JEWEL
Joint nEtWork for European
Net-Zero Manufacturing Leadership

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D4.2
CROSS-REGIONAL SERVICE PACK

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STARTING INFORMATION

INTRODUCTION: PURPOSE OF THIS GUIDE

The goal of this document is to serve as a comprehensive roadmap for Small and Medium Enterprises (SMEs) looking to lead the European transition toward net-zero manufacturing.

What you will find in this document

This service pack provides all the essential tools and information required to navigate the JEWEL journey:

- **Knowledge Hub:** Detailed definitions of the Net-Zero Technologies (NZT) prioritized by the European Commission and JEWEL.
- **Project Factory:** A guide to our Matchmaking Services, designed to help you find the right cross-border partners and join thematic focus groups.
- **Funding Window:** Clear criteria and timelines for our Open Calls, which offer direct financial support of up to €60,000 per SME for innovation and flagship projects.
- **Internationalization Support:** Resources to help you access foreign markets and build a European track record.

Who should read this?

This document is specifically designed for:

- **Innovative SMEs** within the Energy-Intensive, Mobility/Automotive, and Aerospace & Defence ecosystems.
- **Manufacturing Experts** seeking to bridge the gap between traditional operations and "green tech" through specialized training and workshops.
- **Tech Providers** ready to prototype or implement disruptive solutions in real-world industrial settings.

WHAT IS JEWEL

JEWEL stands for **Joint nEtWork for European Net-Zero Manufacturing Leadership.**

It is a comprehensive EU-funded initiative designed to mobilize the European manufacturing sector - specifically innovative SMEs like yours - to address the urgent challenges of the green transition.

The project is fully aligned with the European Union's Green Deal and the Net-Zero Industry Act, with the primary goal of positioning Europe as a global leader in sustainable industrial practices.
JEWEL is a project funded by the European Union under the Eurocluster programme.

THE CORE MISSION

The project aims to accelerate the transition of European industry toward a greener, more competitive, and resilient future.

JEWEL combines innovation, sustainability, and cross-border collaboration to foster the emergence of transformative projects.

EUROCLUSTER PROJECTS

Euroclusters are strategic, trans-European initiatives funded by the EU to strengthen industrial resilience. They connect clusters and SMEs across borders to accelerate the green and digital transition.
For SMEs, Euroclusters act as a growth engine by offering:

- **Direct Financial Support**: Over €30 million is distributed directly to SMEs through competitive open calls to finance innovation and technology adoption.
- **Cross-Border Networking**: Facilitating partnerships between companies in different member states.
- **Strategic Services**: Providing training, internationalization support, and market insights.

JEWEL is a Eurocluster selected under Strand 1, specifically focused on **Net-Zero Technologies**.

JEWEL CONSORTIUM

The project adopts a cross-sectoral and pan-European approach. It is driven by a consortium of eight experienced partners from seven different countries (France, Poland, Portugal, Latvia, Italy, Belgium, and Finland).

These partners are manufacturing clusters that represent diverse industrial ecosystems, ensuring that the support provided is relevant to a wide range of value chains, including Energy-Intensive Industries, Mobility & Transport, Aerospace and Defence.

Pôle MecaTech	Located in the Wallonia (Belgium), Pole MecaTech is the coordinator of JEWEL and supports innovation in advanced materials, manufacturing, and data technologies
CLUST-ER MECH MECCATRONICA E MOTORISTICA	Based in the Emilia-Romagna region of Italy, Clust-ER MECH boosts competitiveness in the automotive and manufacturing sectors through robotics and advanced materials
CIMES Creating Integrated MEchanical Systems Auvergne-Rhône-Alpes	The competitiveness cluster based in the Auvergne-Rhône-Alpes region of France, dedicated to Industry 4.0, robotics, and optimizing manufacturing performance.
GREEN TECH CLUSTER	The Latvian cluster focused on green mobility, renewable resources, and energy efficiency across the energy, transport, and manufacturing sectors
pool-net PORTUGUESE TOOLING & PLASTICS NETWORK	Operating from the Centro region of Portugal, Pool-Net leads the engineering and tooling sectors (moulds & plastics), promoting digitalization and the circular economy
MERINOVA TECHNOLOGY CENTRE	A key actor in the largest energy technology cluster in the Nordic countries (EnergyVaasa) and expert organisation focusing on energy technology, which supports the growth and internationalisation of companies in the field.
evoluma industry cluster	Located in the Podlaskie region of Poland, EVOLUMA Industry Cluster focuses on mechanical engineering, digitization, and environmentally friendly technologies.
EMC2	Operating in the Pays de la Loire and Brittany regions of France, EMC2 fosters collaborative R&D in advanced manufacturing technologies to produce cleaner and better.

JEWEL JOURNEY FOR SME

JEWEL is structured around three strategic pillars, designed to guide SMEs through every stage of the green transition—from initial technical orientation to the successful deployment of funded innovations. Below is a detailed summary of the content and objectives contained within each chapter of this service pack

KNOWLEDGE & RESOURCE HUB

This pillar serves as the primary intelligence center for SMEs seeking to align with the European Union's Net-Zero Industry Act.

- **Technology Mapping**: Detailed analysis of priority Net-Zero Technology (NZT) categories, including Batteries; Hydrogen; Smart Grids; and Wind, solar, and other green energy production technologies
- **Strategic Resources:** Access to the "Net-Zero White Paper" and a The Roadmap on Net-zero manufacturing methods and tools for decarbonization and competitiveness .
- **Capacity Building:** Information on technical workshops and green manufacturing training focused on circular economy principles.

THE PROJECT FACTORY (INNOVATION SUPPORT)

The Project Factory translates technical knowledge into actionable partnerships, moving ideas from conception to collaborative projects.

- **Upstream Ideation:** Opportunities to join Thematic Focus Groups to co-design solutions for market challenges alongside industrial leaders.
- **Matchmaking:** Access to four partner-search mechanisms leveraging an EU-wide Ambassadors' Network to form mandatory cross-border consortia.
- **Internationalization**: Support for testing cross-border collaborations and building a European track record.

THE FUNDING WINDOW

This pillar details the direct financial instruments available, including the administration of the €1.98 million grant pool.

- **Open Call Pathways**: Specifications for Innovation Projects (market readiness) and Flagship Projects (disruptive prototyping).
- **Financial Administration**: Breakdown of the lump-sum model offering up to €60,000 per SME for staff, equipment, and consumables.
- **Proposal Excellence**: Strategic guidance on meeting core evaluation criteria: Excellence, Impact, and Implementation.

KNOWLEDGE HUB

WHAT ARE THE NET-ZERO TECHNOLOGIES?

To participate in JEWEL, your project must involve Net-Zero Technologies (NZT).

But what exactly are they?

In simple terms, these are technologies that significantly contribute to decarbonization by having extremely low, zero, or negative greenhouse gas emissions. They are the tools that will allow Europe to reach climate neutrality by 2050.

The definition used by JEWEL is grounded in the European Commission's Net-Zero Industry Act (NZIA), which lists technologies essential for the EU's strategic autonomy and green transition.

Why should your SME participate?

By joining JEWEL, your company can:

- **Gain expertise:** Access training on cutting-edge Net-Zero Technologies and circular economy methods.
- **Find partners:** Connect with other tech-savvy SMEs and large industrial groups across Europe to build collaborative projects.
- **Get funded:** Apply for direct financial support (grants) to prototype or implement green and digital manufacturing solutions.

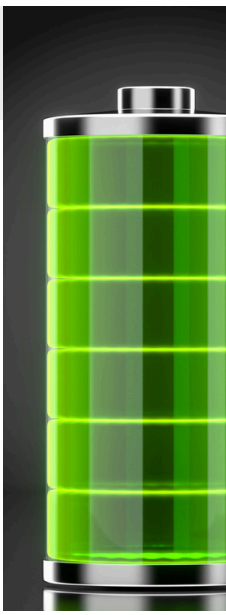
According to European Commission's Official European List, strategic Net-Zero Technologies include:

Solar technologies (photovoltaic and solar thermal)

This category encompasses the full range of technologies that harvest energy from the sun.
Under the regulation, it specifically includes:

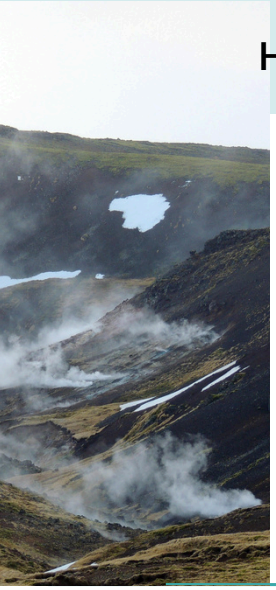
- **Solar Photovoltaic (PV)**: Technologies that convert light into electricity, covering the entire value chain from wafers and ingots to solar cells and modules.
- **Solar Thermal Electric**: Systems (often called Concentrated Solar Power) that generate electricity from concentrated solar heat.
- **Solar Thermal Technologies**: Systems used purely for heating purposes, such as industrial process heat or district heating.

Battery and storage technologies



This category covers essential solutions for balancing energy supply and demand.
The definition is broad and includes:

- **Batteries**: The manufacturing of battery cells, packs, and critical components (such as anodes, cathodes, and separators) for both electric mobility (EVs) and stationary use.
- **Energy Storage**: Non-battery solutions used to store energy to stabilize the grid, including mechanical, thermal, or electrical energy storage systems.

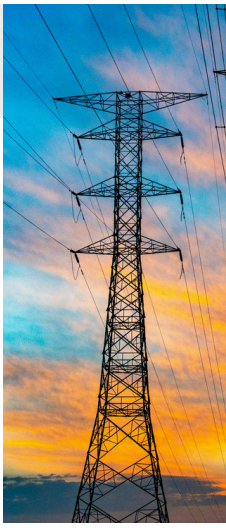


Heat pumps and geothermal energy technologies

These are the primary technologies for decarbonizing heating in buildings and industrial processes:

- **Heat Pumps**: Highly efficient devices that transfer thermal energy from a natural source (air, water, or ground) to a building or industrial application, serving as an electric alternative to gas boilers.
- **Geothermal Energy**: Equipment used to harness heat from beneath the Earth's surface for direct heating or electricity generation.

Grid technologies (smart grids, electric charging infrastructure)



This refers to the physical and digital infrastructure required to modernize the energy network. It includes:

- **Smart Grid Technologies**: Digital hardware and software (smart meters, monitoring systems) that allow the grid to manage variable renewable energy flows.
- **Electric Charging Infrastructure**: The hardware and software required for Electric Vehicle (EV) charging stations, which are critical for integrating transport into the energy grid.

Wind technologies (onshore and offshore)

This category covers the manufacturing of wind energy generation equipment for both onshore (land-based) and offshore (sea-based) environments. The scope includes:

- **Complete turbines**: The assembly of the final wind turbine units.
- **Key components**: The manufacturing of critical parts such as blades, nacelles, towers, generators, and floating foundations.

Hydrogen technologies (electrolysers and fuel cells)

Focusing on the decarbonization of "hard-to-abate" sectors, this category includes:

- **Electrolysers**: Technology used to produce "green hydrogen" by splitting water molecules using renewable electricity.
- **Fuel Cells**: Devices that convert hydrogen back into electricity for use in heavy-duty transport or stationary power generation.

Other Recognized Technologies

These technologies are also defined in the regulation and may be relevant for specific industrial contexts within the project:

- Sustainable Biogas/Biomethane Technologies
- Carbon Capture and Storage (CCS) Technologies
- Nuclear Fission Energy Technologies (including Small Modular Reactors)
- Sustainable Alternative Fuels
- Hydropower Technologies

FOCUS ON 4 NZT CATEGORIES

While the European list is broad, **JEWEL specifically targets four key categories** where your SME can have the most impact. If your innovation fits into one of these, you are a prime candidate for support:

BATTERIES & ENERGY STORAGE

Technologies that improve energy retention, efficiency, and management (e.g., advanced battery cells, thermal storage).

Why it matters

Energy storage provides flexibility and resilience. By storing energy (whether electricity or heat), SMEs can bridge the gap between intermittent renewable generation (like solar) and continuous production needs. This allows companies to avoid expensive peak energy tariffs, maintain operations during grid fluctuations, and maximize the self-consumption of their own green energy.

Boosting Competitiveness with Net-Zero Technologies (NZT)

Integrating these technologies can fundamentally change SMEs operational model, driving improvements in several key areas:

Operational efficiency & cost reduction: By adopting advanced digital solutions like AI and IoT, companies can optimize operational performance and energy consumption. This leads to measurable reductions in greenhouse gas emissions and improves resource efficiency.

Transition to circular business models: NZT implementation encourages companies to rethink their consumption of resources. It facilitates the adoption of circular economy models, allowing you to design production systems that minimize waste and retain value.

HYDROGEN TECHNOLOGIES

Specifically focusing on electrolysers (production of green hydrogen) and fuel cells (using hydrogen for power), which are critical for decarbonizing heavy industry and transport.

Why it matters

For SMEs in industries that require extremely elevated temperatures or heavy-duty transport capabilities (where batteries fall short), hydrogen is often the only viable path to net-zero. Adopting hydrogen technologies allows companies to replace natural gas in industrial burners or decarbonize logistics fleets, future-proofing the business against fossil fuel phase-outs and carbon taxes.

ELECTRICITY GRID TECHNOLOGIES

Solutions that make the power grid smarter, more flexible, and capable of handling high loads of renewable energy.

Why it matters

Effective management requires precise measurement. Implementing smart grid technologies (like smart meters and digital management systems) inside a factory allows for real-time optimization of energy consumption. It enables SMEs to identify waste immediately, balance loads efficiently, and potentially participate in demand-response markets to generate extra revenue.

WIND, SOLAR, AND OTHER GREEN ENERGY PRODUCTION TECHNOLOGIES

This broad category includes renewable energy technologies applied directly to industrial processes to drastically reduce carbon footprints (e.g., electrifying heat processes, integrating wind/solar into factories).

Why it matters

This moves decarbonization from "supporting infrastructure" to the core production process. By integrating renewables directly into the factory (e.g., rooftop solar) or electrifying heat processes (e.g., heat pumps), SMEs can drastically lower operational costs and exposure to volatile fossil fuel markets. It also signals to clients in the automotive, aerospace, or energy sectors that the supply chain is sustainable.

JEWEL KEY SECTORS

Your use of these technologies should ideally apply to one of the following ecosystems, which JEWEL has identified as high priorities:

ENERGY-INTENSIVE INDUSTRIES (E.G., METALS, CHEMICALS, MATERIALS)

MOBILITY, TRANSPORT & AUTOMOTIVE

AEROSPACE & DEFENCE

The choice of JEWEL to focus on these ecosystems is motivated by three main reasons:

1. The share of pollution generated by these ecosystems in the overall volume of greenhouse gas emissions in Europe and worldwide,
2. The existence of similar challenges to these three ecosystems that will allow joint actions to be taken by companies in the value chains,
3. The very significant share of innovative SMEs working in these ecosystems.

Example of Net-Zero Technologies implementation

Based on the technologies prioritized by JEWEL, here are concrete ways manufacturing SMEs can implement these solutions:

- **Smart Energy Management (Digital & Grid Tech):** A factory implements digital tools (IoT, AI, big data) to monitor energy usage and waste management. This optimizes energy consumption and operational performance, allowing the grid to handle renewable energy loads more effectively.
- **Decarbonizing Heat & Power (Hydrogen):** A manufacturing company integrates hydrogen technologies, such as electrolysers or fuel cells, into its production lines. This replaces fossil-fuel-based energy sources with green hydrogen, significantly lowering the carbon footprint of industrial processes.
- **Circular Production Systems:** A firm redesigns its production system to align with circular economy principles. This could involve using transformative industrial technologies to recover waste heat or materials, thereby defining a virtuous economic model that rethinks resource consumption.
- **Energy Storage Integration:** An industrial plant installs battery and energy storage technologies to capture renewable energy. This ensures a stable energy supply and maximizes the efficiency of renewable sources used on-site.

ACCESS TO EXPERT AND KNOWLEDGE ON NET-ZERO TECHNOLOGIES

For manufacturing experts who are not "green tech" specialists, JEWEL has established a specific Resource and Knowledge Hub to bridge this expertise gap.
The project offers several structured opportunities to deepen knowledge regarding Net-Zero Technologies (NZT) and green manufacturing methods before a commitment is made to a specific project.

ACCESS TO THE "NET-ZERO WHITE PAPER" & STRATEGIC ROADMAP

JEWEL produces two key documents that act as a technical baseline for all participants:

- **The NZT White Paper:** A comprehensive mapping of available technologies and providers within European ecosystems. This document assists in identifying which solutions (e.g., specific energy storage or hydrogen technologies) exist for specific industrial sectors.
- **The Strategic Roadmap:** A guide focused on Decarbonisation (green manufacturing, NZT, circular economy methods and tools) specifically designed to help SMEs understand how to initiate the transition.

PARTICIPATION IN AWARENESS & TRAINING WORKSHOPS

Technical Awareness Workshops (NZT)
Throughout the project, a cycle of technical whroshops is organised to deepend the understanding of NZT. These deep-dev sessions are led by technology experts to demonstrate the state-of-art in Europe, show scope and market opportunities, vizualize how the NZT can be integrated into industries turning abstract concepts into concrete project applications.

Calendar of Workshops

FEBRUARY 2026	ELECTRICITY GRID TECHNOLOGIES
OCTOBER 2026	BATTERY & ENERGY STORAGE TECHNOLOGIES
FEBRUARY 2027	WIND, SOLAR, AND OTHER GREEN ENERGY PRODUCTION TECHNOLOGIES

Green Manufacturing Training Cycles

Parallel to the workshops, JEWEL offers training focused on methodology and process innovation for more circular models, that are crucial for sustainability, cost savings, and resilience. It addresses increasing resource scarcity and consumer demand for sustainable options by designing products for longevity and easy disassembly, including Repair-Reuse-Recycle services and so, fostering closed-loop systems.

- Webinars and training sessions will adress green manufacturing challenges and circular economy principles, to identify opportunities for improvements that can form the basis of an innovation project.
- These sessions help identify "low-hanging fruit" for decarbonization that might otherwise be overlooked.

COLLABORATION IN "FOCUS GROUPS" WITH INDUSTRIAL LEADERS

Thematic Focus Groups led by "Industrial Catalysts" (large corporations) and facilitators are available for interested SMEs. (cf. section **GENERAL UPSTREAM IDEATION**)

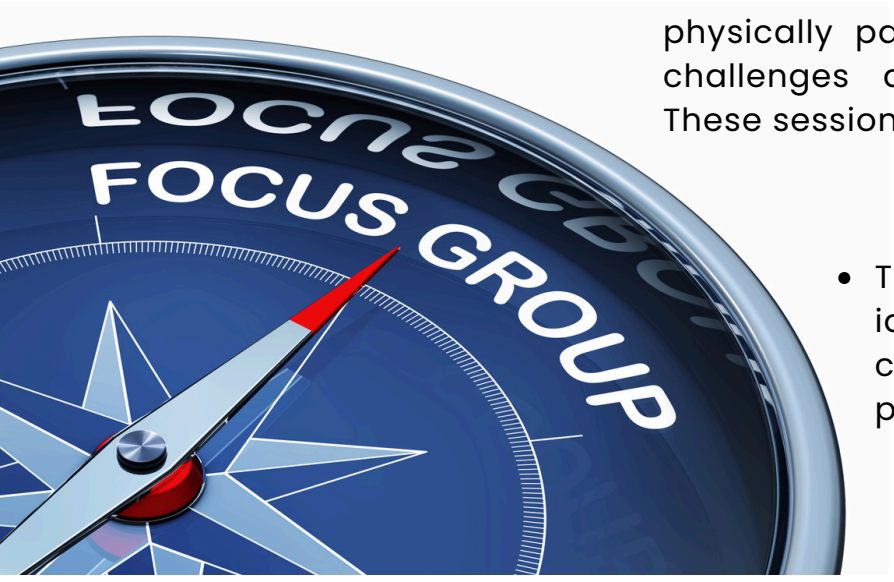
PROJECT FACTORY

GENERAL UPSTREAM IDEATION

JEWEL does not expect every SME to enter the project with a fully defined proposal. Instead, the project organizes a structured calendar of events and activities designed to spark innovation. These appointments allow companies to identify market needs, understand emerging technologies, and co-design solutions before entering the competitive Open Calls.

Thematic Focus Groups

To support the ideation process, JEWEL offers core collaborative appointments, by organizing cross-regional focus groups. These focus groups bring together SMEs and "industrial catalysts" large corportations or mid-caps) to define and address specific NZT challenges.



- 4 collaborative sessions will gather online and physically participants to work on concrete NZT challenges and co-design potential solutions. These sessions are taking place in Autumn 2026.

- This ensures that the resulting project ideas have an immediate potential customer or application and stimulate partnerships.

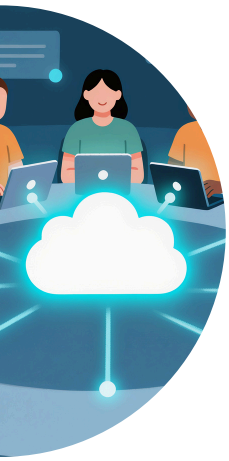
The Knowldge Hub, by disseminating information and offering trainings related to NZT and circular methodologies, will also contribute to inspire potential innovative projects among participants (see previous section about **"ACCESS TO EXPERT AND KNOWLEDGE ON NET-ZERO TECHNOLOGIES"**).

ACCESS-TO-PARTNERS

Collaboration significantly boosts innovation by merging diverse perspectives, skills, and experiences, leading to more creative problem-solving, faster development, enhanced learning, and better risk management, ultimately driving breakthrough ideas and new solutions that benefit from collective intelligence and pooled resources, moving beyond silos to create novel products and business models. So, JEWEL strategically choses to support collaborative efforts to increase innovation in industry. Whether applying for a Flagship Project (requiring 3 SMEs from different countries) or an Innovation Project (requiring 2 SMEs), building a consortium is a mandatory requirement to access JEWEL open calls.

Identifying suitable partners—those with complementary skills, mutual trust, and locations in other European countries—is often a significant hurdle in the proposal process. JEWEL addresses this by offering a structured Matchmaking Service within its "Project Factory", designed to connect companies with the right counterparts.

Here are the 4 specific mechanisms available to facilitate partner search:

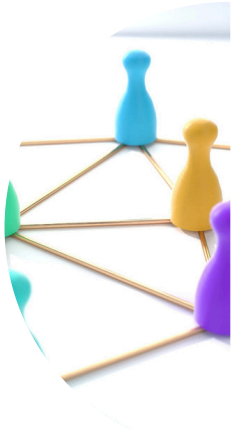


1. Participation in Thematic Focus Groups

The most natural way to identify partners is to collaborate on shared industrial problems. JEWEL organizes Thematic Focus Groups where SMEs and "Industrial Catalysts" (large corporations) work together on specific Net-Zero challenges.

- Why participate: These groups are designed to be cross-regional. Participants collaborate alongside 7-10 other companies (large groups and SMEs) from different countries who share an interest in the same solutions (e.g., Hydrogen or Grid Tech).
- The Outcome: Consortia often form organically within these groups as companies identify complementary technologies and common goals during the working sessions.

2. Leveraging the Ambassadors' Network



As already mentioned, cluster partners of JEWEL are your catalysts towards partner ecosystems, but the reach of JEWEL extends beyond its eight core partners. Thanks to a complementary network of "Cluster Ambassadors" established across the EU and in non-EU countries, beneficiaries get access to market opportunities and contacts outside the areas directly covered by JEWEL partners, broadcasting the partner searches.

3. Networking & Matchmaking Events

Throughout the project lifecycle, JEWEL organizes workshops and webinars that include dedicated networking components. These events serve a dual purpose: learning and meeting. Attending an event organized by JEWEL can place companies in direct contact with potential partners facing similar transition challenges.

4. Search on request

As part of the customized service pack, companies can utilize a **direct inquiry available online**.

The JEWEL partners search their respective cluster databases—representing thousands of members across France, Poland, Portugal, Latvia, Italy, Belgium, and Finland—to identify and introduce suitable matches. In addition, the Enterprise Europe Network (EEN) offers its own helpdesk to find potential partners (https://een.ec.europa.eu/partnering-opportunities).
Finally, JEWEL cluster partners can also mobilise their own networks and the European associations of which they are members (i.e BEPA, EFFRA, EIT Manufacturing, etc.) to help you identify suitable collaborations.

ACCESS-TO-MARKETS AND INTERNATIONALISATION

The transition to Net-Zero is a global challenge, and valid solutions often require looking beyond national borders. While JEWEL focuses primarily on technology adoption, it also provides a structured environment to support the international dimension of participating SMEs and offers a valuable network and a risk-free framework to test international collaborations.

THE AMBASSADORS' NETWORK: FACILITATING CONNECTIONS

Entering a new market or finding a foreign partner is often difficult without the right local contacts. JEWEL leverages a network of an Ambassadors' Network to bridge this gap.

- **Network access:** Through the project partners, SMEs can request introductions to specific industrial ecosystems across the EU and in countries participating in the Single Market Programme (SMP).
- **Targeted introductions**: Instead of generic cold-calling, the network relies on Cluster Managers who have direct knowledge of their local members. They can facilitate connections with relevant companies or stakeholders in their region, helping SMEs identify potential technical partners or suppliers more efficiently.
- **Ecosystem insight:** This network serves as a resource for gathering initial feedback or understanding the landscape of a foreign market before committing significant resources.

BUILDING A EUROPEAN TRACK RECORD

Participating in a JEWEL project allows companies to build and demonstrate their capacity for international cooperation.

- **Reducing the barrier to entry:** The open calls provide funding specifically for cross-border collaborations. This financial support lowers the risk associated with working with foreign partners, allowing SMEs to test international supply chains and joint developments in a supported environment.
- **Visibility**: JEWEL actively disseminates the results of funded projects to a broad European audience. Successful case studies are showcased through the project's communication channels, providing SMEs with visibility beyond their domestic market.
- **Validation**: Successfully delivering a trans-European project serves as a strong credential. It demonstrates to future clients and investors that the company has the maturity and operational capability to manage international partnerships.

FUNDING WINDOW

JEWEL OPEN CALLS

JEWEL is not just about advice; it is about action. The project manages a **"Funding Window"** with a total budget of **€1.98 million** dedicated to directly financing manufacturing SMEs.
Through competitive open calls, JEWEL selects and funds collaborative projects that demonstrate innovation in **Net-Zero Technologies (NZT)** and green manufacturing methods. There are two distinct types of calls, each designed for a different stage of innovation.

As EUROCLUSTER project, JEWEL is mostly supporting SMEs, which can receive up to a maximum of 60.000€ from JEWEL funding. Other organization (large enterprises, research centers,...) can be part of the consortium and benefit from the project, without having access to the funding or to a limited budget as subcontractor.

OPEN CALL 1 & 3: INNOVATION PROJECTS

These calls are designed for companies ready to implement functional solutions in real-world settings. They bridge the gap between research and market readiness, focusing on the actual adoption of green technologies.

Develop or validate an innovative technology/system in a real environment (starting at TRL 4 and reaching TRL 7-8)

Projects are expected to last 9 months.

You must form a team of at least 2 SMEs from at least 2 different eligible NUTS2 regions.

- Maximum Grant: €54,000 per project.
- Budget Requirement: The grant covers 90% of costs; projects must have a minimum total budget of €60,000.
- Type of funding: lump sum.

20 projects will be funded in total.

Two calls, expected to launch in Spring 2026 & Spring 2027

OPEN CALL 2: FLAGSHIP PROJECTS

This call targets ambitious projects that aim to develop or prototype disruptive technologies. These projects must push beyond the current state-of-the-art and serve as models for the rest of the European industry.

Develop or validate an innovative technology/system in a simulated environment (starting at TRL 4 and reaching TRL 6-7)

Projects are expected to last 12 months.

You must form a team of at least 3 SMEs from minimum 2 different eligible countries.

- Maximum Grant: €180,000 per project (max €60,000 per SME).
- Budget Requirement: The grant covers 90% of costs; projects must have a minimum total budget of €198,000.
- Type of funding: lump sum.

5 projects will be funded in total.

One single call, expected to launch in Autumn 2026

Important notice regarding open calls: Please note that the official regulatory text (Guide for Applicants) for the JEWEL open calls is currently being finalized. The Guide for Applicants will be the official document setting open calls conditions, in case of inconsistency, the Guide for Applicants and the open call texts and annexes prevail over this "service pack" document.

What can you spend the grant on?

The funding is provided as a lump sum, making management simpler and quicker. You will receive a prefinancing at the start of the project and the balance upon approval of your implementation report. Eligible costs include:

- Staff costs: Hours your team spends working on the project.
- Subcontracting: For specialized tasks with a limited budget.
- Other direct costs: Travel, equipment depreciation, and consumables.

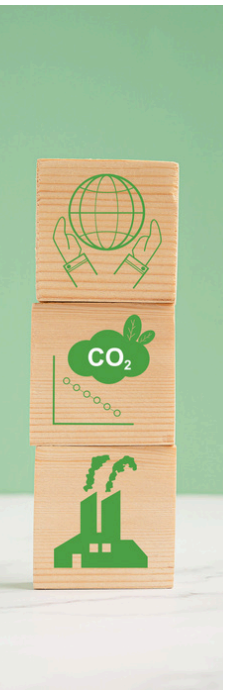
APPLYING TO JEWEL: SCOPE OF THE OPEN CALLS

It is crucial to understand the specific funding objectives of the JEWEL project. The open calls are not designed for generic business improvements; they are specifically targeted at accelerating the green and digital transition of the European manufacturing sector.

The scope of the call is defined by three key dimensions: The Challenge, The Technologies, and The Maturity Level.

THE CHALLENGE **TECHNOLOGIES** **MATURITY LEVEL**

THE CHALLENGE: DECARBONIZATION & RESILIENCE



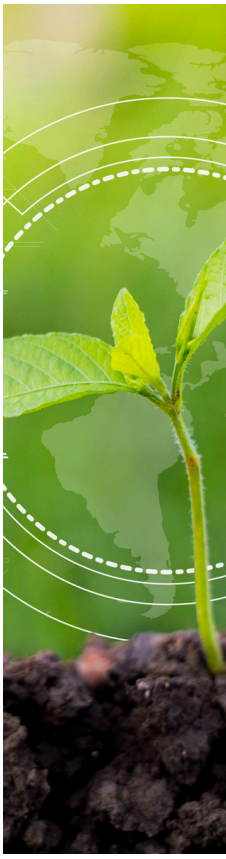
Your project must address the urgent need to reduce the environmental footprint of industrial processes. JEWEL is looking for projects that:

- Drastically reduce greenhouse gas emissions in manufacturing
- Optimize resource through circular economy principles (reducing waste, reusing materials, optimizing use of resouruces like water, energy and raw materials)
- Promote energy efficiency to lower costs and dependency on external grids
- Enhance resilience by adopting digital tools that make production adaptable and smarter

The project specifically targets key industrial ecosystems where this transition is most critical: Energy-Intensive Industries, Mobility-Transport-Automotive, and Aerospace & Defence.

ENERGY-INTENSIVE INDUSTRIES **AEROSPACE & DEFENCE** **MOBILITY, TRANSPORT & AUTOMOTIVE**

THE TECHNOLOGIES: NET-ZERO & DIGITAL



The scope is strictly tied to the implementation or development of Net-Zero Technologies (NZT). Your proposal must involve at least one of the priority technologies identified by the project:

- Batteries & Energy Storage
- Hydrogen Technologies (electrolysers & fuel cells)
- Electricity Grid Technologies
- Wind, Solar and other green energy production technologies.

Crucially, JEWEL promotes the "Twin Transition".
This means successful projects should not only be green but also digital.
SMEs are expected to integrate advanced digital solutions—such as Artificial Intelligence (AI), the Internet of Things (IoT), or Big Data—to manage energy, optimize performance, and track sustainability metrics.

THE MATURITY LEVEL: DEVELOPMENT VS. ADOPTION

The scope of your project depends on which call you apply for, as they target different stages of innovation (Technology Readiness Levels or TRL):

- For Flagship Projects (The "Developers"): The scope here is disruptive innovation. You should develop or prototype a "game-changing" solution that breaks with the current state-of-art, and answering challenges of the European market (manufacturing companies)
  - Target: Reach TRL 6-7 (Technology demonstrated in a relevant or operational environment).
  - Focus: Prototyping, testing in simulated environments, and pushing technological boundaries.

- For Innovation Projects (The "Adopters"): The scope here is implementation. You should be taking a proven technology (already tested in a simulated environment) and deploying it in a real-world industrial setting to solve a specific problem.
  - Target: TRL 7-8 (System complete and qualified).
  - Focus: Piloting, market readiness, scalable deployment, and bridging the gap between applied research and commercial use.

HOW TO WRITE A GOOD PROPOSAL

Writing a winning proposal is about clarity, alignment, and demonstrating impact. Whether you are applying for a **Flagship** or an **Innovation** project, your application needs to convince the evaluators that your idea is not just good, but feasible and transformative.
Here is a guide to defining, formulating, and describing your project effectively.

1. THE "WHY" AND "WHAT"
Before you start writing, clearly define the core of your project. A good proposal solves a specific problem with a specific solution.

- **Define the problem:** Start with the industrial challenge you are facing. Be specific. Instead of saying "we want to reduce emissions," say "our current metal hardening process consumes X amount of gas, which is costly and high-carbon".
- **Align with the scope:** Ensure your definition fits strictly within the JEWEL scope. Are you developing a **Net-Zero Technology** (like a new battery component) or adopting one (like installing an electrolyser)? Explicitly state which of the four priority technology areas your project addresses.
- **Check the TRL**: Be coherent about your starting point. If you are applying for a Flagship project, you must start at TRL 4. If you claim to be at TRL 8 but need research funding, you will be rejected. Define your current maturity level and where you expect to end up.

2. BUILDING THE CONSORTIUM
JEWEL projects are collaborative. Your consortium structure is as important as the technology itself. JEWEL is a tool to foster cross-regional collaboration and help companies and innovation projects gain visibility at EU level.

- **Find the right partners:**
  - **Flagship projects:** You need at least **3 SMEs** from **2 different countries**. Look for partners that complement your skills—for example, if you are a technology provider, you could collaborate with a manufacturing end-user and a digital or another tech provider in your consortium.
  - **Innovation projects:** You need **at least 2 SMEs**. Collaboration with partners from different regions is highly encouraged and often scores better.
- **Define roles clearly:** Who is doing what? Avoid vague descriptions like "all partners will collaborate." Describe of the competences of the staff, expertises of each partner and their complementarity.
- **Leverage JEWEL support:** If you are struggling to find partners, use the matchmaking services provided by the JEWEL "Project Factory" to connect with suitable companies across Europe. Cluster partners of JEWEL are your catalysts to partner European ecosystems.

3. WRITING THE NARRATIVE

When describing your project in the application template, focus on these three evaluation criteria: **Excellence**, **Impact**, and **Implementation**.

Excellence (The Innovation):

- Describe *how* your solution goes beyond the "state-of-the-art." Don't just say it's better; explain the technical breakthrough.
- Highlight the **digital aspect**. Explain how you are using IoT, AI, or Big Data to make the green solution work better.

Impact (The Results):

- **Quantify your goals.** Evaluators love numbers. Estimate the reduction in CO2 emissions, the percentage of energy saved, or the reduction in waste material. Fix realistic KPIs for your project. They will be the monitoring system of the project implementation and final report, even if it is an innovation project (KPIs are guidance tools).
- Mention **scalability**. Highlight the impact at the European level or on the European industry/market.
- Include a brief **internationalization strategy**. How will this help you enter new markets outside your home country?

Implementation (The Plan):

- Provide a clear **work plan**. Break the project down into logical steps (tasks) with realistic timelines.
- Even if the grant is a lump-sum, your **budget** should be in adequation with your objectives and the total amount of money you are supposed to get.
- Risk Management: Show that you've anticipated what could go wrong (for example, if the prototype fails) and include a clear contingency plan.

ACCESS TO FUNDING (OTHER OPPORTUNITIES)

EUROCLUSTER PROJECTS

JEWEL is part of a broader European initiative designed to strengthen industrial resilience and accelerate decarbonization. While JEWEL focuses on specific manufacturing ecosystems and technologies, the European Commission has funded several other projects on the same topic (Net-Zero Technologies).
Each of these projects targets different industrial sectors or specific technology niches. If a proposal does not fully align with the priorities of JEWEL, it might be a perfect fit for one of these parallel initiatives. Here is a sample of some other funding opportunities (not exhaustive list).

MANUFACTergy

Manufacturing and Energy Synergies for Sustainable Operations and Resilient Factories

Fosters synergies between the manufacturing and energy sectors. It supports SMEs in adopting advanced technologies that bridge the gap between industrial operations and energy supply, ensuring factories are not just efficient but fully integrated into the energy system.

Sector Focus: Manufacturing & Energy Intensive Industries.

GREEN MANTIS

Green Manufacturing and Advanced Net-Zero Technology Innovation Support

Dedicated to helping manufacturing SMEs adopt and scale up three specific net-zero technologies: electricity grid technologies, energy system-related efficiency, and transformative industrial technologies to drastically reduce carbon emissions.

Sector Focus: Green Manufacturing & Grid Technologies.

RENEW-BOOSTER PROJECT

Strengthening Renewable Energy Value Chains

Specifically aims to strengthen European value chains in Photovoltaics (PV), Offshore Wind (including floating platforms), and Smart Grids. It supports SMEs in bringing new products to market faster to reduce dependencies and boost European resilience in energy generation.

Sector Focus: Renewable Energy (Photovoltaics, Offshore Wind, Smart Grids).

Accelerating Innovation and Net-Zero Technologies Across Europe

Designed to boost the development of a wide range of net-zero technologies. It connects SMEs with clusters and industry leaders to foster innovation in solar energy, battery systems, hydrogen, sustainable biogas, and Carbon Capture and Storage (CCS).

Sector Focus: Multi-tech (Solar, Hydrogen, Biogas, Storage, Carbon Capture).

Empowering Cleantech SMEs to Scale Renewable Energy and Grid Resilience Solutions

Aims to accelerate the transition to a Net-Zero economy by promoting the growth of cleantech SMEs. It addresses specific challenges for industrial SMEs in optimizing energy use and helps cleantech providers scale their solutions for grid resilience.

Sector Focus: Cleantech & Energy Systems.

REsilience through Sustainable processes and production for the European automotive InduSTry

Focused exclusively on the automotive and transport ecosystem. It provides financial support for training, reskilling, and resilience checks to help SMEs in this sector navigate the green transition and adapt to the severe structural changes in the mobility market.

Sector Focus: Mobility, Transport & Automotive.

Developing Biosolutions for Net-Zero Technologies

Uniquely focuses on biotechnological processes and biosolutions. It targets SMEs in the agri-food and energy-intensive industries, helping them introduce bio-based innovations to achieve their net-zero targets.

Sector Focus: Biotechnology, Agri-food & Energy-Intensive Industries.

AD-HOC HELPDESK FOR SMES

For specific inquiries, JEWEL offers a customized support channel. Through an official Heldesk questionnaire, SMEs and innovation-focused companies exploring the opportunities offered by JEWEL and seeking quick and reliable advice can easily reach out to the consortium partners.

Assignment and follow-up process:

- **Smart regional routing:** Once a query is submitted, it is referred to the most appropriate JEWEL consortium partner. This assignment is based on geographical coverage and language preference, ensuring that every SME receives support from a local contact point familiar with their specific ecosystem when possible.

- **Clear & efficient response process:** The majority of inquiries are directly managed via email to ensure a quick and traceable response. If a query requires more complex or technical clarification, an online meeting may be scheduled upon agreement between the SME and the assigned cluster partner.

Stay connected: Beyond resolving specific inquiries, the Helpdesk is your gateway to the JEWEL ecosystem. SMEs and innovators can use this form to signal their interest in the project, ensuring they stay tuned for upcoming events, newsletters, and future opportunities.

Important notice regarding open calls: Please note that the official regulatory text (Guide for Applicants) for the JEWEL open calls is currently being finalized. Specific questions regarding eligibility criteria or administrative rules cannot be fully answered until this document is officially published. In case of inconsistency, the Guide for Applicants and the open call texts and annexes prevail over this "service pack" document.

EXPRESS YOUR INTEREST

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