

# **Alpine Space**

INNOBIOVC

# Embed VCG and SAT for IEC applicants

Output O 1.4

## **Summary**

This report shows how VCG and SAT were embedded to be used by the IEC applicants.





#### **OUTPUT DESCRIPTION**

#### **OUTPUT:**

O 1.4 Embed VCG and SAT to be available for IEC applicants

#### **WORK PACKAGE:**

WP1. Rolling-out the enhanced Innovation Express Scheme for establishing cross-regional value chains ACTIVITY 1.3:

Roll out the enhanced Innovation Express Call Scheme (IEC) for establishing cross-regional value chains

## **AUTHOR(S):**

Alexandra Wolf

## **DUE DATE:**

30/09/2024

## **ACTUAL SUBMISSION DATE:**

27/09/2024

#### **DISSEMINATION LEVEL**

[] CO: Confidential, only for members of the consortium (including the Commission Services)

[] CI: Classified as referred to in Commission Decision 2001/844/EC

[X] PU: Public

## **GRANT AGREEMENT No:**

ASP0400287

#### **PROJECT STARTING DATE:**

01/04/2023

## **PROJECT DURATION:**

18 months

## **COORDINATOR:**

Wirtschaftsförderung Raum Heilbronn GmbH

## Quality of information

Co-funded by the European Union – Interreg Alpine Space. However, views and opinions expressed are those of the author(s) only and do not necessarily reflect those of the European Union or Interreg Alpine Space Programme. Neither the European Union nor the granting authority can be held responsible.

Reproduction is authorised subject to citing the source unless otherwise indicated. For use/reproduction of third-party material specified as such, permission must be obtained from the copyright. For further information on the INNObioVC project and to download additional resources, refer to the project website:

https://www.alpine-space.eu/project/innobiovc/

@InnoBioVC, 2023



REVISION HISTORY					
Version	Date	Modified by	Comments		
0.1	01/07/2024	WFG	The first draft is shared among consortium partners.		
Final	20/08/2024	WFG	Finalized.		

## TABLE OF CONTENTS

Exe	ecutive summary	3
	Introduction to the innovation express call 2024	
	Sustainability assessment tool	
	value chain generator	
	embed vcg and sat to be available for iec applicants	
Tab	ole 1: Overview of regions and funding programmes interested in participating in IEC24	4
Figu	ure 1: Workflow of VCG and SAT for IEC24	7
Figu	ure 2: Workflow of VCG and SAT for IEC24 for website	9



## **EXECUTIVE SUMMARY**

The INNOBIOVC report, Output O1.4, provides an overview about how all project partners embedded the Value Chain Generator (VCG) and the Sustainability Assessment Tool (SAT) to be used by the Innovation Express Call 2024 (IEC) applicants. Both tools are used at a different need and stage of the application process. Both tools are designed to support companies going and improving their value chain towards circularity.

The output result can be viewed at following website: <u>IEC24 - iec24</u> which was separately created and linked to the Interreg Alpine Space INNOBIOVC project website. The project partners saw the need to create a website solely for the IEC24 so that all information focused on the call and not on the entire project can be displayed.

## 1.INTRODUCTION TO THE INNOVATION EXPRESS CALL 2024

The Innovation Express Call 2024 was created and established with the following final five participating regions:

- AT, Salzburg
- AT, Upper Austria
- CH, Canton of Fribourg
- DE, Bavaria
- DE, Brandenburg

From these regions six funding programmes were available for the participants to be used. The funding programmes are listed in the following table.

Table 1: Overview of regions and funding programmes interested in participating in IEC24

PARNTER REGION	FUNDING PARNTER	PARTICIPATING NATIONAL / REGIONAL FUNDING PROGRAMME	TYPE OF APPLICANTS	TYPE OF ACTIVITIES
AT / Salzburg	Regional Government Office of Land Salzburg, Department Economy, Tourism and Municipalities	WISS FTI-Förderprogramme www.salzburg.gv.at/wirtschaft_/Seiten/fti- foerderung.aspx	SME, companies & Research Institutions	Applied R&D
AT / Upper Austria	Regional Government Office of Upper Austria, Directorate for Regional Planning, Economic and Rural Development Department of Economics and Research	Unternehmens- und Forschungskooperationsförderung 2024 - 2026 (Business and research cooperation funding 2024- 2026) www.land-oberoesterreich.gv.at/526010.htm	SME, big companies, R&D organisations (only in combination with an SME in Upper Austria)	Applied R&D, industrial research, experimental development; Technology projects & technology based organisational innovation projects
n Fribourg	School of Engineering and Architecture of Fribourg	Fund for application-oriented research and development	School of Engineering and Architecture of Fribourg (HES- SO) researchers and institutes	Research and Development
CH / Canton Fribourg	Confederation and Canton of Fribourg	New Regional Policy - Collaboration projects	Research institutes, companies	Applied R&D. Focus on pre- competitive collaborations.
DE / Bavaria	Bavarian State Ministry of Economic Affairs, Regional Development and Energy	BayBioökonomie Scale-up (Bioeconomy-Scale-Up) www.stmwi.bayern.de/foerderungen/biooekono mie-scale-up/	Start-Ups; SMEs and big companies	Production facilities for the utilisation of biogenic resources
DE / Brandenburg	Ministry of Economic Affairs, Labour and Energy State of Brandenburg (MWAE)	Labour and Energy State of Programme to support research, innovation and		Applied R&D, industrial research, experimental development; projects should develop a new or improved product, process or service



The IEC24 coordination office, which was established within the project and lead by Biz-up and WFG, with collaboration of all project partners, was coordinating the final thematic scope of the call. The final thematic scope was broad to keep the call attractive:

# 1) Application and development of technology for implementing and upscaling bio-based solutions:

Supporting projects that leverage advanced technologies. Emphasis on upscaling side and waste streams, turning them into valuable resources and contributing to a more sustainable and circular economy. Proposals could include the up-scaling of waste-to-resource technologies, for example fermentation technologies, biorefineries and bio-polymerisation. Proposals should focus on advancing innovations, technologies, and strategies that contribute to the following thematic areas:

## a) Circular Production

- Optimising production processes and increasing resource efficiency through establishing crosssector value chains
- Developing and implementing waste-to-resource technologies (e.g. biomass conversion technologies) for side and waste stream valorisation and up-scaling

## b) Bio-Based Materials and Products

Development of bio-based materials as alternatives to conventional plastics and chemicals

## 2) New Solutions for Climate Protection and Decarbonisation of Supply Chains

In this thematic field, the funding programme aims to stimulate new solutions for increased sustainability and decarbonisation of supply chains. These models are designed to enhance collaboration and to be implemented along different stages of the supply value chains. The emphasis is on creating synergies among diverse stakeholders, such as manufacturers, distributors and primary producers along different industry sectors. Key areas of interest include developing new or optimizing existing supply chains.

## a) Sustainable Supply Chains

- Optimising and adapting cross-regional logistics and transportation processes in supply chains
- Development of cross-sectoral circular supply chain models through innovative logistics solutions, digital platforms or collaborative networks or enhancing resilience and risk mitigation within the value chains

## b) Decarbonized Supply Chains

Decarbonisation of cross-sectoral supply chains through application of circularity principles, e.g.
integration of renewable energy sources into supply chain operations, closed-loop supply systems
(e.g. waste management)

Overall the The Innovation Express Call 2024 represents a joint approach for supporting participants, especially <u>SME</u>s, at international matchmaking and joint RDI projects in the fields of transregional circular bioeconomy value chains, key resources and sectors in **agriculture**, **food and beverages**, **chemistry**, **polymers and energy**. The funding instrument aims at facilitating cross-sector collaboration, the



development of innovative solutions in two given thematic fields for projects by developing transregional linkages among SMEs, research institutions and other business organizations. Innovation Express Call 2024 is a joint call for proposals implemented within the frame of the INNOBIOVC project by synchronizing existing regional funding schemes in the Alpine Space and beyond.

## Synchronizing of existing regional funding programmes under the IEC24 means:

- Regions participate with their own, existing regional funding programmes.
- Participating regions remain in full control of their administrative procedures, financial management of the call as well as the decision-making process.
- Funding and eligibility rules apply according to the regional funding programme of the applicant's regions.
- Applications will be evaluated based on their potential to create benefits for participating applicants, to contribute to the competitiveness of the regional economy and in accordance with the criteria from the respective regional/national funding programmes.

## 2. SUSTAINABILITY ASSESSMENT TOOL

The Sustainable Assessment Tool (SAT) was specifically designed to keep in mind the objectives of the Innovation Express Call 24 (IEC24) a joint call for proposals implemented by synchronizing existing regional funding schemes in the Alpine Space and beyond. This Alpine space call targets biobased companies seeking to implement and enhance their business models. To maximize its utility for potential applicants, the SAT has been integrated into the project's webpage starting from March 2024 (https://www.iec24.info/tools.html), complete with a comprehensive explanatory PDF outlining its functionality.

Additionally, a decision-flow diagram has been provided to guide users through the process, ensuring they can effectively exploit the tool to meet their sustainability goals and choose to use the SAT in addition to the VCG.AI, an artificial intelligence tool that allows creating a sustainable value chain from zero.

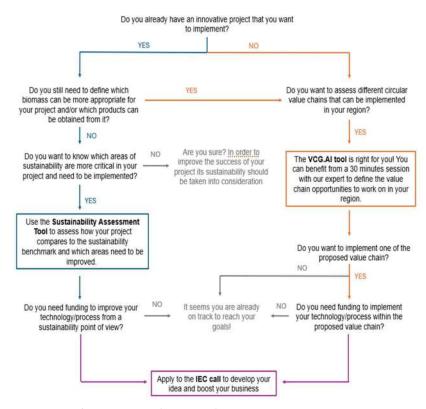


Figure 1: SAT decision Flow

Figure 1: Workflow of VCG and SAT for IEC24



## 3. VALUE CHAIN GENERATOR

The Value chain generator utilizes the cutting edge BioLink® algorithm to define technologically sound and commercially viable circular value chains and business models for the regions and clusters.

## Value Chain Generator (VCG) A Pathway to Circularity and Profitability

VCG leverages AI and big data Biolink® model, to repurpose industrial resdiuals into valuable resources and products. VCG not only enhances the profitability of companies in the region, but also aligns with climate targets by fostering a transition towards a circular economy.

## **Creating High-Demand Products from Waste**

By matching companies based on their resource needs and residuals, VCG facilitates the creation of indemand market products. It offers technical solutions and fosters business partnerships that reduce waste treatment costs, generate new revenue streams, and improve overall profitability. Simultaneously, it contributes to the reduction of CO2 emissions and the conservation of land and freshwater resources.

## **Empowering Regional Development Agencies, Clusters, and Chambers**

VCG serves regional development agencies, clusters, and chambers in their effort to accelerating the adoption of circular economy practices among their members. It enables the exploration and development of viable solutions and concrete partnerships for projects and investments. Additionally, VCG promotes knowledge transfer across projects and initiatives, facilitating best practice sharing and expediting the transition to a circular economy while leveraging European-developed technologies.



## 4. EMBED VCG AND SAT TO BE AVAILABLE FOR IEC APPLICANTS

The process of embedding VCG and SAT to be available for IEC applicants started by discussions between the responsible parties of the IEC, VCG and SAT in a few virtual online sessions (14.11.23; 19.01.24; 06.02.24).

The outcome was to provide IEC applicants the opportunity to chose if they use the SAT and/or the VCG depending on different stages at their own proposal and company. In this matter a workflow was created for the user to decide which tool can support him best in his progress towards the IEC. The workflow was then adjusted graphically to fit into the website design:

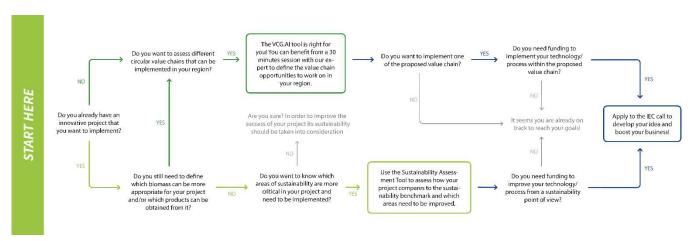


Figure 2: Workflow of VCG and SAT for IEC24 for website

This means if a company already has a project or a project idea and they need to define which biomass can be best for the project and/or which products it can be obtained from they can use the SAT. Also if they want to know which area of sustainability are critical for their project the SAT tool can be used. The SAT is used to assess how the project compares to the sustainability benchmark and which areas (environmental, economic, social) need to be improved. The VCG.ai tool can be used if the applicant already has a project idea and wants to assess different circular value chains for their region or cross-border alternatives. Both tools should help applicants of the IEC24 to gain a better understanding of potential partners, value chains and sustainability aspects. Further information on the tools can be found for the VCG in D.1.2.1 and for the SAT in D.1.1.2.