & Funding, Policy support)
2. Technical Solution / CheckBox – multichoice \*  
(Renewable energy, Energy storage, Energy grid, Energy Efficiency, Clean cooking, Recycling, EVs, LEVs, Internet, Water, 2nd life)
3. Process / CheckBox – multichoice  
(Operation, Procurement, Management, Funding, Legislation, Training, Data privacy, Test & simulation, Impact assessment/ Evaluation, TCO)
4. User groups / CheckBox – multichoice \*  
(Agriculture professionals, Citizen initiatives, City officers, Drinkwater professionals, Education professionals, Energy authorities, Energy professionals, Energy providers, Entrepreneurs (SME/Startup), Financing institutions, General public, Industry, National governments, NGOs (social & environmental), Policy makers, Regional governments, Researchers)
5. Locations / CheckBox – multichoice  
(Ghana, Kenya, Malawi, Morocco, Namibia, Nigeria, Rwanda, South Africa, Tanzania)
6. Geographical context / CheckBox – multichoice \*  
(Rural, Urban)
7. URL for Video DL / FileDocument - url
8. KeyWords / TextArea

However, the backend design can accommodate additional filter subcategories as well as additional options within a subcategory should the development of future content require any adjustments.

ToolKit			
Order	Label	Name	Type
1	Building blocks *	building-blocks	Checkbox
2	Technical Solution *	technical_solution	Checkbox
3	Process	process	Checkbox
4	User groups *	user_groups	Checkbox
5	Locations	locations	Checkbox
6	Geographical context *	geographical_context	Checkbox
7	URL for Video DL	url_for_video_dl	File
8	KeyWords	keywords	Text Area

Figure 12 Custom fields

### 3.3.3 Content page

All of the text sections from the 'Content details template' can be added to the content page, and sections that are not applicable (i.e., if there is a video but no downloads, for example) can be hidden. As a result, the navigation pane displayed on the left is conform the delivered content (Figure 13 and Figure 14).

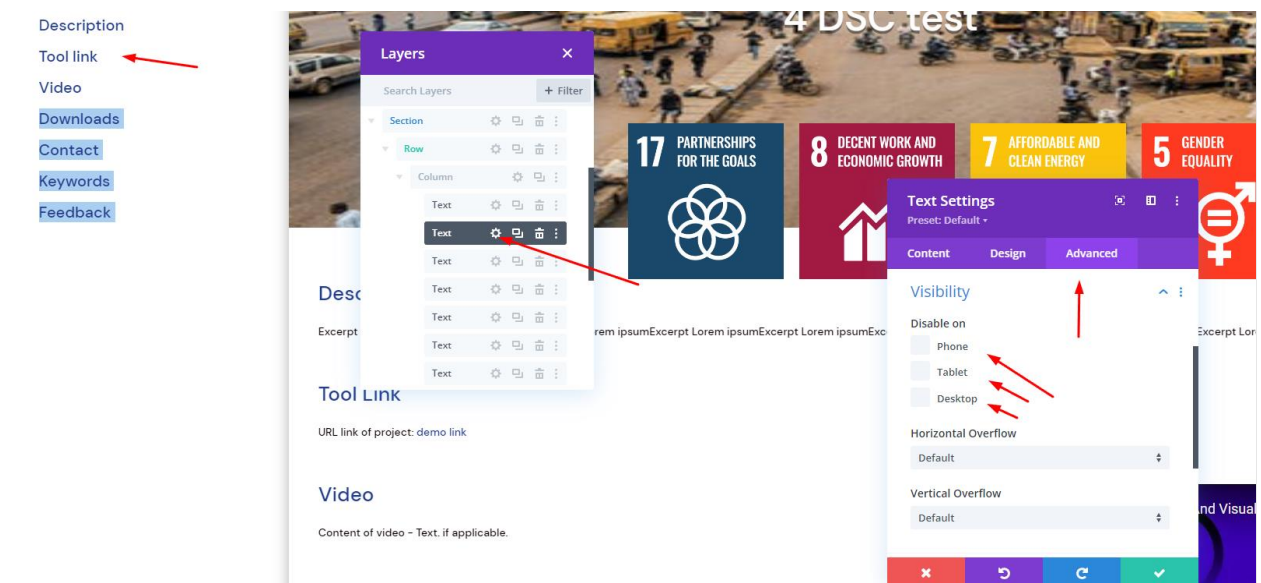


Figure 13 Filling the content page

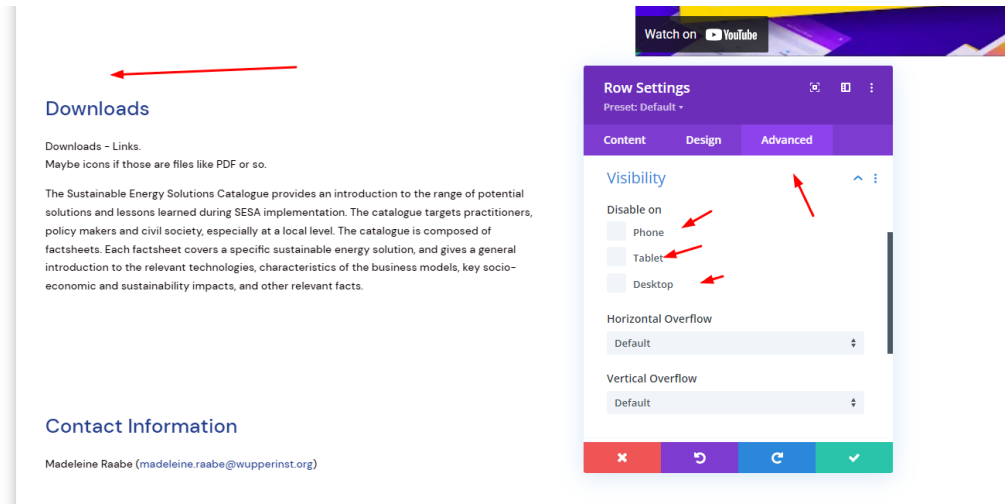


Figure 14 Filling the content page 2

Next, via the Divi library (Figure 15) all the checkboxes for the additional filters can be checked, tags can be added, and a featured image can be uploaded (Figure 16).

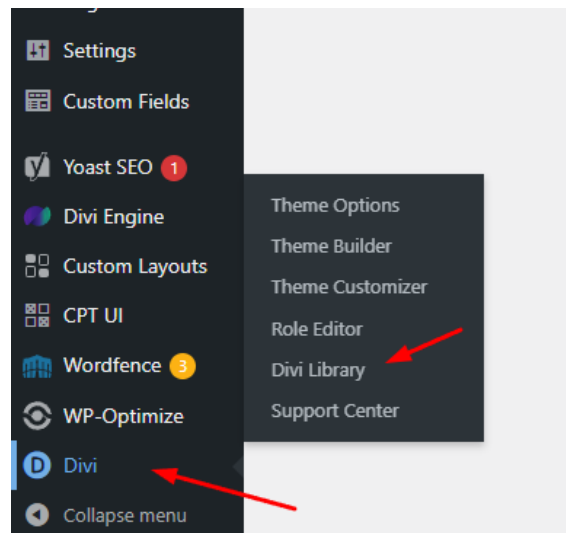


Figure 15 Divi library

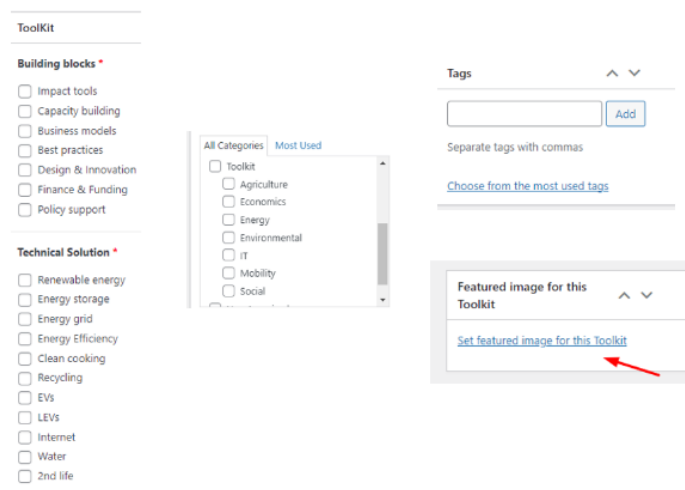


Figure 16 Filters and other content details

## 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 D1.1. 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
- Work package
- 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 work package that has been added to this tracker excel. The completed items have been highlighted.

Table 1 Content from every work package

WP #	Content from SESA project partners
WP1	<ul style="list-style-type: none"> <li>ICLEI WS: SDG Impact Assessment Tool (COMPLETE)</li> <li>CENEX NL: Toolbox 'Knowledgebase' via InfoSpots</li> </ul>
WP2	<ul style="list-style-type: none"> <li>ICLEI AS: Capacity building plan (COMPLETE), Infographic on key consideration for capacity building</li> <li>ICLEI ES: 6 videos (3 min long) on basics of: Solar energy &amp; PV systems, clean cooking, e-mobility, second life EV batteries, smart-micro grid systems and internet access</li> <li>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.</li> </ul>
WP3	<ul style="list-style-type: none"> <li>WI: 10 factsheets identified under 'Sustainable Energy Solutions Catalogue'. 3 factsheets have been submitted for review.</li> <li>TECHNALIA: 2 factsheets from task 3.1 (Climate proofing and Smart Microgrids) &amp; 1 report from the outcomes of task 3.2</li> </ul>
WP4	<ul style="list-style-type: none"> <li>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</li> </ul>
WP5	<ul style="list-style-type: none"> <li>ICLEI WS: Mapping of International Financial Institutions (COMPLETE), Pre-feasibility studies on selected projects from demo actions.</li> <li>ICLEI WS in collaboration with WP4: Project concepts based on demo actions</li> </ul>

## Current status of the Content Forecast

Table 2 Status of content

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

View the entire list in Annex 1.

## ANNEX 1 - Content Forecast

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) <b>Completed?</b>
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 circulatory 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 generatited and maintained in T3.2 with a set of Technical and Funtional 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 F6S. 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 DOCUM	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 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 finalisation & shared with the WP leaders as well as the WP 6 communications team. It can be found on MS teams here: <a href="https://icleies.sharepoint.com/:w:/r/sites/Sesa/Shared%20Documents/WP%202%20-%20Capacity%20building/Deliverables/_SESA_2.1.%20Capacity%20Building%20Plan_version%202%20updated%20draft_15%20July%202022%20(Proofread).docx?d=w34c4bbf10a9540d7a0885008d294f9de&amp;csf=1&amp;web=1&amp;e=kagu04">https://icleies.sharepoint.com/:w:/r/sites/Sesa/Shared%20Documents/WP%202%20-%20Capacity%20building/Deliverables/_SESA_2.1.%20Capacity%20Building%20Plan_version%202%20updated%20draft_15%20July%202022%20(Proofread).docx?d=w34c4bbf10a9540d7a0885008d294f9de&amp;csf=1&amp;web=1&amp;e=kagu04</a> . There will be an article going out to annouce 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 coocking	~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 soluti	~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 Institution	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 motorbicycles 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 seco		Progress	Internal	Technical specificatio	English	
50	BTH	WP4	Innovations	MIG Bio-Cooker	Commericalising 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 rend of life managment 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 area	07-Oct-22	Progress	External	Visuals	English	*Format is an infographic
54	TECNALIA	WP1	Impact assessmer	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 infrastruc	General guidelines and methodologies to be applied in planning and design processes to make them more resilient				Factsheets	English	First proposal to be discussed

56	TECNALIA	WP1	Design & operatio	Climate-proofing of PV project	Example application of the methodology to adapt PV project				English	First proposal to be discussed
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