

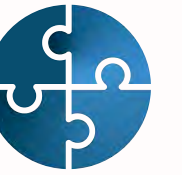
Blue Synergy SL

**Sustainability, innovation and
societal impact designed for
real-world transformation**



Company presentation - 2026

www.bluesynergy.eu

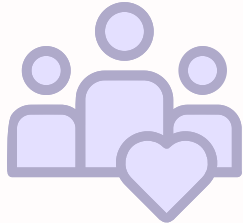
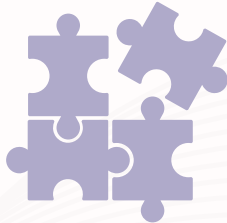


WELCOME TO BLUE SYNERGY

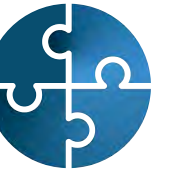
At Blue Synergy, we help organisations, projects and initiatives design, implement and strengthen their value by bridging the gap between research, environmental and social needs; empowering our partners to lead the transition toward a more impactful, sustainable and inclusive Europe.

Blue Synergy is a Spanish SME that supports public and private organizations in designing, developing, and scaling sustainable innovation. Combining engineering expertise, research excellence, and social insight, we transform knowledge into impactful solutions that strengthen competitiveness and long-term growth.

BLUE SYNERGY'S PILLARS AND BACKGROUND

Sustainability & Circularity 	Social Engagement & Impact 	Innovation Management 
+ 15 Years of experience working in European Collaborative projects.	+ 1K Partner organizations, collaborators and high-level institutions in our network	+ 30 European Research Projects where we have contributed.





A WORD FROM OUR DIRECTOR

We believe that the most complex challenges require solutions that combine scientific excellence, social expertise, and a genuine commitment to sustainability. Every organisation or project has unique ambitions, and our role is to help transform those ambitions into practical, high-impact solutions.

Our work is built on three complementary pillars: sustainability, social sciences and humanities, and innovation. We help organisations improve their environmental performance and embrace circularity, ensure that innovation is aligned with the needs of people and society, and accelerate the development and market uptake of new technologies, products, and services. This integrated approach enables us to deliver solutions that are technically robust, economically viable, and socially responsible.

If you are looking for a trusted innovation partner, we would be delighted to work with you. Thank you for being interested in Blue Synergy. We look forward to exploring how we can create meaningful impact together.



Germán Caveró López
General & Operations Manager



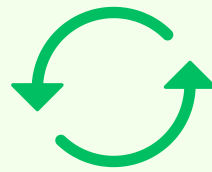
BLUE SYNERGY'S SERVICES & EXPERTISE

The Blue Synergy SL team has vast experience supporting organisations in the development and implementation of the best strategies to transition towards sustainable operations, to improving social welfare and awareness, and to identifying and managing innovation opportunities.

Our talented, multidisciplinary team composed of Humanities & Social Sciences Experts, Sustainability Engineers and Innovation Strategy Specialists have mastered different types of abilities and contributed to R&D initiatives, organisations and projects.

SERVICES

SUSTAINABILITY & CIRCULARITY



**Environmental Impact
Assessment & Life Cycle
Assessment (LCA)**



**Life Cycle Costing (LCC), Net
Present Value (NPV) & Techno-
Economic Assessment (TEA)**



**Circular Economy &
Circularity Assessment**



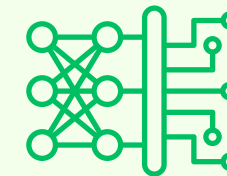
**Resource Efficiency
& Waste Valorization**



**Carbon Footprint
Assessment**



**Reuse, Recovery &
Recycling Strategies**



**Process Simulation &
Sustainability Modelling**



**Safe and Sustainable
by Design (SSbD)**



**Eco-Design &
Sustainable Product
Development**



**Environmental Product
Declarations (EPDs) &
Sustainability Compliance**





Sustainability & Circularity

- ✓ Valorization of by-products/residues and implementation of circular economy strategies.
- ✓ Development of high-performance materials & nanomaterials.
- ✓ Efficient use of renewable energy sources for industrial processes and provision of energy management services.
- ✓ Development of green electronics and electric insulation components
- ✓ Implementation of sustainable pretreatment processes for heterogeneous bio-waste.
- ✓ Development of advanced solutions for thermochemical energy storage.
- ✓ Development of environmental bioremediation technologies.
- ✓ Recovery of critical raw materials from primary and secondary sources.
- ✓ Mapping social risks, benefits and opportunities across the life cycle to understand value-chain impacts.



SERVICES

SOCIAL ENGAGEMENT & IMPACT



**Social Awareness
& Perception**



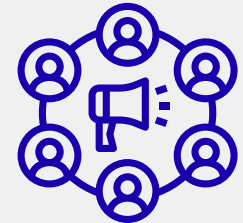
**Social Impact
Assessment**



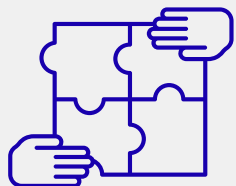
Citizen Science



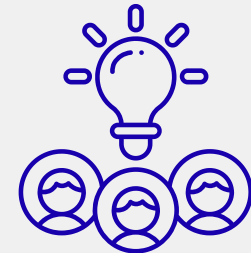
Social Acceptance



**Communication
& Dissemination**



**Co-creation &
co-design
methodologies**



Stakeholder Engagement



**Clustering &
Networking**



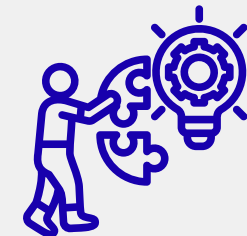
**Socio-Economic
Assessment & Social
Return on Investment
(SROI)**



**Social Life Cycle
Assessment (S-LCA)**



**Capacity Building
& Training**



Social Innovation



Social Engagement & Impact

- ✓ Involving users, stakeholders and communities in the design of solutions.
- ✓ Turning complex project results into clear, relevant and engaging messages for the audiences.
- ✓ Mapping and engaging key actors to build trust, collect insights and support long-term collaboration.
- ✓ Connecting projects, initiatives and organisations working in related fields to promote synergies.
- ✓ Analysing how different audiences perceive specific challenges, technologies or innovations.
- ✓ Analysing expectations, concerns and enabling factors to help new technologies and solutions gain trust and uptake.
- ✓ Supporting the integration of citizens into research and innovation activities.
- ✓ We assessing how projects, technologies and interventions affect communities and stakeholders.
- ✓ Designing workshops, training materials and learning activities that strengthen knowledge, skills and participation.



SERVICES

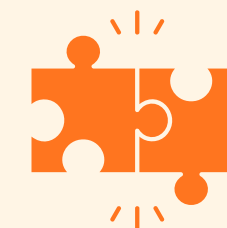
INNOVATION MANAGEMENT



**Exploitation Strategy
& Roadmap Co-
Design**



**Long-Term Funding
Architecture**



Alignment Validation



**Funding Scouting
and Monitoring**



**Market Intelligence
& Competitor
Landscaping**



**IP Management &
Freedom-to-Operate
(FTO) Screening**





Innovation Management

- ✓ Identificating and tracking of European funding calls (e.g., Horizon Europe, EIC, LIFE, Erasmus+) aligned with R&D strategies.
- ✓ Analysing technological concepts to verify their positioning against EU policy agendas, work programmes, expected impact metrics, and target Technology Readiness Levels (TRLs).
- ✓ Designing a multi-year capitalization matrix that combines public EU grants with private funding sources.
- ✓ We facilitate tailored Key Exploitable Results identification using advanced Canvas methodologies, establishing a clear pathway to market or policymaking.
- ✓ Coordinating the legal and strategic mapping of background and foreground knowledge, preventing ownership conflicts and setting up clear exploitation agreements.
- ✓ Using predictive data analysis, we map the target ecosystem, validate user needs, and define precise value propositions for your technology or methodology.





BLUE SYNERGY'S NETWORK OF PARTNERS

NETWORK OF PARTNERS

Blue Synergy collaborates with a diverse network of partners and clients, including companies, research organisations, universities, technology centres, public institutions and European project consortia. We work closely with multidisciplinary teams to provide tailored support in sustainability, innovation management and social engagement & impact, helping organisations strengthen their projects, increase their visibility and transform research and innovation outcomes into meaningful value. These are some of them:



WHAT OUR PARTNERS SAY ABOUT BLUE SYNERGY

“Working with Bluesynergy has been a pleasure, always on time, always available, and a very kind and pleasant team of people. Indeed, we highly recommend them!”

Giulio Poggiarioni

ETA Florence



WHAT OUR PARTNERS SAY ABOUT BLUE SYNERGY

“Blue Synergy has consistently demonstrated a high level of professionalism, technical expertise, and commitment in its contributions to the EU-funded projects. They deliver high-quality work in project communication, dissemination, stakeholder engagement, and exploitation activities, ensuring that project results were effectively promoted to relevant scientific, industrial, and policy-making audiences.”

Mircea Modreanu

Tyndall National Institute



WHAT OUR PARTNERS SAY ABOUT BLUE SYNERGY

"Blue Synergy's team is proactive and careful in giving the right feedback to comply with LCA and LCC in the European projects we are working on. Indeed, they help other consortium members better understand the requirements and needs for a more sustainable technology, often proposing solutions to respect European regulations in the frame of environment protection. We, at IMT, hope to have other fruitful collaborations with them in the future!"

Martino Aldrigo

IMT Bucharest





BLUE SYNERGY'S LATEST PROJECTS

LATEST PROJECTS



BIOSYSMO is a 48-month action that develops a computationally-assisted framework for designing and optimising synergistic biosystems combining the required pathways and traits to achieve the most efficient degradation and sequestration of pollutant mixtures.

Blue Synergy contributed to BIOSYSMO through:

- LifeCycle Assessment (LCA)
- LifeCycle Costing (LCC) / Net Present Value
- Social LCA
- Social Return of Investment (SROI)
- Social Impact Assessment

www.biosysmo.eu



VALORISH is a research project funded under the Horizon Europe framework aligned with HORIZON-CL6-2023-CIRCBIO-02. Its mission is to develop and scale up a computationally assisted cascade valorisation approach for waste and by-products from the fishing industry, transforming these resources into high-value bioproducts targeting food applications.

Blue Synergy contributes to VALORISH through:

- LifeCycle Assessment (LCA)
- Social LCA
- Social Return of Investment (SROI)
- Stakeholder and Consumer Perception Analysis
- Stakeholder Engagement
- Clustering & Networking

www.valorish.eu



LATEST PROJECTS



NANO-EH sought to create a multi-source energy harvester technological platform by translating forefront knowledge in novel smart nanomaterials and nanomaterial systems/structures into advanced engineering that enables efficient manufacturing processes.

Blue Synergy contributed to NANO-EH through:

- LifeCycle Assessment (LCA)
- LifeCycle Costing (LCC)
- Identification of Eco-design Opportunities
- Circular, end-of-life evaluations.

www.nano-eh.eu



SECRETed exploits the application of potential of Systems and Synthetic Biology toolboxes on aquatic biotechnology to develop novel hybrid compounds for different industries. Biosynthetic pathways of marine and extremophilic microorganisms are reverse engineered to infer the individual roles of their constituent genes, which are combined for the production of non-natural biosurfactants and siderophores with tailor-made properties.

Blue Synergy contributed to SECRETed through:

- Sustainability Assessment
- Social Acceptance
- Consumer Awareness

www.secreted.eu



LATEST PROJECTS



The NANOMAT Project pioneers the emerging field of “Flexible power RF nanoelectronics” to overcome current limitations in flexible electronics, which cannot meet the high-power demands of future applications like satellite IoT and avionic radar. By developing a novel heterogeneous platform integrating carbon-based electronics, wide bandgap semiconductors, RF MEMS, and thermoelectrics, NANOMAT delivers flexible RF components and circuits.

Blue Synergy contributed to NANOMAT through:

- LifeCycle Assessment (LCA)
- LifeCycle Costing (LCC)
- Circularity Assessments
- Eco-design

www.nanomat-project.com



POWERSAT introduces the concept of combined solar and microwave energy harvesting in satellites. This harvested energy is employed to fuel the low-power embedded electronics within satellites, including components like low-noise amplifiers, various sensors, and oscillators. The specific goals of the project are to scavenge the unexploited solar spectrum, to harvest the microwave spillover losses from satellite’s antennas and transform them into a practical DC power supply; and to facilitate efficient and low-power inter-satellite links (ISLs).

Blue Synergy contributes to POWERSAT through:

- LifeCycle Assessment (LCA)
- LifeCycle Costing (LCC)
- Eco-design

www.project-powersat.com



LATEST PROJECTS



The Eyes Hearts Hands project addresses urban challenges in combating climate change by equipping cities with the skills and tools needed to implement effective energy and sustainability plans. Many city managers face difficulties in selecting appropriate technologies and managing large-scale renovations.

Blue Synergy contributed a comprehensive stakeholder engagement roadmap for the Zoersel renovation project. This roadmap included stakeholder categorization, engagement activities, a communication plan, and the selection of engagement tools to ensure everyone's ideas were heard and visible to the consortium. It also established key performance indicators (KPIs) related to stakeholder engagement, such as participation rates, diversity of feedback, and satisfaction surveys.

www.eyesheartshands.eu



NewWave contributed to building a circular economy by introducing sustainable raw materials in 4 manufacturing lines, replacing toxic chemicals, and lowering the environmental footprint of the products. The innovative approach of NewWave is to apply Thermo-Chemical Fractionation (TCF) to unlock and fractionate residual biomass.

Blue Synergy contributed to NEWWAVE through:

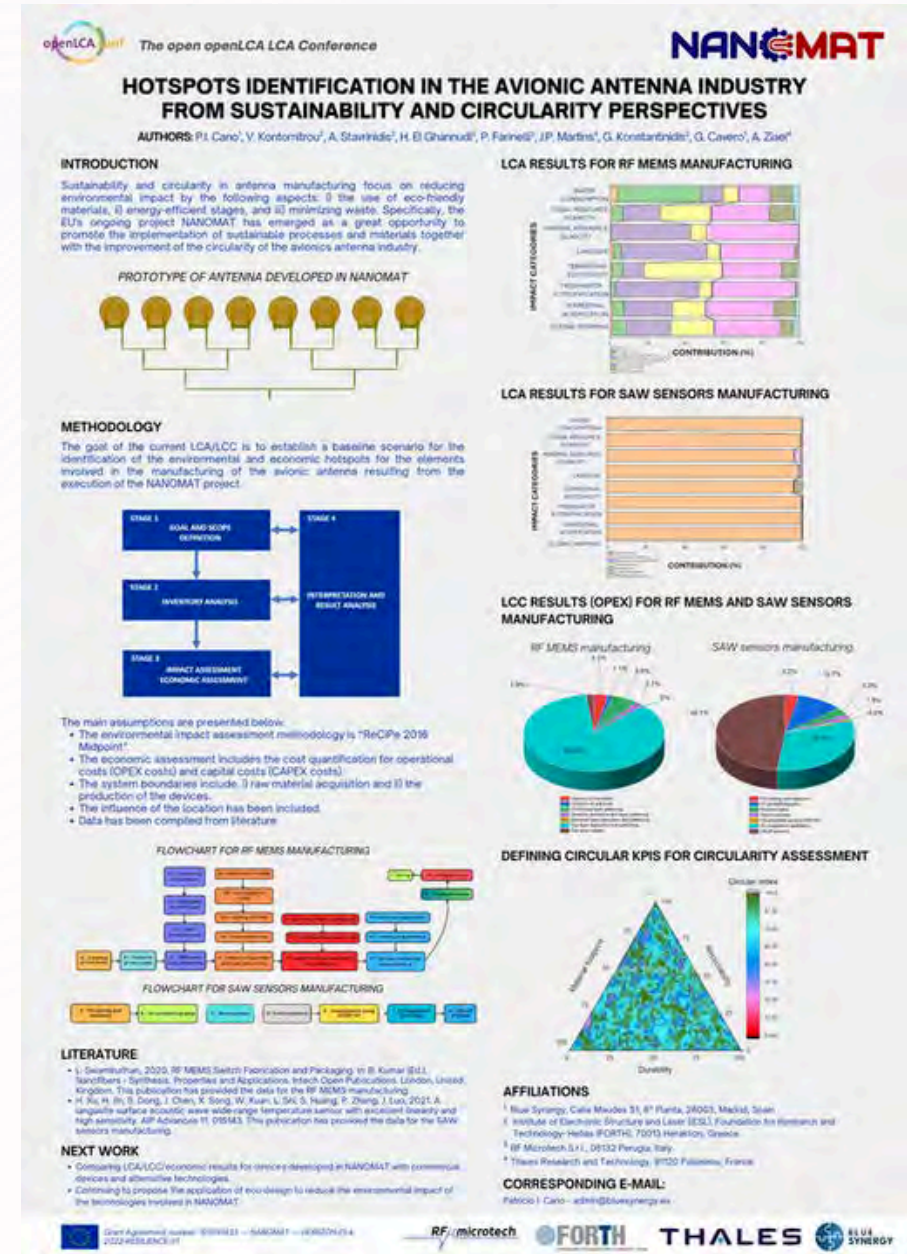
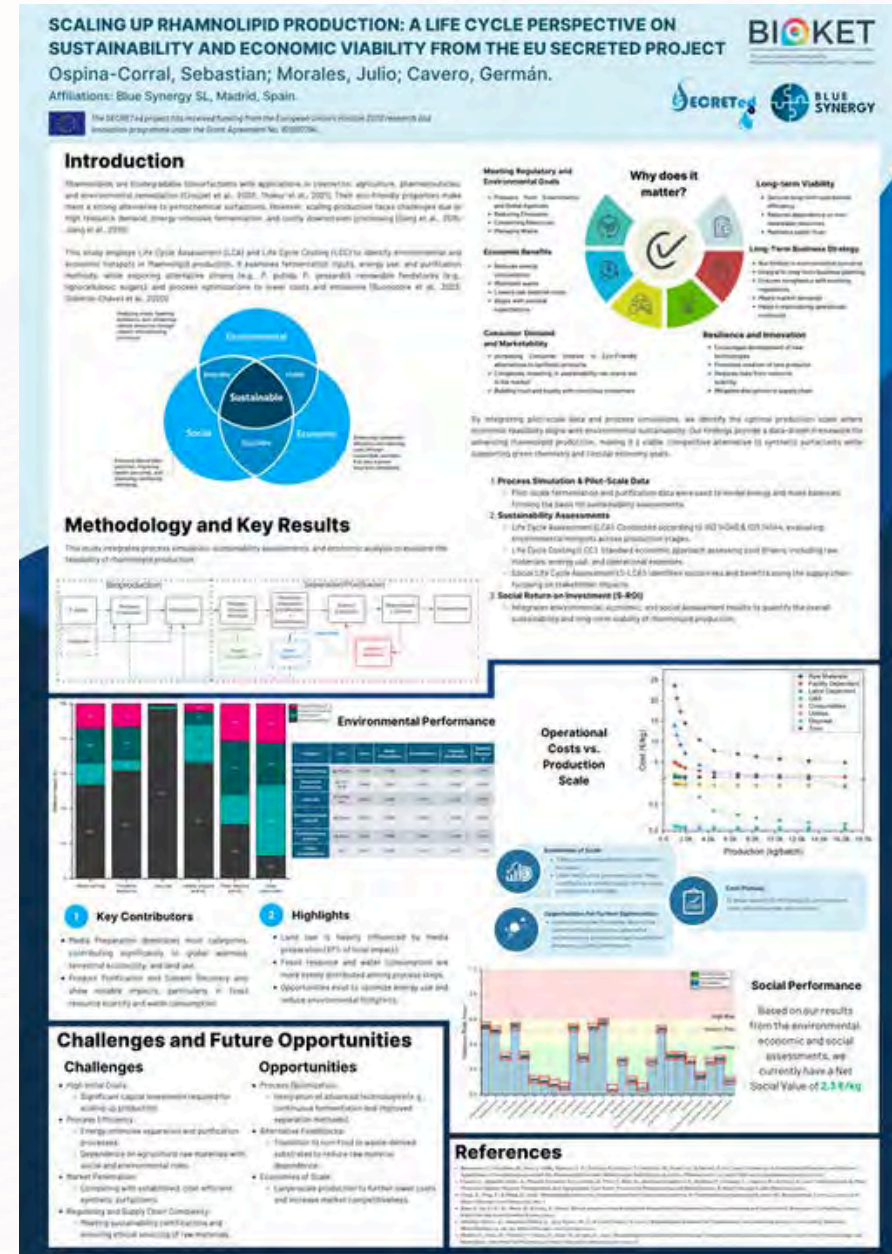
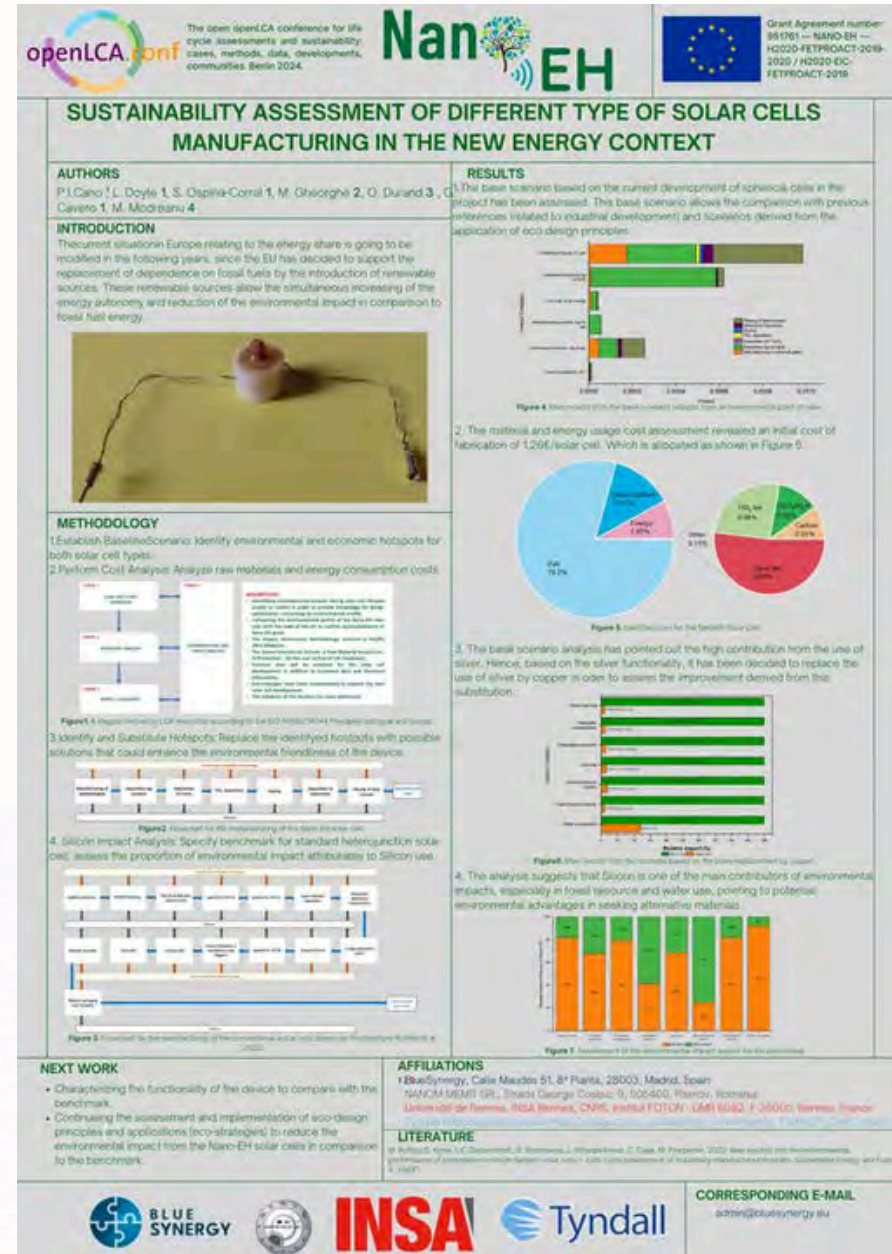
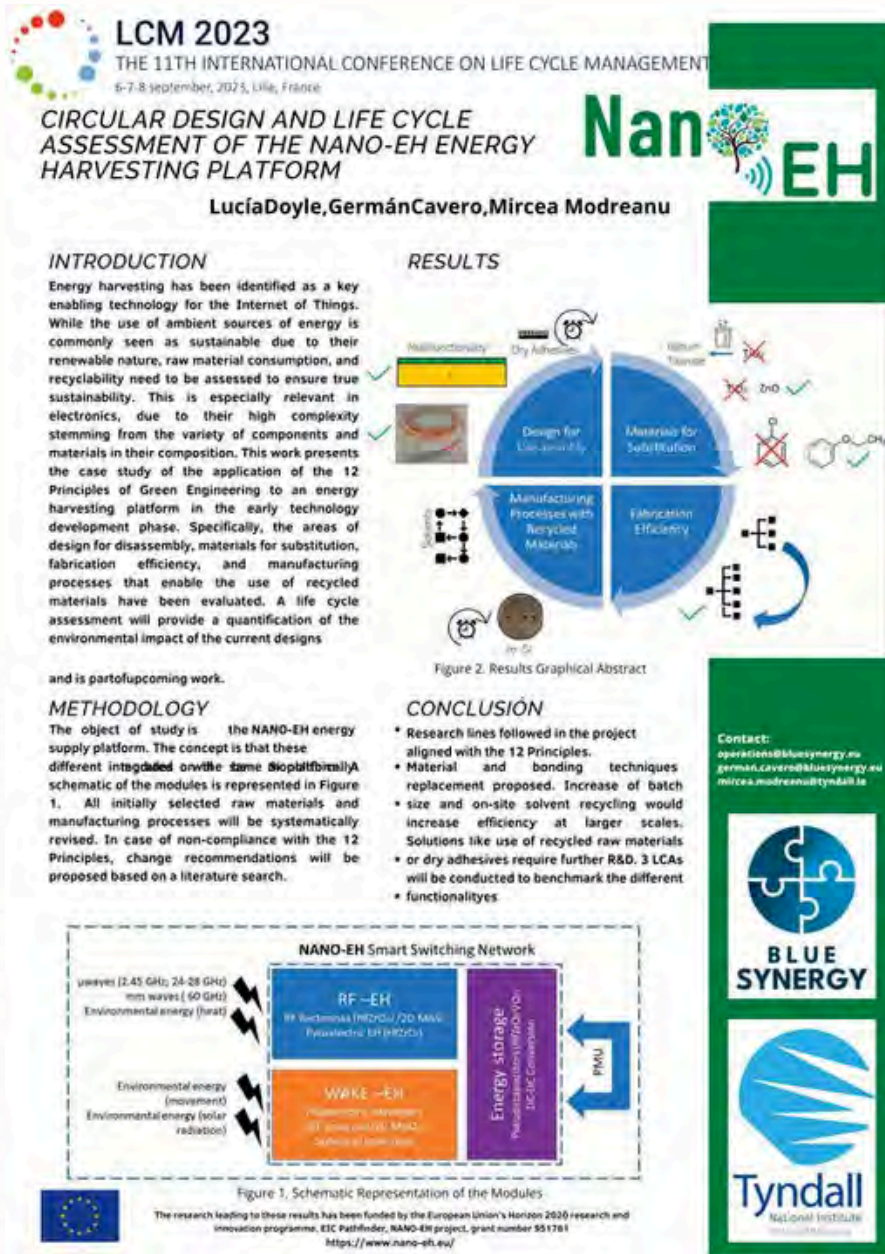
- LifeCycle Assessment (LCA)
- LifeCycle Costing (LCC)
- Reuse & Recycling Strategies
- Business Models
- Social Impact Analysis

www.newwave-horizon.eu





BLUE SYNERGY'S SCIENTIFIC AND TECHNICAL ACTIVITIES



Presented posters on the SECRETed, NANOMAT, and NANO-EH projects to the international scientific community at conferences.



PARTICIPATION IN EVENTS

Speeches at conferences

Valorization of fish waste from industry: A circular economy strategy supported by Life Cycle Assessment

34th European Biomass Conference & Exhibition . Oral Contribution.
World Forum. The Hague, Netherlands - 2026

Assessing the Low-Carbon Production of Bio-Based Resins and Solvents via Thermochemical Biomass Conversion

Biomass Conference 2025. Oral Contribution.
Viena, Austria - 2025

Environmental and Economic Evaluation of Low-TRL Technologies for Soil and Water Bioremediation

12th International Conference on Life Cycle Management (LCM 2025). Oral Contribution.
Palermo, Italy - 2026

Environmental assessment of groundwater remediation from a biodiversity approach.

1st International Life Cycle Assessment Symposium —Towards Circular Water and Nutrient Management for Food Production
Universitat Autònoma de Barcelona - Barcelona, Spain. 2025.

Scaling up Rhamnolipid Production: A Life Cycle Perspective on Sustainability and Economic Viability from the EU SECRETED Project

BIOKET 2025. Poster Presentation.
Brussels, Belgium - 2025

Assessing Sustainability and Market Viability of Thermochemical Biorefinery Products

Workshop: From Forest to Function: Thermochemical Pathways Driving Industrial Bioeconomy Innovation in the NewWave Project
EUBCE - Valencia, Spain. 2025.

Case Study – Encapsulation of siRNA with Biosurfactants

SECRETed Social Awareness Workshop for University Students
Universidad de Sevilla - Seville, Spain. 2025.

Hotspots Identification in the Avionic Antenna Industry from Sustainability and Circularity Perspectives

The Open OpenLCA Conference for Life Cycle Assessments and Sustainability – Second Edition. Poster presentation.
Berlin, Germany - 2024

Encapsulation Innovations: Sustainable Drug Delivery Systems for the Future

SECRETed Social Awareness Workshop for Pharma/Cosmetic Industry
Farmaforum - Madrid, Spain. 2024

Sustainable Nanoelectronics: The NanoEH Approach

Workshop: A new technological platform for hybrid integrate energy harvesting
IEEE - Gijón, Spain. 2024

The Role of Stakeholders in Marine-Based Compound Production

SECRETed Social Awareness Workshop for Stakeholders
Verona, Italy. 2024



PARTICIPATION IN EVENTS AND PUBLICATIONS

Papers and other publications

Published

Ospina-Corral, S.; Devriese, D.; De las Heras, I.; Uitterhaegen, E.; De Winter, K.; Soetaert, W.; Cano, P.; Salvador, M.; Caverio, G. **Scaling glucose-based rhamnolipid production with engineered *Pseudomonas putida*: Environmental and economic challenges from plasmid-based pilot test to antibiotic-free industry simulation.** [version 1; peer review: awaiting peer review]. Open Res Europe 2026, 6:67.

<https://doi.org/10.12688/openreseurope.22080.1>

Doyle, L.; Caverio, G.; Modreanu, M. **Applying the 12 Principles of Green Engineering in Low TRL Electronics: A Case Study of an Energy-Harvesting Platform.** Sustainability 2023, 15, 11227.

<https://doi.org/10.3390/su151411227>

Cano, P.; Castillo, H.; Chalot, M.; Caverio, G. **Integrated Sustainability Assessment of Brownfield Regeneration: The Vieux-Charmont Park Case (France).** MDPI. Accepted, awaiting DOI. <https://doi.org/10.3390/su18147056> (registering DOI)

Pending

Cano, P.; Caverio, G. **Bioelectrochemical systems for environmental remediation — Sustainability challenges, energy demand, and assessment perspectives.** Open Research Europe. To be sent.

Cano, P.; Opsina-Corral, S.; Caverio, G. **Toward robust Life Cycle Assessment of nanoelectronics: Resolving database gaps with transparent and reusable input datasets.** Cleaner Environmental Systems. Awaiting acceptance, Major Revisions.



GALLERY





CONTACT

CONTACT US

Phone: +34 910-888-203

Emails:

projects@bluesynergy.eu

german.cavero@bluesynergy.eu

Website: www.bluesynergy.eu

Address: Calle de Maudes, 51. 8th floor. Madrid, Spain. 28003

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THANK YOU!



**BLUE
SYNERGY**