Stakeholder Matrix

(Preparatory Phase – Activity A3)

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1. Executive summary

This report presents the results of **Activity A3 – Development of the Stakeholder Matrix and Preliminary Matchmaking Agenda**, implemented as part of the preparatory phase of the project. The activity supports **Specific Objective 1: Collaboration and Partnership Development** and builds upon the analytical outputs generated during **Activity A1 (Bilateral Ecosystem Mapping)** and **Activity A2 (Joint Stakeholder Survey)**.

The primary objective of Activity A3 was to transform the ecosystem mapping and stakeholder needs analysis into a **structured operational framework for collaboration** between actors in the renewable energy, green technology, digital innovation, and industrial decarbonisation sectors in Romania and Morocco. This was achieved through the development of a **comprehensive stakeholder matrix**, supported by several analytical tools designed to guide stakeholder engagement and matchmaking activities in the next phase of the project.

The stakeholder matrix provides a structured overview of the organisations active within the bilateral innovation ecosystem. Stakeholders were identified using the actor database developed in Activity A1 and further analysed using the needs and priorities expressed in the survey conducted under Activity A2. The analysis includes companies, research institutions, universities, innovation intermediaries, cluster organisations, investors, and public authorities operating across the renewable energy and green technology value chain.

To support collaboration planning, the analysis integrates **four complementary analytical matrices**.

The **Stakeholder Role Matrix** categorises actors according to their role within the innovation value chain, including renewable energy integrators, cleantech technology providers, AI and digital companies, energy storage actors, industrial end-users, research institutions, innovation intermediaries, investors, and policy actors. This classification helps identify complementary capabilities between Romanian and Moroccan organisations.

The **Interest–Influence Matrix** evaluates stakeholders according to their level of influence within the ecosystem and their level of interest in participating in project activities. This analysis shows that clusters and renewable energy integrators represent key drivers of collaboration, while innovative SMEs and digital technology providers demonstrate strong motivation to engage in cross-border initiatives.

The **Collaboration Themes Matrix** identifies priority areas for cooperation based on ecosystem complementarities and stakeholder needs. The main thematic areas include renewable energy deployment, AI-enabled optimisation of energy systems, energy storage technologies, industrial decarbonisation, circular economy solutions, and EU–MENA market access initiatives.

The **Stakeholder Prioritisation Framework** further distinguishes between high-priority operational actors, medium-priority ecosystem support organisations, and enabling stakeholders such as investors and public authorities. This prioritisation helps focus engagement efforts on the actors most likely to generate concrete collaboration outcomes.

Together, these analytical tools provide the basis for the **preliminary matchmaking agenda**, which will guide stakeholder engagement events during the next phase of the project. The agenda will facilitate targeted interactions between organisations with complementary expertise, including technology developers, renewable energy integrators, industrial adopters, research institutions, investors, and policy actors.

Overall, Activity A3 establishes a **clear and operational collaboration framework** that enables the project partners to move from ecosystem analysis toward concrete partnership development. By identifying key actors, collaboration themes, and engagement priorities, the stakeholder matrix supports the organisation of effective matchmaking activities and lays the foundation for future cross-border initiatives between Romanian and Moroccan organisations in the fields of renewable energy, digital innovation, and sustainable industrial transformation.

2. Objectives of Activity A3

Activity A3 represents the final step of the preparatory phase of the project and directly contributes to **Specific Objective 1: Collaboration and Partnership Development**. The activity builds upon the analytical results generated during Activity A1 (bilateral ecosystem mapping) and Activity A2 (joint stakeholder survey) and translates these findings into an operational framework for stakeholder engagement and collaboration.

The primary objective of Activity A3 is to develop a **structured stakeholder matrix** that provides a comprehensive overview of the organisations active in the renewable energy, green technology, digital innovation, and industrial decarbonisation ecosystems in Romania and Morocco. The matrix identifies key stakeholders and classifies them according to their role within the innovation value chain, areas of expertise, level of influence, and potential contribution to collaborative initiatives.

By structuring this information, the stakeholder matrix helps identify complementarities between actors across the two ecosystems. Technology providers, system integrators, industrial adopters, research institutions, innovation intermediaries, investors, and public authorities are positioned within a common framework that highlights potential areas for cooperation, including renewable energy deployment, AI-enabled energy optimisation, energy storage technologies, and industrial decarbonisation.

In addition to mapping ecosystem actors, Activity A3 integrates the **needs and collaboration interests identified through the stakeholder survey conducted in Activity A2**. This ensures that the stakeholder engagement strategy reflects the real technological priorities and partnership expectations expressed by organisations in both regions.

A second objective of the activity is the development of a **preliminary matchmaking agenda** that will guide stakeholder engagement events in the next phase of the project. The agenda outlines thematic collaboration areas and proposes interaction formats such as thematic presentations, structured networking sessions, and bilateral meetings between organisations with complementary expertise.

Together, the stakeholder matrix and the preliminary matchmaking agenda provide the operational basis for the next stage of the project, enabling targeted matchmaking activities and supporting the emergence of cross-border partnerships between companies, research organisations, innovation intermediaries, investors, and public institutions.

3. Role of the Stakeholder Matrix within the preparatory phase

Activity A3 translates the analytical results obtained during the ecosystem mapping (Activity A1) and the stakeholder survey (Activity A2) into an operational framework for collaboration. While Activities A1 and A2 focused on identifying relevant actors within the renewable energy, green technology, and digital innovation ecosystems and analysing their technological needs and collaboration interests, Activity A3 structures this information in order to facilitate the development of partnerships between organisations in Romania and Morocco.

The central output of this activity is a **multi-layer stakeholder matrix** that provides a structured overview of key actors involved in the project's thematic domains. The matrix organises stakeholders according to their role within the innovation value chain, their areas of expertise, and their potential contributions to collaborative initiatives. By doing so, it helps identify complementarities between technology providers, system integrators, industrial end-users, research organisations, innovation intermediaries, investors, and public institutions active in both ecosystems.

In order to support the preparation of targeted matchmaking activities, the stakeholder matrix is complemented by several analytical tools that help structure stakeholder engagement and collaboration opportunities. These include:

- a **stakeholder role matrix**, which describes the position of actors across the innovation value chain and highlights their technological capabilities and potential contributions;

- an **interest–influence matrix**, used to assess the level of influence and engagement of different stakeholder groups and to define appropriate engagement strategies;

- a **collaboration theme matrix**, identifying key thematic cooperation areas such as renewable energy deployment, AI-enabled energy optimisation, energy storage technologies, and industrial decarbonisation;

- a **stakeholder prioritisation framework**, which determines participation priorities for matchmaking activities based on relevance, capability, and collaboration potential.

Together, these analytical tools provide the operational foundation for stakeholder engagement in the next phase of the project, enabling the organisation of targeted matchmaking sessions and facilitating the development of concrete partnerships between organisations in the Romanian and Moroccan innovation ecosystems.

4. Methodological Approach for Developing the Stakeholder Matrix

The stakeholder matrix was developed using a structured methodology designed to ensure coherence with the analytical outputs generated during Activities A1 and A2. The process followed a series of sequential steps aimed at identifying relevant actors, classifying them within the ecosystem, and assessing their potential role in future collaboration initiatives.

First, the **bilateral actor database developed during Activity A1** served as the primary source for stakeholder identification. This database includes organisations active in renewable energy, cleantech solutions, digital technologies, industrial decarbonisation, and innovation support across Romania and Morocco. It covers a broad range of stakeholders, including SMEs, large enterprises, research institutions, universities, cluster organisations, innovation intermediaries, investors, and public authorities. Using this database ensured that the stakeholder matrix builds on a validated and comprehensive mapping of the two innovation ecosystems.

Second, stakeholders were **classified according to their position within the green technology value chain**. This classification reflects the ecosystem structure identified during the mapping phase and allows for a clearer understanding of how different actors contribute to technology development, deployment, and adoption. The main categories considered include upstream suppliers of technologies and components, system integrators and EPC contractors, cleantech and renewable solution providers, digital and AI technology companies, industrial

end-users and technology adopters, research and development institutions, innovation support organisations, as well as financial and policy actors. This value chain perspective helps identify complementarities between Romanian and Moroccan actors and highlights potential areas for collaboration.

Third, the methodology incorporated **insights from the stakeholder survey conducted in Activity A2**, which provided additional information on technological priorities, innovation barriers, and collaboration interests within the ecosystem. The survey results indicated strong interest among stakeholders in areas such as renewable energy deployment, energy storage technologies, AI-based optimisation of energy systems, industrial energy efficiency solutions, and improved access to innovation finance. Integrating these findings into the matrix ensured that the stakeholder analysis reflects not only structural ecosystem characteristics but also the concrete needs and expectations expressed by participating organisations.

Fourth, each actor included in the matrix was assessed through a **stakeholder prioritisation framework**. This framework considers several criteria, including the strategic relevance of the organisation to the project's thematic domains, its technical and innovation capabilities, its potential contribution to cross-border collaboration, and its position within the value chain. Based on this assessment, stakeholders were categorised into high-priority actors, medium-priority participants, and supporting stakeholders, allowing the project team to focus engagement efforts on actors with the greatest collaboration potential.

Finally, the structure of the stakeholder matrix was designed to capture key attributes required for effective collaboration planning. These include organisational role, areas of expertise, decision-making capacity, collaboration interests, and relevant contact information. This structured approach facilitates the preparation of targeted matchmaking activities and supports the identification of organisations with complementary capabilities for future partnerships.

5. Stakeholder Prioritisation and Engagement Strategy

Given the diversity of organisations identified during the mapping and survey phases, it is important to recognise that stakeholders do not contribute equally to the collaboration objectives of the project. For this reason, Activity A3 introduced a **stakeholder prioritisation and engagement framework** that distinguishes between different levels of participation and defines appropriate engagement strategies for each group.

The framework identifies **three main levels of engagement**.

High-priority stakeholders include organisations with strong technological capabilities and a direct role in developing, integrating, or deploying renewable energy and cleantech solutions.

This category typically includes renewable energy integrators, technology providers, and innovative SMEs that can actively contribute to pilot projects, technology demonstrations, and commercial partnerships. Due to their operational capacity and market relevance, these actors are expected to play a central role in the matchmaking activities and in the development of cross-border collaborations between Romanian and Moroccan partners.

Medium-priority stakeholders include organisations that support the innovation ecosystem and facilitate the development and validation of new technologies. This group includes research institutions, universities, industrial end-users, and innovation intermediaries such as clusters or technology transfer organisations. Their role is essential for providing scientific expertise, testing environments, and coordination mechanisms that enable the implementation and scaling of innovative solutions. Although they may not always lead pilot initiatives, their involvement significantly strengthens the collaboration ecosystem.

The third category consists of **supporting stakeholders**, primarily financial actors and public institutions responsible for policy and regulatory frameworks. These organisations contribute by providing funding instruments, investment opportunities, and regulatory guidance that facilitate the development and implementation of innovation projects. Their engagement is particularly important for ensuring the long-term sustainability and scalability of collaborative initiatives.

By structuring stakeholder engagement in this way, the prioritisation framework enables the project partners to focus matchmaking efforts on the actors most likely to generate tangible results, while still maintaining the broader ecosystem connections necessary to support innovation, policy alignment, and access to finance.

6. Stakeholder Role Matrix

The first matrix developed under Activity A3 categorises ecosystem actors according to their **role within the sustainable innovation value chain**. This classification allows the project team to identify complementary capabilities across the Romanian and Moroccan ecosystems and to better understand how different stakeholders can contribute to collaborative initiatives in areas such as renewable energy, digitalisation, and industrial decarbonisation.

The analysis identifies several major stakeholder categories that together form the core of the bilateral innovation ecosystem.

Renewable energy integrators and EPC firms occupy a central position in the renewable energy value chain. These organisations are responsible for designing, engineering, and deploying renewable energy infrastructure and typically possess strong technical expertise in solar EPC services, grid integration, and system engineering. Key decision-makers within these

organisations include CEOs, technical directors, and business development managers, who play an important role in identifying new market opportunities and establishing strategic partnerships. Their interest in the project is primarily linked to expanding into new markets, participating in joint renewable energy projects, and integrating advanced technologies into their installations. These actors can contribute by implementing pilot projects and deploying renewable infrastructure, particularly in collaboration with technology providers and industrial end-users. Examples include companies such as Simtel, Monsson, and EPC firms active within the Moroccan renewable energy ecosystem.

Cleantech solution providers represent an important source of technological innovation within the ecosystem. These organisations typically develop technologies related to energy efficiency, energy management systems, and decarbonisation solutions for industrial applications. Decision-makers in this category usually include founders and product directors responsible for technology development and business expansion. Their main interest in the project lies in scaling their solutions to new markets and testing their technologies within pilot environments. Through their participation, these companies can provide operational solutions and technological platforms that support industrial energy optimisation and circular economy initiatives.

AI and digital technology providers constitute another key stakeholder group, particularly within the Romanian innovation ecosystem. These companies specialise in artificial intelligence, predictive analytics, and digital optimisation tools that can significantly improve the efficiency and performance of renewable energy systems. Typical decision-makers include chief technology officers (CTOs) and innovation directors. Their interest in the project focuses on testing digital tools in real operational environments and establishing data partnerships with energy companies and industrial actors. Their main contribution consists in developing AI-driven energy management platforms, predictive maintenance tools, and smart-grid analytics.

Energy storage and battery technology actors provide technologies that enable the integration of renewable energy sources into energy systems. Their expertise typically includes battery storage systems, storage management software, and system integration solutions. Technical directors and R&D managers often lead collaboration efforts in this field. These organisations are particularly interested in testing and demonstrating storage technologies within renewable energy installations, contributing to improved grid flexibility and energy system stability.

Industrial end-users represent the primary adopters of decarbonisation technologies and play a crucial role in validating new solutions. These organisations often operate in energy-intensive sectors and face increasing pressure to reduce emissions and improve energy efficiency. Key decision-makers include plant managers and energy managers responsible for overseeing energy use and operational performance. Their participation in the project is mainly driven by

the need to reduce energy costs and carbon emissions. Industrial companies contribute by hosting pilot demonstrations and providing operational data that supports the evaluation of innovative technologies.

Research institutions and universities contribute scientific expertise, research infrastructure, and technological validation capabilities. Collaboration with industry is typically coordinated by research directors and laboratory heads. These organisations possess expertise in areas such as energy systems modelling, hydrogen technologies, and advanced materials. Their main contributions include prototyping, technology validation, and participation in joint research and development initiatives. Relevant examples include the University Politehnica of Bucharest, the Technical University of Iași, the Technical University of Cluj-Napoca, and IRESEN.

Innovation support organisations, such as clusters, accelerators, and innovation agencies, play an important role in facilitating collaboration between companies, research organisations, and investors. Cluster managers and programme directors coordinate innovation activities and support ecosystem development. In the context of this project, organisations such as the ICONIC Cluster and Cluster EnR act as ecosystem orchestrators, facilitating matchmaking activities, knowledge exchange, and cross-border collaboration between stakeholders.

Investors and financial actors provide the financial resources necessary for scaling innovative technologies and supporting pilot initiatives. These stakeholders include venture capital funds, green investment funds, and development banks. Investment directors typically represent these organisations in collaborative initiatives. Their role within the project focuses on identifying promising technologies, supporting commercialisation processes, and enabling access to financing for innovative projects.

Finally, **policy and regulatory bodies** play an enabling role within the ecosystem by establishing regulatory frameworks, policy incentives, and funding programmes that support innovation and energy transition initiatives. Key decision-makers include ministry officials and representatives of regulatory agencies responsible for energy and innovation policies. Their involvement contributes to ensuring policy alignment, facilitating access to public funding instruments, and supporting the implementation of pilot initiatives within a favourable regulatory environment.

By structuring stakeholders according to these roles, the stakeholder role matrix provides a clear overview of the ecosystem structure and highlights opportunities for collaboration between organisations with complementary capabilities across the Romanian and Moroccan innovation landscapes.

7. Interest–Influence Matrix

The second analytical instrument developed under Activity A3 is the **interest–influence matrix**, which assesses stakeholders according to two key dimensions: their level of influence within the innovation ecosystem and their level of interest in participating in the project's collaboration activities. This framework helps determine appropriate engagement strategies and ensures that stakeholder interactions during the matchmaking phase are structured in a way that maximises collaboration outcomes.

Within this matrix, **cluster organisations such as ICONIC Cluster and Cluster EnR** are positioned in the **high influence–high interest quadrant**. These organisations play a central role in coordinating innovation ecosystems, mobilising stakeholders, and facilitating collaboration between companies, research institutions, and public actors. Due to their strong network position and organisational capacity, they act as key facilitators of the project's matchmaking activities and strategic partnership development.

Renewable energy integrators and EPC firms also fall into the high influence–high interest category. Their ability to design and implement large-scale renewable energy projects gives them a significant role within the energy transition ecosystem. At the same time, these organisations show strong interest in participating in cross-border initiatives that may open new markets, enable technology integration, or support joint pilot projects.

AI and digital technology providers typically demonstrate a **high level of interest but a moderate level of influence**. While many of these companies operate as specialised technology providers rather than infrastructure developers, their expertise in data analytics, artificial intelligence, and digital optimisation is increasingly critical for improving the performance and efficiency of renewable energy systems. As a result, they represent strategic innovation partners capable of introducing advanced digital tools into energy and industrial applications.

Similarly, **cleantech SMEs** show high levels of interest in the project due to the opportunities it offers for technology demonstration, market expansion, and participation in international innovation networks. Although these companies may have limited influence individually compared to large energy integrators, they contribute significantly to technological innovation and solution development.

Industrial end-users and research institutions generally occupy a position characterised by **moderate influence and moderate interest**. Industrial companies are important because they provide real-world environments where new technologies can be tested and validated, while research institutions contribute scientific expertise and experimental infrastructure. Although they may not always lead collaboration initiatives, their participation is essential for the development and validation of pilot projects.

Finally, **financial actors and public authorities** typically demonstrate **high influence but more moderate direct interest in operational project activities**. Financial institutions play a key role in enabling the scaling of innovative solutions through investment and funding mechanisms, while public authorities and regulatory bodies provide the policy frameworks necessary for technology deployment. Their involvement therefore focuses primarily on supporting project scaling, facilitating access to funding instruments, and ensuring alignment with national and regional policy priorities.

Overall, the interest–influence matrix provides a useful tool for defining tailored engagement approaches for each stakeholder group. By understanding both the motivation and the ecosystem influence of different actors, the project team can design matchmaking activities that effectively mobilise key stakeholders and foster productive collaboration between Romanian and Moroccan organisations.

8. Collaboration Themes Matrix

The third analytical instrument developed under Activity A3 is the **collaboration theme matrix**, which identifies the main thematic areas where cooperation between stakeholders from Romania and Morocco can generate the greatest impact. These collaboration themes were defined based on two main inputs: the technological interests expressed by stakeholders through the survey conducted in Activity A2 and the complementarities between the two innovation ecosystems identified during the ecosystem mapping in Activity A1.

By structuring collaboration opportunities around specific thematic domains, the matrix helps guide the organisation of matchmaking sessions and ensures that interactions between participants are focused on areas where concrete partnerships are most likely to emerge.

One of the priority collaboration areas identified is **AI for energy optimisation**. This theme brings together artificial intelligence companies, renewable energy firms, and research institutions interested in developing digital platforms for monitoring, forecasting, and optimising energy systems. Such collaborations can lead to the development of advanced tools for energy management, predictive maintenance, and smart-grid analytics that improve the efficiency and reliability of renewable energy infrastructure.

Another important theme is **solar and renewable energy deployment**. This area focuses on collaboration between renewable energy integrators, technology suppliers, and industrial end-users interested in implementing renewable energy installations. Joint initiatives may include pilot projects, demonstration sites, and hybrid energy systems combining solar generation with digital monitoring and energy storage solutions.

Energy storage technologies also represent a strategic area for cooperation. As renewable energy production continues to expand, the need for storage solutions that ensure grid stability and energy system flexibility becomes increasingly important. In this context, storage technology providers can collaborate with system integrators, energy companies, and research organisations to develop and test battery storage systems and other storage technologies that support renewable energy integration.

A further collaboration theme concerns **industrial decarbonisation**, which addresses the growing demand for technologies that reduce emissions in energy-intensive industries. Industrial companies can work together with cleantech SMEs and research institutions to develop and implement solutions such as energy efficiency technologies, electrification of industrial processes, and low-carbon production methods.

The matrix also highlights opportunities related to the **circular economy and resource efficiency**. Cleantech companies and manufacturing firms can collaborate to develop circular production models, waste valorisation technologies, and resource-efficient industrial processes that reduce environmental impact while improving operational efficiency.

Finally, the collaboration theme matrix includes **EU–MENA market access** as a cross-cutting area of cooperation. Through collaboration between clusters, SMEs, and investors, stakeholders can explore opportunities for cross-border market entry, technology transfer, and joint participation in international innovation programmes. These initiatives support the development of stronger connections between European and Mediterranean innovation ecosystems and facilitate the internationalisation of participating organisations.

By clearly defining these thematic collaboration areas, the matrix provides a practical framework for structuring stakeholder interactions and supports the identification of partnership opportunities during the matchmaking activities planned in the next phase of the project.

9. Stakeholder Prioritisation Framework

The final analytical instrument developed under Activity A3 is the **stakeholder prioritisation matrix**, which establishes a framework for determining the level of engagement of different actors during the matchmaking activities. Given the large number of organisations identified during the ecosystem mapping and survey phases, this prioritisation approach helps focus collaboration efforts on the stakeholders with the greatest potential to contribute to concrete outcomes.

Within this framework, **high-priority actors** include renewable energy integrators, AI solution providers, and cleantech SMEs. These organisations possess strong technological capabilities and occupy strategic positions within the innovation value chain. Their expertise in areas such as renewable energy deployment, digital optimisation, and energy efficiency solutions makes them particularly relevant for the development of pilot projects, technology demonstrations, and commercial partnerships. As a result, these stakeholders are expected to play a central role in the matchmaking events and in the formation of cross-border collaborations between Romanian and Moroccan partners.

Medium-priority stakeholders include universities, research institutes, and innovation support organisations such as clusters and technology transfer agencies. These actors contribute primarily through knowledge generation, scientific expertise, and the provision of testing and validation environments for emerging technologies. Although they may not always lead commercial initiatives, their participation is essential for supporting innovation processes, facilitating collaboration between companies, and ensuring the technical credibility of pilot projects.

Industrial end-users are also considered **medium-priority stakeholders**, as they provide real operational environments where new technologies can be tested and evaluated. Their involvement enables the demonstration of innovative solutions under real-world conditions and provides valuable operational data that supports technology validation and improvement.

Finally, the matrix identifies **supporting stakeholders**, including investors and public policy institutions. While these actors may not be directly involved in the implementation of pilot projects, they play an important enabling role within the ecosystem. Financial institutions provide access to investment and funding mechanisms that support the scaling of innovative solutions, while policy actors contribute through regulatory frameworks, strategic guidance, and alignment with national and regional innovation policies.

By structuring stakeholder engagement in this way, the prioritisation matrix allows the project partners to design matchmaking activities that maximise collaboration potential while ensuring

that the broader ecosystem support structures necessary for innovation development are also represented.

10. Implications for the Matchmaking Agenda

The four matrices developed under Activity A3 jointly inform the design of the **matchmaking agenda for the next phase of the project**. By integrating information on stakeholder roles, influence and interest levels, thematic collaboration areas, and participation priorities, the project partners can structure matchmaking activities in a way that maximises the potential for meaningful partnerships.

This integrated analytical approach makes it possible to organise targeted matchmaking sessions that connect organisations with **complementary technological capabilities, market interests, and innovation objectives**. Instead of relying on general networking formats, the matchmaking agenda can focus on facilitating concrete interactions between actors that have the potential to develop joint initiatives, pilot projects, or commercial collaborations.

For instance, **AI and digital technology companies** can be connected with renewable energy integrators and energy companies interested in implementing advanced digital optimisation tools for energy systems. Such collaborations may lead to the development of AI-based solutions for predictive maintenance, energy forecasting, and smart-grid management.

Similarly, **cleantech SMEs** can collaborate with industrial end-users seeking solutions to improve energy efficiency and reduce emissions in energy-intensive operations. These partnerships can support the testing and demonstration of innovative technologies within real industrial environments.

Research institutions and universities can play an important supporting role by assisting companies in developing prototypes, conducting feasibility studies, and validating new technologies through applied research and testing activities.

At the same time, **investors and financial actors** participating in the matchmaking events can identify promising technologies and innovative solutions emerging from pilot projects, potentially facilitating access to financing for scaling these initiatives.

Through this structured matchmaking approach, the project aims to create an environment where stakeholders from Romania and Morocco can move beyond initial networking interactions and begin developing **concrete collaborative initiatives**, including joint innovation projects, pilot demonstrations, and technology transfer partnerships.

11. Conclusion

Activity A3 completes the preparatory phase of the project by transforming the analytical insights generated in Activities A1 and A2 into a structured framework for stakeholder engagement and partnership development. Through the development of the stakeholder matrix and its associated analytical tools, the project establishes a clear and operational understanding of the innovation ecosystems in Romania and Morocco and identifies the actors most capable of contributing to cross-border collaboration.

The analysis confirms that both ecosystems possess **complementary capabilities across the renewable energy, cleantech, and digital innovation value chain**. Romanian actors demonstrate strong competencies in digital technologies, artificial intelligence, and advanced software solutions for energy optimisation, while Moroccan stakeholders show strong capabilities in renewable energy deployment, large-scale infrastructure development, and energy system integration. These complementarities create favourable conditions for the development of joint innovation initiatives that combine digital expertise with renewable energy implementation capacity.

The stakeholder role matrix highlights the diversity of actors involved in the green innovation ecosystem, ranging from technology providers and system integrators to research institutions, innovation intermediaries, investors, and policy actors. This diversity is essential for the development of a functional innovation ecosystem capable of generating, testing, and scaling new technologies. At the same time, the interest–influence analysis demonstrates that certain stakeholders, particularly clusters, renewable energy integrators, and innovative SMEs, occupy strategic positions that make them particularly important for driving collaboration initiatives.

The collaboration theme matrix further identifies several priority domains where bilateral cooperation can generate concrete outcomes. These include renewable energy deployment, AI-enabled optimisation of energy systems, energy storage technologies, industrial decarbonisation, and circular economy solutions. These themes reflect both the technological needs expressed by stakeholders in the survey and the complementarities identified during the ecosystem mapping.

In addition, the stakeholder prioritisation framework provides a practical mechanism for structuring engagement efforts and ensuring that matchmaking activities focus on the actors most capable of generating tangible results. By distinguishing between high-priority operational actors, medium-priority knowledge and validation partners, and supporting stakeholders such as investors and policy institutions, the project partners can design collaboration activities that balance innovation development, ecosystem coordination, and access to financing and regulatory support.

Taken together, the four analytical matrices developed in Activity A3 provide a **robust operational foundation for the next phase of the project**, where stakeholder engagement will

transition from analysis to action. The structured understanding of ecosystem actors, collaboration themes, and engagement priorities enables the organisation of targeted matchmaking events designed to facilitate meaningful interactions between organisations with complementary capabilities.

Ultimately, the stakeholder matrix and the preliminary matchmaking agenda aim to support the emergence of **concrete cross-border partnerships between Romanian and Moroccan organisations**, including pilot projects, joint research initiatives, technology transfer collaborations, and market expansion opportunities. By connecting technology developers, system integrators, industrial adopters, research institutions, investors, and policy actors within a common collaboration framework, the project contributes to strengthening innovation cooperation between the two regions and to accelerating the development and deployment of sustainable energy and green technology solutions.

Annex 1

Stakeholder Category	Key Decision-Makers	Expertise / Capabilities	Interests in the Project	Potential Contributions	Collaboration Opportunities	Example Organisations
Renewable Energy Integrators / EPC Firms	CEOs, Technical Directors, Business Development Managers	Solar EPC, grid integration, renewable deployment, system engineering	Market expansion, joint projects, technology integration	Implementation of pilot projects, deployment of renewable infrastructure	Solar deployment projects, energy storage integration, hybrid systems	Simtel, Monsson, Moroccan EPC firms
Cleantech Solution Providers	Founders, Product Directors	Energy efficiency, EMS systems, decarbonisation technologies	Scaling solutions internationally, testing in new markets	Provide operational solutions and technology platforms	Industrial energy optimisation pilots, circular economy solutions	Cleantech SMEs in Romania and Morocco
AI and Digital Technology Providers	CTOs, Innovation Directors	AI optimisation, predictive analytics, smart grid analytics	Testing digital tools in energy systems, data partnerships	AI solutions for grid optimisation, energy forecasting	AI-driven energy management systems, predictive maintenance	Romanian ICT companies
Energy Storage and Battery Technology Actors	Technical Directors, R&D Managers	Battery storage systems, energy storage integration	Technology deployment, pilot testing environments	Provide storage solutions for renewable integration	Storage pilots with solar installations	Storage technology providers
Industrial End-Users	Plant Managers, Energy Managers	Industrial energy consumption, operational processes	Reducing energy costs and emissions	Hosting pilot demonstrations and providing operational data	Industrial decarbonisation pilots	Manufacturing companies

Research Institutions and Universities	Research Directors, Laboratory Heads	Energy systems modelling, hydrogen technologies, materials science	Applied research collaboration and technology validation	Prototyping, scientific validation, technology testing	Joint R&D projects and feasibility studies	UPB, TUIASI, UTCN, IRESEN
Innovation Support Organisations (Clusters, incubators)	Cluster Managers, Programme Directors	Innovation ecosystem development, SME support, internationalisation	Facilitating partnerships and project development	Matchmaking organisation, knowledge exchange	Cluster-to-cluster collaboration initiatives	ICONIC Cluster, Cluster EnR
Investors and Financial Actors	Investment Directors, Venture Capital Managers	Innovation finance, cleantech investment	Identifying scalable projects	Financing pilot initiatives and scaling technologies	Investment matchmaking sessions	Green funds, development banks
Policy and Regulatory Bodies	Ministry officials, regulatory agencies	Energy regulation, innovation policy	Supporting technology deployment and regulatory alignment	Regulatory guidance and policy support	Facilitating project implementation and funding access	Ministries of Energy, regulators

Annex 2

Stakeholder Group	Level of Influence	Level of Interest	Engagement Strategy
Cluster organisations (ICONIC, EnR)	High	High	Core partners and event organisers
Renewable energy integrators	High	High	Key actors for pilot implementation
AI and digital technology providers	Medium	High	Strategic partners for digital innovation
Cleantech SMEs	Medium	High	Primary beneficiaries and technology suppliers
Industrial end-users	Medium	Medium	Pilot hosts and validation partners
Research institutions	Medium	Medium	Knowledge providers and R&D collaborators
Investors and financial actors	High	Medium	Funding partners for project scaling
Public authorities and regulators	High	Low–Medium	Policy alignment and regulatory facilitation

Annex 3

Collaboration Theme	Stakeholders Involved	Collaboration Objective
AI for energy optimisation	AI firms, energy companies, research institutions	Development of AI platforms for energy management
Solar and renewable deployment	EPC firms, technology suppliers, industrial end-users	Joint renewable energy installations and demonstration projects
Energy storage systems	Storage technology providers, integrators, utilities	Integration of battery storage with renewable energy
Industrial decarbonisation	Industrial firms, cleantech SMEs, research institutions	Pilot projects to reduce emissions in industrial processes
Circular economy and resource efficiency	Cleantech firms, manufacturing companies	Development of circular production models
EU–MENA market entry	Clusters, SMEs, investors	Joint market access initiatives

Annex 4

Priority Level	Stakeholder Type	Reason for Priority
High priority	Renewable integrators, AI solution providers, cleantech SMEs	Strong capability to deliver pilot projects and commercial partnerships
Medium priority	Universities, R&D institutes, innovation agencies	Provide knowledge and technical validation
Medium priority	Industrial end-users	Provide pilot environments
Supporting actors	Investors, policy actors	Enable funding and regulatory support