

switchasia



Funded by
the European Union

 Green Growth
Knowledge Partnership

Bridging Circular Economy Knowledge and Action through Enhanced Knowledge Generation, Management and Sharing

Proceedings Report:
Circular Economy Knowledge Hubs
Webinar Series 2024-2025



Acknowledgements

This Report, *Bridging Circular Economy Knowledge and Action through Enhanced Knowledge Generation, Management and Sharing*, was prepared as part of an [intervention](#) co-implemented by the EU SWITCH-Asia Policy Support Component (PSC) and the Green Growth Knowledge Partnership (GGKP) under the supervision of Dr Sara Gabai, Communication, Knowledge Management and Partnerships Expert, and Dr Zinaida Fadeeva, Team Leader, EU SWITCH-Asia Policy Support Component.

Contributing Authors:

- Rene van Berkel, Senior Circular Economy Expert for EU SWITCH-Asia Policy Support Component
- Hannes Mac Nulty, Green Industry Platform Manager – Green Growth Knowledge Partnership (GGKP)
- Gianguglielmo Calvi, Senior Knowledge Management Systems Expert, Green Growth Knowledge Partnership (GGKP)
- Saengroj Srisawaskraisorn, Expert for EU SWITCH-Asia Policy Support Component

The SWITCH-Asia Programme

© 2025 SWITCH-Asia

Disclaimer

The information and contents in this document are the sole responsibility of the authors and do not necessarily reflect the views of the European Union.

Table of Contents

Executive Summary 4

Introduction 5

Overview of the Webinar Series 6

Analysis of the Participants 8

Key Insights and Reflections 9

 Workshop 1: Bridging Circular Economy Knowledge and Action through Enhanced Knowledge Generation, Management and Sharing 9

 Webinar 2: Advancing Circular Solutions: Regional Knowledge Platforms and Users’ Perspectives 10

 Webinar 3: Turning Knowledge Hubs into Circular Economy Transition Facilitators 12

 Webinar 4: Harnessing AI to Scale the Impact of Circular Economy Knowledge 14

Cross-cutting Lessons Learned 16

Opportunities for Stakeholders 16

Way Forward 18

GGKP API: Addressing Interoperability 18

Common Circular Economy Knowledge Taxonomy: Harmonizing Classification 19

Abbreviations and Symbols

AI	Artificial Intelligence
ACEN	African Circular Economy Network
ACESP	ASEAN Circular Economy Stakeholder Platform
CACIP	Central Asia Climate and Information Portal
CEC LAC	Circular Economy Coalition for Latin America and the Caribbean
CEMPRE	Centro de Estágio e Emprego
ECESP	European Circular Economy Stakeholder Platform
EPR	Extended Producer Responsibility
ERIA	Economic Research Institute for ASEAN and East Asia
GiZ	Gesellschaft für Internationale Zusammenarbeit
GGKP	Green Growth Knowledge Partnership
(M)SME	(Micro), Small and Medium Enterprise(s)
UN GCN	United Nations Global Compact Network
WBCSD	World Business Council for Sustainable Development

List of Figure and Table

Figure 1. Regional distribution of participants for Workshops 1-4

Table 1. Details of webinars

Executive Summary

The “Circular Economy Knowledge Hubs” Webinar Series (October 2024-May 2025), co-organized by the EU SWITCH-Asia Policy Support Component and the Green Growth Knowledge Partnership (GGKP), convened **over 450 participants representing** policymakers, business and industry leaders, researchers and experts, platform operators, and civil-society representatives—from Asia and the Pacific, Africa, Europe, and the Americas. With one interactive workshop and three thematic webinars, the series moved beyond awareness raising to investigate how knowledge hubs can support the translation of research into knowledge products and their effective utilization in policy, financing, and on-the-ground action to accelerate circular economy transitions.

Three key themes emerged from the series:



Knowledge hubs must evolve into active intermediaries that curate evidence-based knowledge products, broker partnerships, and promote generalizable knowledge and information metrics;



Data quality and interoperability, supported by standardized material-flow and efficiency information and compatible knowledge taxonomies, are prerequisites for effective policy and market development; and



Inclusive, just circular economy transition requires engaging SMEs, informal establishments and (waste) workers, and marginalized groups while embedding social impact indicators alongside environmental goals.

The informative and rich discussions among experts provided noteworthy insights. Artificial Intelligence (AI) can support knowledge management even with small sets of knowledge products. Businesses remain hesitant to fully adopt the circular economy despite cost and market incentives due to fragmented regulations and unclear terminology. And many ambitious policies falter on weak implementation and accountability. The interactive format of the events (live polls, open Q&As), was critical for surfacing these barriers and generating practical, co-created solutions.

Building on these insights, the following **suggestions** provide concrete actions for the four stakeholder groups involved in effective curation, management, sharing and using of circular economy knowledge:



Knowledge Hubs should transform into dynamic service platforms by curating practical case studies and diverse circular economy insights, deploying AI-driven curation tools, brokering cross-sector partnerships, and adopting inclusive and transparent governance to ensure credibility and impartiality and guard against greenwashing.



Policymakers should harmonise data requirements and circular-economy terminology regionally; co-create adaptive roadmaps that integrate diverse circular economy solutions and policy instruments, e.g., industrial symbiosis, EPR, right-to-repair, and green public procurement, in national economic, employment, climate and environment policy and strategies; and pilot transparent, contained and controlled AI analytics under human oversight.



Donors & Development Partners should address core funding gaps for knowledge curation, management, sharing and advocacy by supported knowledge hubs (multilingual content, knowledge management and communications, monitoring and evaluation, and maintenance support interoperability through open vocabularies and API frameworks; and scale capacity-building for MSMEs, youth, and informal workers using shared AI-ready datasets in low-resource contexts.



Circular-Economy Practitioners are encouraged to adopt standardised (*knowledge*) taxonomies with rigorous evidence validation and source citation; combine AI-assisted queries with expert interpretations; participate in peer-learning fora to share successes and failures; and frame circular initiatives around clear societal and business benefits such as climate action, cost savings, new markets, and resilience.

Introduction

As circular economy is gaining momentum globally, so is the number of knowledge products on the topic. A significant challenge is alignment among best practice knowledge products with frequent overlaps in topics, objectives, and target audiences. This is further complicated by the frequent use of differing interpretations of the ambition, concepts and operational practices for circular economy, which vary in terminology, scope, prioritized sectors, stakeholder groups, and cultural distinctions. These challenges might also lead to a fragmented approach to managing and disseminating the knowledge, skills, and information required to strengthen actions toward a truly-green and inclusive circular economy.

With funding from the European Union, the EU SWITCH-Asia Policy Support Component and the Green Growth Knowledge Partnership (GGKP) implemented the [Circular Economy Knowledge Hub Webinar Series](#) with an aim to generate a shared understanding on Circular Economy principles and possible circular economy knowledge taxonomy, by actively engaging regional circular economy knowledge and stakeholder platforms, globally, as operational in Southeast Asia, Central Asia, Europe, Africa, and Latin America. The series comprised of online workshop and webinars to foster the exchange of knowledge, experiences, and lessons among circular economy policymakers, industry leaders, academics and experts, and knowledge management platforms. Each webinar had its theme and dedicated objectives.

Workshop 1 (invitation-only): [Bridging Circular Economy Knowledge and Action through Enhanced Knowledge Generation, Management and Sharing](#) aimed at enhancing both peer-to-peer exchanges and supporting knowledge-sharing among circular economy knowledge managers. The webinar introduced the global initiative to key stakeholders and showcased a baseline assessment of currently used knowledge taxonomies. It also covered interactive activities to gather insights and exchange knowledge on circular economy knowledge curation, management and sharing.

Webinar 2: [Advancing Circular Solutions: Regional Knowledge Platforms and Users' Perspectives](#) explored regional and global perspectives on implementing the circular economy, focusing on potential contributions of knowledge platforms to awareness, capacity building, and tangible action by policy makers, producers and consumers.

Webinar 3: [Turning Knowledge Hubs into Circular Economy Transition Facilitators](#) explored how knowledge hubs can improve their impact and efficiency in facilitating circular economy transitions. The discussion emphasised the potentially transformative role in strengthening policy effectiveness, fostering private sector participation and innovation, and building robust knowledge ecosystems.

Webinar 4: [Harnessing AI to Scale the Impact of Circular Economy Knowledge](#) explored how artificial intelligence (AI) can play a key role in enhancing circular economy (CE) knowledge exchange, accessibility and application. The discussion also considered the extent to which dedicated circular economy knowledge-focused AI solutions may function within the set parameters of a defined knowledge library to ensure quality and relevance of their outputs.

Overview of the Webinar Series

Table 1. Details of the webinars

Title	No. of Participants/ Format	Speakers
16 October 2024 Workshop 1: Bridging Circular Economy Knowledge and Action through Enhanced Knowledge Generation, Management and Sharing	80 participants (invitation-only) Online workshop with interactive activities and facilitated discussion	<ul style="list-style-type: none"> • Zinaida FADEEVA, Team Leader at SWITCH Asia Policy Support Component • Rene VAN BERKEL, Circular Economy Expert, SWITCH-Asia Policy Support Component • Hannes MAC NULTY, Green Industry Platform Manager - Green Growth Knowledge Partnership (GGKP) • Sara GABAI, Stakeholder Engagement, Communication and Knowledge Management Expert, SWITCH Asia Policy Support Component • Axel DARUT, Stakeholder Engagement Expert, SWITCH Asia Policy Support Component • Laura MELLADO, Communication and Knowledge Management Expert, SWITCH-Asia Policy Support Component
28 November 2024 Webinar 2: Advancing Circular Solutions: Regional Knowledge Platforms and Users' Perspectives	114 participants Webinar-style with online icebreaking activities and facilitated discussion	<p>Panel I</p> <ul style="list-style-type: none"> • Alice SENG, Administrator, European Circular Economy Stakeholder Platform (ECESP) Secretariat, • Anthony PRAMUALRATANA, Deputy Executive Director, ASEAN Centre for Sustainable Development Studies and Dialogue (ACSDSD), ASEAN Circular Economy Stakeholder Platform (ACESP) • Beatriz MARTINS CARNEIRO, Regional Lead for Finance and Economic Transformations in Latin America and Caribbean, Circular Economy Coalition for Latin America and the Caribbean • Katharina GIHRING, Strategic Programme and Operational Lead of the African Circular Economy Network (ACEN) • Zafar MAKHMUDOV, former Executive Director of the Regional Environmental Centre for Central Asia (CAREC), Central Asia Climate and Information Portal (CACIP) <p>Panel II</p> <ul style="list-style-type: none"> • Tho Dinh NGUYEN, President of the Institute of Strategy, Policy on Natural Resources and Environment, Vietnam • Cynthia REYNOLDS, Founder & Convener, Circular Economy Coalition • Basrie KAMBA, President Director of Asia Pacific Rayon (APR) • Hoa TRINH, Co-founder, BUYO Bioplastics Company Limited • Carlos SCHEEL, Professor Emeritus, EGADE Business School, Tecnologico de Monterrey, Mexico

Title	No. of Participants/ Format	Speakers
<p>27 February 2025</p> <p>Webinar 3: Turning Knowledge Hubs into Circular Economy Transition Facilitators</p>	<p>128 participants</p> <p>Webinar-style with facilitated discussion</p>	<p>Panel I</p> <ul style="list-style-type: none"> • Kgauta MOKOENA, Chief Director, Chemicals and Waste Policy, Specialist Monitoring Services at the Department of Forestry, Fisheries and The Environment in South Africa; Co-chair of the African Circular Economy Alliance (ACEA) • Dr Venkatachalam ANBUMOZHI, Senior Research Fellow for Innovation, Economic Research Institute for ASEAN and East Asia (ERIA) • Daniel MAZURÉ, Head of Environment and Climate, UN Global Compact Network Germany • Chloe POTTINGER-GLASS, Research Fellow, Stockholm Environment Institute (Asia Hub). <p>Panel II</p> <ul style="list-style-type: none"> • Tim FORSLUND, Senior Lead, Sitra International Programmes and European Circular Economy Resource Center (ECERC) • Filipe CAMANO GARCIA, Manager and Lead, Global Circularity Protocol for Business, World Business Council for Sustainable Development (WBCSD) • Thomas THOMAS, Co-convenor, ASEAN Circular Economy Business Alliance (ACEBA) • Andres ROJAS, Finance and Services Manager at CEMPRE Colombia • Dr. Martin CALISTO FRIANT, Global Value Chains Lead, Circle Economy, The Netherlands.
<p>6 May 2025</p> <p>Webinar 4: Harnessing AI to Scale the Impact of Circular Economy Knowledge</p>	<p>180 participants</p> <p>Webinar-style with facilitated discussion</p>	<p>Panel I</p> <ul style="list-style-type: none"> • Gianguglielmo CALVI, Senior Knowledge Management Systems Expert, Green Growth Knowledge Partnership (GGKP), • Antoine DIARRA, CEO, Ynnov • Moria LEVY, Founder & CEO, ROM Global <p>Panel II</p> <ul style="list-style-type: none"> • Sotirios KANELLOPOULOS, Policy Officer, Data and ICT for Environmental Sustainability, Directorate-General for Environment, European Commission • Rajendra (Raj) SHROFF, Director of Applied AI Research, Blu Artificial Intelligence (Blue AI) • Laura MELLADO, Communication and Public Diplomacy Consultant • Robin NOWOK, Advisor Data for Development, GIZ Data Lab, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Analysis of the Participants

Figure 1. Regional Distribution of Participants in Workshops 1-4



Key Insights and Reflections



Workshop 1: Bridging Circular Economy Knowledge and Action through Enhanced Knowledge Generation, Management and Sharing

This first and invitation-only webinar was organised to gather insights from participants on gaps, challenges, and the structure of currently operational regional circular economy knowledge platforms. Participants were drawn from select circular economy platforms and knowledge hubs identified in the Stakeholder Plan and the GGKP circular economy networks, including representatives from five circular economy knowledge hubs that are leading this collaborative initiative, specifically: [Central Asia Climate and Information Portal \(CACIP\)](#), [European Circular Economy Stakeholder Platform \(ECESP\)](#), [ASEAN Circular Economy Stakeholder Platform \(ACESP\)](#), [Circular Economy Coalition for Latin America and the Caribbean \(CEC LAC\)](#), and [African Circular Economy Network \(ACEN\)](#).

Participants were asked questions via real-time online polls about their perceptions on gaps and challenges when managing, curating and disseminating circular economy knowledge. **A lack of connectivity between platforms (62%) was identified as the most significant gap in current circular economy knowledge platforms.** This pertains the lacking ability to search and retrieve knowledge products already stored and indexed on sister knowledge platforms. The **lack of understanding of the target audiences' needs (48%) was cited as the main challenge in sharing circular economy knowledge to target audiences.** **Participants also recognized that tailored content for different sectors (46%) would help knowledge platforms to be more inclusive and effective in meeting the diverse needs of the circular economy target audience.**

A significant number of participants also suggested that circular economy knowledge be organised by product's lifecycle stages (45%) to ensure effective tagging and classification. They noted that the biggest challenge in developing a flexible knowledge taxonomy lies in being specific enough for different needs while still being sufficiently general to foster cross-sector, cross regional and inter-stakeholders learning. Other challenges included adapting to various stages of circular economy development, accommodating existing and emergent global standards, and including different cultural views and specific industry terms.

KEY INSIGHTS

- **Clear definitions and user-driven insights** are crucial for effectively training AI (Large Language Models) to extract relevant information from vast amounts of knowledge.
- **Sector-specific knowledge** is key because different sectors have unique product qualities, policies, standards, supply chains, and customer behaviours.
- "Circular (green) washing" is of genuine concern to avoid the romanticizing of recycling or other circular solutions that pose genuine environmental or health risks. Therefore, **human expertise-led scrutiny and geographically specific knowledge are needed to verify circularity claims**, as AI alone may not suffice.
- EU Taxonomy's "Do No Significant Harm" (DNSH) guidelines are as important as direct circular activities, and **a multi-tagging system is needed** to classify CE knowledge products effectively.
- **A lifecycle stage-focused approach** could offer a more solution-agnostic perspective and help users explore all circular possibilities.



Webinar 2: Advancing Circular Solutions: Regional Knowledge Platforms and Users' Perspectives

This second webinar focused on regional perspectives and user needs. It explored regional and global perspectives on implementing the circular economy in policy and by businesses and other organizations, focusing on how knowledge platforms can drive awareness, capacity building, and tangible action.

During the two panel discussions, invited speakers reflected on the role of knowledge platforms in raising awareness, building capacity, and fostering implementation of the circular economy by policymakers, businesses, and the general public. The panels also addressed regional challenges, collaboration opportunities with global initiatives, and indicators for assessing the relevance and accessibility of circular economy knowledge provided by current platforms for different sectors or regions and user groups.

KEY INSIGHTS

- **Bridging Global and Local Contexts:** Regional platforms can play a critical role in adapting and customizing global circular economy concepts and strategies to local realities, ensuring that circular economy initiatives are contextually relevant and can unlock adoption and implementation.
- **Importance of Capacity Building:** Capacity-building initiatives, including training, workshops, and peer-to-peer exchanges, empower local stakeholders by providing them with tools, knowledge, and skills to implement circular economy practices effectively.
- **Challenges in Data Access and Standardization:** A recurring challenge is the lack of user-oriented data, and the diversity of data requirements among different user-groups. These range from material and resource flow data, contextual understanding of effectiveness of policy measures, to circular product, service and business model solutions, among others, which hinders effective knowledge exchange and collaboration between and within regions.
- **Localized Solutions for Circularity:** Localizing knowledge and adapting international frameworks to specific cultural, economic, and social contexts are essential to make circular economy practices actionable and unlock local circularity opportunities.
- **Collaborative Frameworks and Partnerships:** Partnerships among governments, academia, business sectors, and international organisations can be instrumental for driving circular economy innovation and fostering cross-sector collaboration.
- **Focus on Actionable Tools:** Beyond data, circularity practices and techniques and policy recommendations, operational tools and methodologies are needed to (co)-develop innovative, circular solutions that are context and opportunity-specific, particularly for developing regions.
- **Overcoming Barriers for SMEs:** Small and medium-sized enterprises (SMEs) appear at a disadvantage to adopt circular economy practices due to their more limited capabilities and knowledge to navigate and overcome technical, financial and market challenges and regulatory requirements, highlighting the need for targeted support.
- **Information Technology as Enabler:** digital technologies such as AI, blockchain, and digital platforms can track resource flows and circular processes and support the visualisation of circular economy ecosystems.
- **Independence, Trust and Accountability:** Platforms must actively manage and scrutinise their content to maintain impartiality and trustworthiness, to avoid promotion of circularity solutions that carry potentially significant environmental and health risks and thereby counter greenwashing.
- **Fostering Regional and Global Synergies:** Regional platforms must simultaneously address local user needs while contributing to and benefiting from global circular economy knowledge, equally fostering North-South, South-North and triangular and intra-regional learning and scaling up of circularity initiatives.

Speaker Highlights

Our platform is instrumental in collecting and sharing knowledge about the circular economy in Africa through training sessions, case studies, webinars, and active participation in high-level events. Our local chapters further extend our messages to the local level.



Katharina Gihring
African Circular Economy Network (ACEN)

We can assess the impact of our platform through user engagement, the number of users accessing it, and the topics that interest them most. Our impact can also be measured by the strength of our network, particularly with platforms outside Europe. The triple planetary crisis knows no borders, making it essential for ECESP to connect with other regional platforms.



Alice Senga
European Circular Economy Stakeholder Platform (ECESP)

The main challenge for the private sector in implementing circular economy practices is understanding the regulations associated with circularity. It is crucial to localize knowledge and consider the on-the-ground context.



Anthony Pramualratana
ASEAN Circular Economy Stakeholder Platform

We believe in the 5 Cs: community, climate, country, customers, and company. In our textile business, we are committed to achieving 20% recycled material in our production by 2030. This is a challenging goal, and we need to collaborate with global partners to reach these objectives.



Basrie Kamba
President Director of Asia Pacific Rayon (APR)

Regional platforms play a pivotal role in connecting global and local initiatives. They help align local understanding of new concepts, such as the circular economy. By incorporating innovative tools, such as AI, regional platforms can further enhance local knowledge.



Zafar Makhmudov
Central Asia Climate and Information Portal (CACIP) / CAREC

The Circular Economy Coalition developed a standardized data set that enables data interoperability. This fosters a clearer understanding of what the circular economy means in different regions of the world.



Cynthia Reynolds
Founder & Convener
Circular Economy Coalition

We use biowaste at an industrial scale from breweries and from the food and beverage sector in our production. There is very limited information available for our company to really calculate its footprint. We lack data points to benchmark our performance. Regional platforms could help cover this need.



Hoa Trinh
Co-founder, BUYO Bioplastics Company Limited

The Coalition brings together national governments, international organizations, and circular economy knowledge experts. We aim to foster a regional understanding of Circular Economy, as demonstrated by the first Circularity Gap Report launched last year. Sharing best practices is especially appealing to governments and private sector stakeholders.



Beatriz Martins Carneiro
Circular Economy Coalition for Latin America and the Caribbean

It is important to have standardized and harmonized data to define and quantify the circular economy. Such data is essential, for example, in conducting assessments to implement 'extended producer responsibility' policies.



Tho Dinh Nguyen
President of the Institute of Strategy and Policy on Natural Resources and Environment, Vietnam



Webinar 3: Turning Knowledge Hubs into Circular Economy Transition Facilitators

Knowledge hubs have the potential to play a pivotal role in advancing the circular economy by bridging gaps between practice, analysis and research, policy development and implementation and financing to scale up circular economy. While many existing platforms have yet to fully engage in this bidirectional 'knowledge value chain', they could enable collaboration, support evidence-based policymaking, and connect businesses with scalable circular solutions. By integrating diverse knowledge sources—from academic research to grassroots innovations and operational business innovations and models—and offering accessible, actionable resources, these hubs can help overcome persistent challenges such as data gaps, fragmented knowledge and implementation efforts, and limited impact measurement, ultimately accelerating circular transitions. The third webinar in the series explored how knowledge hubs can enhance their impact and efficiency in facilitating circular economy transitions.

Discussions were facilitated in two panels, with Panel 1 discussing the importance of knowledge creation and curation, and Panel 2 discussing how policy implementation could be strengthened through knowledge hubs and cross-sector collaboration. The discussion can be summarised in following key points:

KEY INSIGHTS

- **Circular economy success requires upstream redesign of products, services, and technologies**, supported by policies that incentivise circular (re)design and product and process innovations, close knowledge gaps, foster knowledge sharing and collaboration, and align with national priorities like job creation, inclusive growth and regional development, and environmental protection.
- **Science-based and adaptive policies are essential**, drawing on data from material and resource flow analysis, and promoting practices like industrial symbiosis, resource efficiency, green chemistry and engineering, etc., to enhance efficiency in resource use and close resource loops.
- **Key challenges include data gaps, inconsistent standards, out of date regulations, and the complexity of circular systems**, which call for harmonised, inclusive, and context-specific policy approaches.
- **Knowledge, technology, and financing are core enablers**, alongside strong stakeholder engagement, especially from businesses, informal sectors, and communities often excluded from policy dialogues.
- **Knowledge hubs must focus on action, not just information**, by providing actionable insights for high-impact sectors, facilitating civil society involvement, and supporting companies with practical, value-driven guidance.
- **Inclusive, measurable, and de-politicised approaches**—led by neutral actors and aligned with climate goals can accelerate circular economy adoption while ensuring accountability and impact.

Speaker Highlights

switthasia  Funded by the European Union 

Turning Knowledge Hubs into Circular Economy Transition Facilitators

For policy to be evidence-based, it must be informed by research and science. The discussion on circularity will become more effective as more scientific insights on material efficiency are shared.



Kgauta MOKOENA
African Circular Economy Alliance (ACEA)

WEBINAR SERIES Circular Economy Knowledge Hubs

switthasia  Funded by the European Union 

Turning Knowledge Hubs into Circular Economy Transition Facilitators

We must completely rethink our production technologies to achieve true material efficiency. Knowledge hubs bridge the gap between scientists and businesses.



Daniel MAZURÉ
UN Global Compact Network Germany

WEBINAR SERIES Circular Economy Knowledge Hubs

switthasia  Funded by the European Union 

Turning Knowledge Hubs into Circular Economy Transition Facilitators

As researchers, we face four key challenges in advancing the circular economy: a lack of data on circularity and resource efficiency, the complexity of systemic thinking, the rapid evolution of the field, and the need to harmonize standards within the ASEAN market.



Dr Venkatachalam ANBUMOZHI
Economic Research Institute for ASEAN and East Asia (ERIA)

WEBINAR SERIES Circular Economy Knowledge Hubs

switthasia  Funded by the European Union 

Turning Knowledge Hubs into Circular Economy Transition Facilitators

Exciting circular economy policies are emerging in ASEAN, from extended producer responsibility to single-use plastic regulations and economic stimuli. Yet, challenges remain—limited stakeholder engagement, weak focus on consumption and the right to repair, and insufficient attention to social equity and justice.



Chloe POTTINGER-GLASS
Stockholm Environment Institute (SEI)

WEBINAR SERIES Circular Economy Knowledge Hubs

switthasia  Funded by the European Union 

Turning Knowledge Hubs into Circular Economy Transition Facilitators

Through the recent publication of over 80 business cases, ACEBA has demonstrated that businesses in ASEAN have opportunities to take responsibility for their environmental and social impact.



Thomas THOMAS
ASEAN Circular Economy Business Alliance (ACEBA) | ARAIBA Sdn Bhd

WEBINAR SERIES Circular Economy Knowledge Hubs

switthasia  Funded by the European Union 

Turning Knowledge Hubs into Circular Economy Transition Facilitators

The Global Circularity Protocol seeks to ensure that the language of the circular economy is understood across businesses and financial actors. It aims to enhance circularity measurement and bridge knowledge gaps in the field.



Filipe CAMAÑO GARCIA
Global Circularity Protocol for Business at the World Business Council for Sustainable Development (WBCSD)

WEBINAR SERIES Circular Economy Knowledge Hubs

switthasia  Funded by the European Union 

Turning Knowledge Hubs into Circular Economy Transition Facilitators

In Finland, the Circular Economy Roadmap consultation identified experts for specific tools, such as public procurement, turning their expertise into a valuable knowledge resource beyond government mandates. Similarly, the EU Circular Economy Resource Center will leverage not only data and analysis but also expert networks to drive circularity.



Tim FORSLUND
Sitra International Programmes and EU Circular Economy Resource Centre

WEBINAR SERIES Circular Economy Knowledge Hubs

switthasia  Funded by the European Union 

Turning Knowledge Hubs into Circular Economy Transition Facilitators

A knowledge hub must recognize its role as a bridge between practitioners and policymakers while staying rooted in technical expertise to become a trusted reference.



Andrés ROJAS
CEMPRE Colombia

WEBINAR SERIES Circular Economy Knowledge Hubs

switthasia  Funded by the European Union 

Turning Knowledge Hubs into Circular Economy Transition Facilitators

A knowledge hub should engage a diverse range of actors to ensure broad expertise while actively amplifying the voices of the most vulnerable. It must also focus on making knowledge actionable and transformative.



Dr. Martin CALISTO FRIANT
Circle Economy

WEBINAR SERIES Circular Economy Knowledge Hubs



Webinar 4: Harnessing AI to Scale the Impact of Circular Economy Knowledge

The final webinar of this series explored how artificial intelligence (AI) might play an enabling role in enhancing circular economy knowledge exchange, accessibility and application. The discussion also considered the extent to which dedicated circular economy knowledge-focused AI solutions could function most effectively when operating exclusively in a defined knowledge library to improve quality and relevance of the AI outputs.

Panel I focused on the role of AI in assisting the collation, curation and accessibility of CE knowledge. **Panel II** focused on how AI can support knowledge analysis and the related generation of insights that are adapted to specific target audiences.

KEY INSIGHTS

- **AI can enhance research, knowledge extraction, and public engagement**, making complex topics like the circular economy more accessible through tailored, human-machine interactions and localised, context-specific insights.
- **AI tools can still be effective even in data-scarce environments**, as they can be adapted to work with limited or human-expert-collated data sets and knowledge libraries, especially when supported by smarter, localised data use and structured, context-driven knowledge inputs.
- **Specialised AI tools and domain-specific taxonomies**, such as those for the circular economy, improve the accuracy, relevance, and precision of insights generated.
- **AI's effectiveness and credibility depend on the quality and relevance of its training data**, as well as its ability to link the AI generated insights to verifiable sources, making transparency and traceability essential for user trust.
- **Human oversight remains critical**, providing ethical guidance, validating AI generated outputs, interpreting nuance, and ensuring AI is applied meaningfully in real-world contexts.
- **Communicators and practitioners play a key role in bridging data and understanding**, transforming AI generated outputs into actionable insights and ensuring the technology serves public and policy needs effectively.

Speaker Highlights

switchasia  Funded by the European Union 

Circular Economy Knowledge Hubs Webinar Series:
Harnessing AI to Scale the Impact of Circular Economy Knowledge

“While AI enhances capabilities, human judgment remains essential for providing critical validation, interpretation, and ethical oversight of automated systems and their outputs.”



GIANGUGLIELMO CALVI
Senior Knowledge Management Systems Expert,
Green Growth Knowledge Partnership (GGKP)

switchasia  Funded by the European Union 

Circular Economy Knowledge Hubs Webinar Series:
Harnessing AI to Scale the Impact of Circular Economy Knowledge

“We can harness AI-powered conversations to make the topic of the circular economy more accessible to a broader audience. By distinguishing which tasks are best suited for machines and which require human insight, we can design more targeted and effective interactions tailored to specific users.”



MORIA LEVY
Founder and CEO ROM Global

switchasia  Funded by the European Union 

Circular Economy Knowledge Hubs Webinar Series:
Harnessing AI to Scale the Impact of Circular Economy Knowledge

“In many countries, data is not readily available. In Mali, for example, if you need specific data, it often has to be collected manually and does not update automatically. **My work is not about big data, but rather about smarter data.** AI can be trained to work with the limited data that is available and help augment our understanding of the local context.”



ANTOINE DIARRA
CEO Ynnov

switchasia  Funded by the European Union 

Circular Economy Knowledge Hubs Webinar Series:
Harnessing AI to Scale the Impact of Circular Economy Knowledge

“To ensure AI delivers relevant results, prompts must be properly contextualized to reflect user needs. General models often lack the depth for specific questions, which is why we're moving toward more specialized tools. Challenging these tools with complex queries helps test their value. AI can accelerate research and knowledge extraction, but it needs structured input. A circular economy taxonomy will help curate data more effectively, making language models more reliable and useful.”



SOTIRIOS KANELLOPOULOS
Policy Officer, Data and ICT for Environmental Sustainability,
Directorate-General for Environment (DG-ENV)



switchasia  Funded by the European Union 

Circular Economy Knowledge Hubs Webinar Series:
Harnessing AI to Scale the Impact of Circular Economy Knowledge

“The true power of AI lies not in how fluently it speaks, but in how effectively it connects to verifiable knowledge. To build trust, AI must be grounded in real sources, with every answer clearly referencing the documents it draws from. Transparency is essential—users should be able to trace the origin of any AI-generated content.”




ROBIN NOWOK
Advisor Data for Development, GIZ Data Lab,
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

switchasia  Funded by the European Union 

Circular Economy Knowledge Hubs Webinar Series:
Harnessing AI to Scale the Impact of Circular Economy Knowledge

“The opportunity today isn't just to share more information, but to build paths of understanding through it. Communicators are vital as knowledge translators — turning data into meaning, and complexity into connection.”



LAURA MELLADO
Communication and Public Diplomacy
Consultant

switchasia  Funded by the European Union 

Circular Economy Knowledge Hubs Webinar Series:
Harnessing AI to Scale the Impact of Circular Economy Knowledge




“AI technologies are just one part of the workflow—they are not subject matter experts and lack a real-world understanding. To make meaningful impact, you still need skilled people on the ground who can interpret, apply, and act on the insights AI provides.”



RAJENDRA SHROFF
Director of Applied AI Research at
Blu Artificial Intelligence

Cross-cutting Lessons Learned

Across the four webinars, three themes recurred.

-  **First, knowledge hubs are viewed as essential intermediaries that translate analysis and research into actionable insights for policy makers, businesses and other stakeholders.** Speakers stressed the need for curated, actionable content and indicators, and metrics that move beyond static reports to inform decision-makers.
-  **Second, data quality and interoperability among knowledge platforms emerged as a persistent bottleneck.** Participants flagged gaps in standardised material-flow data, incompatible knowledge taxonomies and divergent use of circular economy concepts and terminology, and poor cross-border comparability, in Southeast Asia and elsewhere, which impede policy harmonisation and market development.
-  **Third, inclusivity is increasingly recognised as a pre-condition for effective circular economy transitions.** Panelists called for stronger engagement of (M)SMEs, informal workers (particularly in waste sector), and other marginalised groups to ensure that circular strategies deliver social development as well as environmental benefits.

Additionally, **AI tools are valuable even with sparse, manually collated and curated datasets**, challenging the assumption that only “big data” enables advanced analytics. Business surveys revealed that **despite clear cost-saving and market incentives, corporate uptake remains low because regulations differ widely and practical guidance is scarce.**

Opportunities for Stakeholders

The webinar discussions moved beyond awareness-raising to practical opportunities and challenges to improve and scale-up circular economy adoption and implementation. It questioned whether and how knowledge hubs, and the wider circular economy knowledge ecosystem, can translate research into actionable policies, financing, and scaled up implementation on the ground. The following section presents opportunities for four major stakeholder groups to take the webinars’ insights forward.

1. Knowledge Hubs – practical takeaways and scalable innovations

- ✓ Have in place a written **Communication and Knowledge Management Strategy**. This will guide your work in line with your vision, goals and objectives, and enable you to focus efficiently on stakeholders’ knowledge needs and measure the impact of your knowledge-sharing activities on your users and stakeholders.
- ✓ **Evolve from static libraries to service platforms**. Pair curated case studies with matchmaking functions and harmonised metrics so that businesses, investors, and cities can compare performance and track the impact.
- ✓ **Strengthen knowledge management, tag resources with an agreed knowledge taxonomy and cite knowledge sources and data sets appropriately**. This strengthens trust and avoids circular-washing. Multi-tagging and verification can help filter unreliable claims.
- ✓ **Embed diverse voices to ensure inclusivity**. Create governance models that include SMEs, informal workers and civil society to improve credibility.

2. Policymakers – suggested actions and research gaps

- ✓ **Harmonise data standards and circular economy terminology.** Inconsistent metrics across and within different regions impede secondary-material markets; common formats for material-flow and product data are a priority.
- ✓ **Build evidence pipelines.** Invest in systematic material-flow studies, informal-sector mapping and curate AI-ready datasets to close the policy-information gap.
- ✓ **Develop adaptive, co-created roadmaps.** Link best practices and policy instruments, e.g., industrial symbiosis, resource efficiency, Extended Producer Responsibility, right-to-repair, and green public procurement, with national goals on job creation, economic and regional development and climate and environment, using inclusive consultation processes.
- ✓ **Pilot AI for policy analytics under human oversight.** Customised AI tools operating on ring-fenced, well-curated circular economy specific knowledge libraries and data sets, can be deployed to summarise evidence and test scenarios quickly, provided transparency and expert validation are built in.

3. Donors & Development Partners – funding and partnership opportunities

- ✓ **Bridge core-funding gaps for knowledge hubs.** Increase investment in the development, management and maintenance of ICT infrastructure and functionality of the circular economy knowledge hubs for the latter to be able to deliver their services and knowledge effectively, and ensure their sustainability.
- ✓ **Back interoperability projects.** Provide grants for open vocabularies, linked taxonomies and APIs to achieve interoperability and synergies between knowledge hubs to accelerate cross-regional knowledge flow and minimize duplication.
- ✓ **Scale capacity-building packages.** Support SME toolkits, youth “policy boot camps,” and informal-worker inclusion pilots that have proved effective in Thailand and beyond.
- ✓ **Invest in shared AI and digital commons.** Funding for AI-ready datasets and lightweight analytics can extend hub services to low-resource contexts without heavy infrastructure.

4. Circular-Economy Practitioners – good knowledge practices

- ✓ **Combine AI queries with expert review.** Leverage structured prompts and human validation to ensure context-appropriate insights to scale up circular economy.
- ✓ **Engage in peer-learning spaces.** Case-study exchanges such as ACEBA’s business cases and CEMPRE’s technical committees translate insights into on-the-ground changes and new industry and other standards.
- ✓ **Frame business value clearly.** Highlight cost savings, new market development and risk resilience to motivate wider uptake of circular models.

Way Forward

The webinar series clearly demonstrated the limitations of current circular economy knowledge hubs to meet the specific circular economy knowledge needs of policy makers, businesses, professionals and other stakeholders. Two key challenges exist. Firstly, circular economy knowledge is inconsistently tagged or classified within knowledge hubs and among stakeholders and regions, resulting in fragmentation of the available knowledge and rendering the latter difficult to be found, accessed, used and shared. Secondly, the communication efforts and initiatives spearheaded by knowledge hubs are yet to be designed and implemented to meet the specific knowledge needs of different target audiences and end users. While communication and engagement strategies and efforts need to be customized and adapted by region, sector, among others, there is an urgent common need for standardized, interoperable solutions to address the fragmented circular economy knowledge landscape. This finding aligns with the parallel discussions, stakeholder engagements and research conducted by the EU SWITCH-Asia programme and GGKP with a range of knowledge platforms.

Insights from the webinars and related research have informed the development of GGKP's new AI-powered knowledge management system, which aims to address **three cross-cutting themes** that emerged: **transforming knowledge platforms into active intermediaries, ensuring knowledge quality and system interoperability, and promoting inclusive circular economy transitions.**

Looking ahead, GGKP invites knowledge platforms to remain engaged as the new knowledge management system is piloted in the last quarter of 2025. During this phase, platforms will have the opportunity to explore how they can integrate key aspects of the GGKP system, outlined below, into their own platforms to enhance audience experience and facilitate more effective exchanges with other platforms from 2026 onwards.

GGKP API: Addressing Interoperability

The GGKP API is designed to standardize and scale the classification and dissemination of knowledge products while connecting knowledge platforms through a common circular economy knowledge taxonomy and related services. It enables external platforms to retrieve and use the shared taxonomy, automatically classify knowledge products, and perform semantic and federated searches across GGKP and partner knowledge platforms.

For knowledge platforms seeking to evolve from static libraries to dynamic facilitators of knowledge sharing and utilization—as identified in previous stakeholder consultations—the GGKP API offers:

- **Enhanced Knowledge Sharing:** The automated classifier of the API processes knowledge products to generate titles, descriptions, summaries, and taxonomy-based classifications, directly addressing the finding that tailored content for different audiences can make platforms more inclusive and effective.
- **Expanded Connectivity:** Through federated search capabilities, platforms can access knowledge resources from multiple organizations connected via the GGKP API, helping to bridge the connectivity gaps identified by webinar participants as the most significant challenge. This will enable one-stop access to globally available circular economy knowledge, practices and insights.

Common Circular Economy Knowledge Taxonomy: Harmonizing Classification

The harmonized Circular Economy Knowledge Taxonomy was developed jointly by GGKP and the EU SWITCH-Asia Programme, with active contributions and reflections from leading regional circular economy knowledge platforms, to address the critical challenge of fragmented knowledge. This harmonized classification system provides a standardized framework for categorizing circular economy knowledge products and is designed to be dynamic and expandable through ongoing community input, allowing for custom domains to accommodate partners' unique terminologies. Upon every update of this taxonomy, the classification of all knowledge products already uploaded in each knowledge platform will be automatically updated.

- **Standardized Framework:** Partners can adopt this system to categorize knowledge products more effectively using the common classification framework (knowledge taxonomy), thus helping to overcome the data quality and interoperability challenges identified in all webinars.
- **Collaborative Evolution:** As a dynamic and expandable taxonomy, it allows partners to contribute sector-specific terminology and insights, ensuring the system remains relevant and comprehensive over time while maintaining global coherence.
- **Quality Assurance:** The structured classification supports better source citation and evidence validation, directly addressing webinar concerns about possible forms of circular 'green' washing and reinforcing the need for human expertise in evaluating circularity claims.



www.switch-asia.eu



EU SWITCH-Asia Programme
@EUSWITCHAsia



SWITCH-Asia
@SWITCHAsia



SWITCH-Asia Official
@switch-asia-official

