

How can AI, digitalisation, and greening ensure smart and sustainable growth for EU regions and cities?

The experience with Smart Specialization Strategies in Andalusia: S4Andalucia 2021-2027

Naples, 26 november 2024

S4 *S4Andalucia Technical Office*
ANDALUCÍA *Andalucía TRADE*
Andalusian Regional Government





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Fondo Europeo de Desarrollo Regional

**A Junta
de Andalucía**

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S4 ANDALUCIA

01

Andalusia Region and the Andalusian Agency for the Economic Transformation and Development: ANDALUCÍA TRADE

02

The Andalusian experience addressing Sustainability, Digitalisation and Regional Challenges through the design of smart specialisation strategies: from RIS3Andalucia 2014-2024 to S4Andalucia 2021-2027

03

How the Andalusian Structure of Specialization and its operational Programming facilitate the ways to a sustainable regional growth

04

Advancing on Sustainability and Digitalization implementation. The S4Andalusian stakeholders and regional Innovation ecosystem, protagonists of the change in the territory. Alliances and Interregional Collaboration in practice



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01

The Andalusia Region and the role of Andalusian Agency for Economic Transformation and Development: Andalucía TRADE



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ANDALUSIA IN THE EU: a “region-country”

- ❑ The 2nd largest region in Europe
- ❑ The most populated region in Spain

- ✓ Region of Borders
- ✓ Large coastal and marine ecosystems: 945 km of coastline
- ✓ Mediterranean and Atlantic sea sides
- ✓ Valuable Natural Capital
- ✓ Great wealth in its seabed



ANDALUSIA: A LESS DEVELOPED REGION

Country/region	Km ²
Hungary	93.011
Portugal	92.226
Andalusia	87.597
Austria	83.879
Czech Rep.	78.868
BENELUX <small>cia</small>	74.657



RIS 2023: Moderate innovator -

Country/region	Inhabitants
Portugal	10.374.822
Sweden	9.747.355
Austria	8.576.261
Andalusia	8.600.224
Bulgaria	7.202.198



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About us

Andalucía TRADE brings together all enterprise support activity in Andalusia



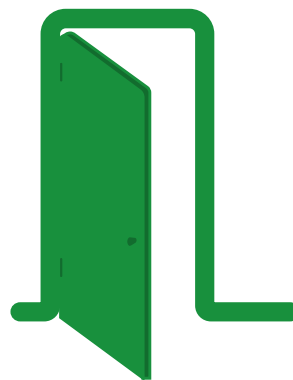
Objectives

- ✓ Foster economic growth
- ✓ Promote investments and internationalisation
- ✓ Committed to innovation and R&D
- ✓ Focus on knowledge transfer

→ Flagship project of the Andalusian Government
→ Firm and ambitious commitment to enterprise
→ Effective and efficient one-stop shop








→ Spain: 11 offices
→ International: 42 offices (services in 70 markets)

One-stop shop



 **350 specialist professionals**

360° service

-  **SMEs**
-  **Major companies**
-  **Sole traders**
-  **Start-ups**
-  **Projects of Strategic Interest**
-  **Investors**
-  **Investment funds**



What we offer

Business Development

- Knowledge transfer
- Business intelligence
- Strategic sectors
- Production spaces and clusters
- Advanced services
- Public-private partnership

Enterprise finance

- Direct grants
- Financial instruments
- Public innovation procurement

Internationalisation

- Enterprise internationalisation
- Market development
- Attraction of investments
- Consultancy

What public resources do we provide?

Direct grants

- Industrial development
- Enterprise R&D + innovation
- Internationalisation

Financial instruments

- Loans
- Guarantees
- Sureties
- Equity investment
- Reimbursable hybrids

Public Innovation Procurement

€900M+ AVAILABLE TO REGIONAL BUSINESSES





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Internationalisation

GOALS

- Implement a market and product expansion strategy
- Increase the number of exporters
- Permanent export activity
- Biggest companies and financial muscle

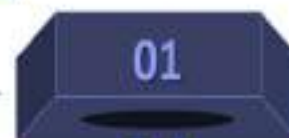
SERVICES

- Group promotion
- Individual promotion
- International trade fairs
- Direct trade missions
- Reverse trade missions
- Business intelligence tools
- Specialized training

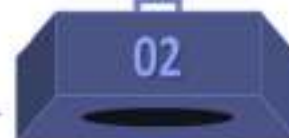


Investments services

Planning



Softlanding



Aftercare



- Information on sectorial regulation, industry situation and market
- Search for the best location
- Scheduling personalised visits to locations and meetings with institutions and potential partners
- Information on business opportunities
- Information about grants and financing sources
- Information on available workforce and operational costs
- Information on available workforce, employment and operational costs and procedures for work and residence permits
- Assistance through national and regional institutions
- Information and follow-up on permits and administrative procedures required to commence professional activities
- Information about potential local providers
- Personalised service of project monitoring established in Andalusia
- Tailored proposals for parent companies
- Support on potential expansion plans

**Andalucía
TRADE**

**Junta
de Andalucía**

Leading the Task Forces facilitating the Technical Secretariat that gives support to several regional planning and Strategies

KEY REGIONAL ACTOR

**RIS³
ANDALUCÍA**

RIS3 Andalusia, Andalusian Innovation Strategy 2014-2020



Andalusian Industrial Strategy 2020



Actively participating in the design of the Andalusian ERDF OP (2021-2027) led by the European Funds DG of Andalusian Government



Andalusian Aerospace Strategy 2021-2027

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S4Andalusia, Smart Specialization Strategy for Sustainability 2021-2027

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The Andalusian experience addressing Sustainability, Digitalisation and Regional Challenges through the design of smart specialisation strategies: from RIS3Andalucia 2014-2024 to S4Andalucia 2021-2027

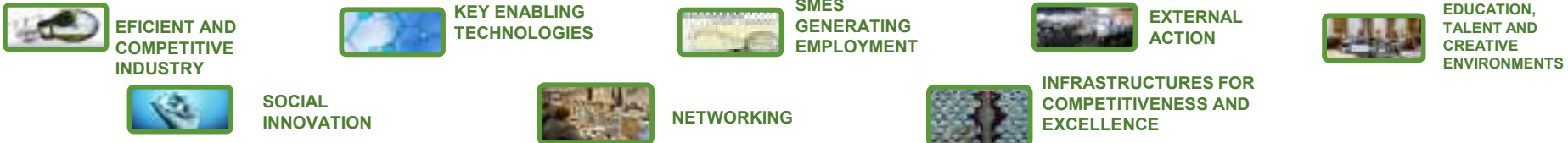
RIS3Andalucia 2014-2020

Research and Innovation Smart Specialization Strategy of Andalusia

8 SPECIALIZATION PRIORITIES
8 TRANSVERSAL DIMENSIONS



Dimensions



**RIS3Andalucia
BIG NUMBERS
MONITORING
REPORT
2014-2022**

RIS3Andalucia implementation			
198	8	3.000 Million €	11
Actions developed	Priorities	98% of the total budget	Regional Strategies involved

Budget and actions developed, by priorities

67%

of the total budget for actions focused on more than one priority

25%

of the budget for ICT (P8), Energy (P7) and Agribusiness (P6)

11%

of the budget for Energy (P7) actions

17%

of all the actions focused on ICT

15%

of all the actions related to Health



Compliance.RIS3Andalucia and SDGs

Sustainable Development

RIS3Andalucia action lines and the specialisation priorities are focusing the objective to move towards a Sustainable Andalusia, this is particularly an evidence with the priorities addressing Renewable energies, energy efficiency, sustainable building and Sustainable use of Territorial-based Endogenous Resources

5
Environments of
Specialisation

8
Strategic Objectives

620 M€
S4Andalucía Budget

4.400 M€
Andalusian ERDF indirectly
linked

860
Actors have already joined
the S4Andalucía strategy

+250
Experts involved in the
design of the Strategy

Sustainable and Intelligent Economic Transformation

Smart Specialisation Strategy for Sustainability of Andalusia, S4Andalucía 2021-2027

Approved by the
Agreement of the
Andalusian Council of
Government on 18th
July 2023

BOJA

Boletín Oficial de la Junta de Andalucía
Número 126 - Viernes, 21 de julio de 2023
página 12315/1

1. Disposiciones generales

CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN

Acuerdo de 18 de julio de 2023, del Consejo de Gobierno, por el que se aprueba
la Estrategia de Especialización Inteligente para la Sostenibilidad de Andalucía
2021-2027. S4ANDALUCÍA



Establishes **priorities at a regional scale**, based on the competitive advantages of the region



Develops **strengths in research and innovation** and their correspondence with business needs and necessary capabilities



Participatory governance

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Sustainability, European Green Deal and SDGs



Industrial Transition joins the **twin digital and green transition**



Entrepreneurial Discovery Process (EDP): **continuous, effective and efficient**

02

What is S4Andalucia?

- The Smart Specialization Strategy for the Sustainability of Andalusia, S4Andalucia 2021-2027, is the Andalusian regional instrument for **planning, execution, development and evaluation of public actions** in the field of **research, innovation and industrial transition, digitalization, training, entrepreneurship and cooperation for specialization** with a transversal **perspective of sustainability and the fight against Climate Change** in the European Cohesion Framework 2021-2027.



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Increasing spending on R&D&i in the regional economy and the productive specialization



Higher levels of transfer and application of knowledge and technologies



Facing the industrial and digital transition successfully



Rising circularity and sustainability of Andalusian productive activity



Increasing public-private collaboration and territorial cooperation (interregional and international), with business and key innovation agents



Training the regional innovation system agents for the successful implementation of S4Andalucia



Fighting gender gaps in R&D&I taking advantage of it to eliminate some other social gaps



Promoting the effective changes from the public sector, based on the "good governance"

THE S4ANDALUCIA CHALLENGES

- Towards a **more specialized, intelligent, sustainable, responsible, green and competitive economy**
- Overcoming **barriers to the diffusion of innovation and digitalization**
- Contributing to **reduce gender gaps in R&D&I**

STRATEGIC OBJECTIVES

Aiming to:

- Give the adequate **response to the identified challenges**
- **Advance into R&D&I, the industrial transition and the digital transformation**
- Gain a **great specialization**
- Towards the **Good Governance**



Increase research and innovation



Raise the levels of transfer and application/generation of knowledge and technologies



Expand integration in the digital economy



Accelerate and expand the Industrial Transition



Increase sustainability and circularity of production, distribution and consumption through innovation



Increase capacity building and innovative entrepreneurship



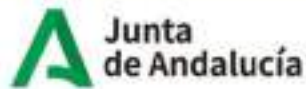
Increase collaboration and cooperation for innovation



Reduction of gender gaps and other social gaps in innovation



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03

How the Andalusian Structure of Specialization and its operational Programming facilitate the ways to a sustainable regional growth



**5 ENVIRONMENTS
OF SPECIALIZATION**
classified into 11
SUBENVIRONMENTS



**Crossed by 7 AXES OF
TRANSVERSAL
SUPPORT**



7 THEMATIC LINES
framing the
S4ANDALUCIA
implementation



**POLICY
INSTRUMENTS** for
the implementation
of Thematic Lines

ENVIRONMENTS OF SPECIALISATION

Areas identifying the future opportunities in the region: sectoral value chains for which Andalusia has a differential development potential due to its availability of material resources (raw materials, infrastructure, equipment...), human resources (entrepreneurs, researchers, qualified labor,...) and business fabric



E1. Intelligent, resilient and healthy society

E1.S1. Health and social well-being

E1.S2. Tourism and culture

E1.S3. ICT sector



E2. Agrotechnology

E2.S1. Green and blue economy

E2.S2. Agri-Food Industry – Functional Food



E3. Natural Resources: Mining and Water Cycle

E3.S1. Mining resources

E3.S2. The water cycle



E4. Driving Industries

E4.S1. Advanced transport and mobility systems industry

E4.S2. Industrialized Building



E5. Ecological Transition

E5.S1. Energy Transition

E5.S2. Industries linked to mitigation and adaptation to climate change

AXIS OF TRANSVERSAL SUPPORT

Drivers towards a more innovative and equal society



Generation and Transfer of knowledge



Digital Transformation



Industrial Transition



Sustainability and circularity



Training and entrepreneurship



Public-private collaboration



Gender equality and reduction of inequalities



In **response to the multisectoral challenges that the Regional Innovation System must overcome**



Informing the Strategy from a horizontal approach



They **serve to guide and set trends for innovative actions to be incorporated into the Strategy**

The PROGRAMMING STRUCTURE: THEMATIC LINES



LT.1. R&D&i



L.T.2. Transfer and generation of knowledge



LT.3. Digital transformation



L.T.4. Industrial Transition



LT.5. Training and Entrepreneurship




L.T.6. Sustainability



LT.7. Collaboration and Cooperation

 They are **the framework** where the actions of S4Andalucía take place

 Aiming to give an answer to each one of the **Strategic Objectives**, from the perspective of an integrated approach of gender and equity

POLICY INSTRUMENTS

Type of instruments



Financial instruments



Fiscal instruments



Advanced services



Training and Education



Equipment for innovation and entrepreneurship



Innovative Public Procurement



Procedures



Regulatory development





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04

Advancing on Sustainability and Digitalisation implementation. The S4Andalusian stakeholders and regional Innovation ecosystem, protagonists of the change in the territory. Alliances and Interregional Collaboration in practice





PROJECTS AND ACTIVITIES ADDRESSING the SUSTAINABLE DEVELOPEMENT GOALS

Focusing the TRIPLE DIMENSION OF SUSTAINABILITY social, economic and environmental

A new regional strategy contributing to SDGs established by Agenda 2030 through the **promotion of regional innovation and its productive ecosystem.**

Common commitment to **engage the quadruple helix** in achieving the SDGs for **economic, social and environmental sustainability**

S4Andalucia particularly addresses **SDGs 5, 6, 7, 8, 9, 13, 14, 15**





POWER4BIO. Empower regional actors to harness the full potential of the European bioeconomy

The POWER4BIO project aims to increase the capacity of regional and local policy makers.



INFAC: Innovative, Non-invasive and Fully Acceptable Scanning Technologies

Innovation and research action aimed at the use of non-invasive mining exploration technologies, transported by drones.



INDUPYMES 4.0: Digital Factory for Industrial SMEs

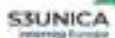
Its objective is to improve the participation of the business fabric in innovation processes and in R + D + I activities closest to the market.



RELIEF: Recover vital well-being through pain self-management techniques with ICT

RELIEF will promote and accelerate market access for innovative solutions, in compliance with public procurement directives.

UNISA3 works on smart and sustainable solutions for increasing energy efficiency in university campus buildings.



REINWASTE - REmanufacture the food supply chain by testing INNovative solutions for zero inorganic WASTE

THEMATIC PARTNERSHIP
TRACEABILITY
AND BIG DATA



Smart Food Production with
Machine Learning, Big Data
and Platforms

Andalusia is leading the T&BD S3TP



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REGIONS
4FOOD
Interreg Europe



European Union
European Regional
Development Fund





**ANDALUCÍA
AGROTECH**
DIGITAL INNOVATION HUB

EDIH | European
Digital Innovation
Hubs Network

WHAT WE DO →

We are a **ONE STOP SHOP** to accelerate and support the digital transformation of the agri-food sector.



**WE CONNECT RESOURCES
AND NEEDS**



**WE ARE AN INTERNATIONAL
REFERENCE**



**WE ADAPT TECHNOLOGIES TO
REAL PROBLEMS**



**WE PROMOTE DIGITAL
CULTURE AND
ENTREPRENEURSHIP**

WHAT WE OFFER →

SERVICES provided by Andalucía Agrotech DIH



TECHNOLOGY SERVICES



INNOVATION ECOSYSTEM



TRAINING



**GRANTS AND FUNDING
STRATEGIES**

Interreg



El Programa está
financiado por el
Fondo Europeo de
Desarrollo Regional
de la Unión Europea

España - Portugal

HIBA
HUB IBERIA AGROTECH

HIBA+

HIBA+ is a project aimed at consolidating the achievements and experiences of the network created in Hub Iberia Agrotech, a multi-regional ecosystem aimed at the digitalisation of the agri-food sector through DIHs.

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INTERNATIONAL NETWORKS AND PROJECTS



RIS S4 ANDALUCÍA



**REGIONS
4FOOD**
Interreg Europe

I4MS

CHANGE2TWIN

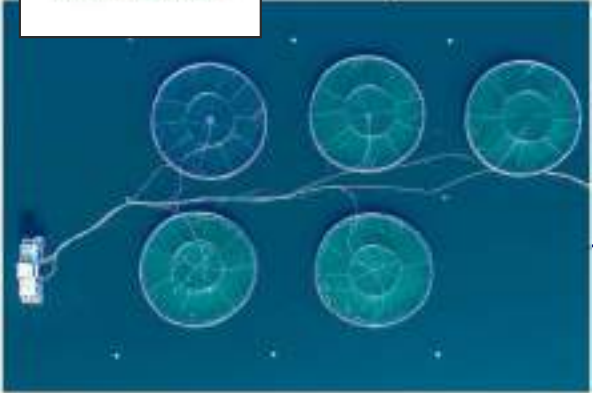
DIH4CPS



interreg España - Portugal **HIBA**



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Sustainable Blue Economy

Andalusia is partner of the Maritime Sustainable Blue Bioeconomy S3 Thematic Partnership

Agencia Andaluza de la Energía
Consejería de Industria,
Energía y Minas



ENERGY S3 THEMATIC PLATFORM



Leading regions
Participating regions

Leading regions
Participating regions

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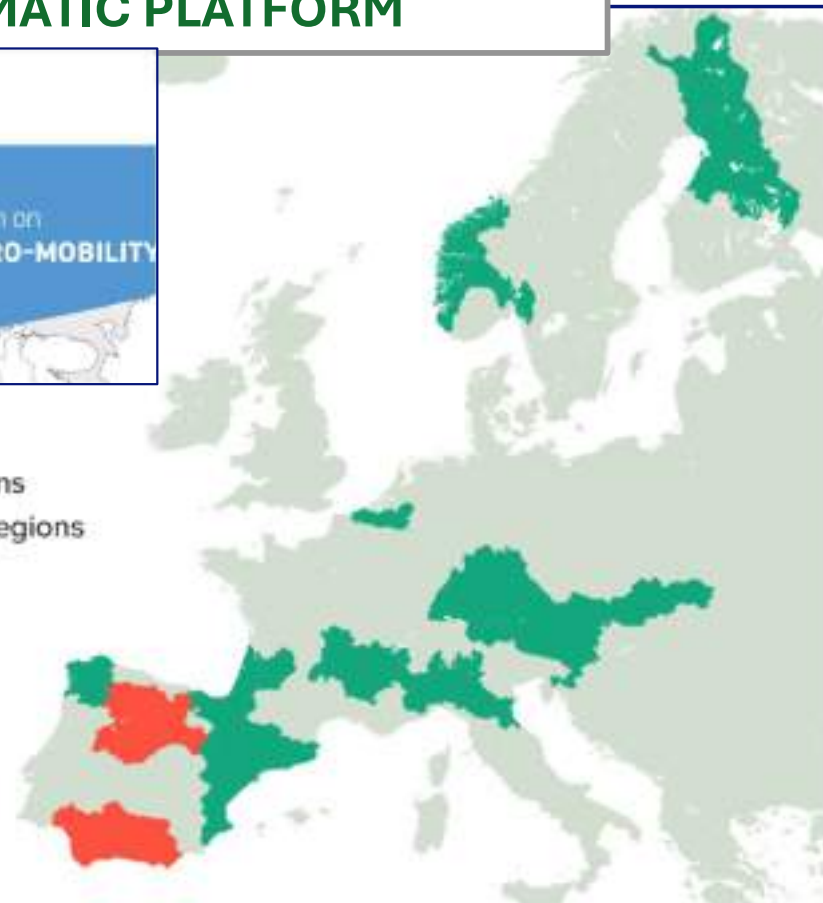
Andalusia is leading the **Sustainable Building S3 Thematic Partnership** and partner of the **Solar Industry Regions Europe (SIRE)**

INDUSTRIAL MODERNISATION S3 THEMATIC PLATFORM



- Leading regions
- Participating regions

Andalusia is leading the Advanced Materials for Batteries for Electro-mobility and Stationary Energy Storage S3 Thematic Partnership



Andalusian leadership of the Digitalisation and Safety for Tourism S3 Thematic Partnership



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The main objective of D3HUB is to design, test, pave the way and maintain a self-sustainable European Competence Centre to support tourism destinations and their ecosystem (with special focus on SMEs) in their data-driven green and digital transition, as well as to increase collaboration and knowledge transfer between tourism stakeholders and tourism destinations.



NECSTouR
European Regions for
Competitive and Sustainable Tourism

Interreg Europe



Co-funded by the European Union

OD4GROWTH



FEDERACIÓN ANDALUZA DE MUNICIPIOS Y PROVINCIAS

The Interreg OD4GROWTH project focused on Open Data for Growth includes **S4Andalucía** on its map of regional stakeholders

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OD4GROWTH

OD4GROWTH

Strengthening the availability and processing of Open Data to support local growth and urban transformation



Thank you for your attention!

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Naples, 26th November 2024

www.s4andalucia.es

s4andalucia@andaluciatrade.es

[@s4andalucia](https://www.instagram.com/s4andalucia)



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2014-2020



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