Portugal **Factsheet**

This document provides an overview of the Portugal's initiatives and current state in the bioeconomy sector, highlighting regional policies, educational programmes, key trends, existing and expected sub-sectors, and opportunities for personal advancement in bioeconomy related fields.



commitment to environmental protection. The most prominent sector is the blue bioeconomy, utilising Portugal's extensive coastal regions. Other key sectors include agriculture, tourism, textiles, and construction materials. In education, Portugal is advancing with bioeconomy-related courses and training initiatives, though a centralised platform is not

yet established. The country is well-positioned to harness the bioeconomy's potential by promoting eco-friendly practices, leveraging natural resources, and investing in education and social inclusion.

Bioeconomy-related activities in **Portugal** are growing as the country seeks to blend economic growth with environmental sustainability, leveraging its unique landscape and

A growing interest and concern are also focusing on Eco-construction and

• Broadband expansion creates new digital

• Sustainability motivates technologies in renewable and circular economies. · Focus on green transformation and

Thematic Orientation

Eco-tourism.

Marine sector

Existing Sub-Sectors

 Forest-based products Agriculture and food

- **Key Trends Influencing Innovation**
- Digitalisation drives innovation across various sectors in Portugal.

opportunities.

Green chemistry

 Cooperation between companies and universities fosters innovation. **Expected Sub-Sectors / Value Chains**

sustainable energy systems.

- Bioplastic Bioenergy
- Opportunities for advancement (Growth,

The Bioeconomy is driving revolutionary

- Career, Social etc.)
- trends that demand a new workforce in areas
- like biomass energy, bioplastics, and aquaculture, creating diverse job

natural and human resources, with educational tools in this field slowly expanding in Portugal, offering significant

opportunities and appealing to young people. As the Bioeconomy grows, it relies on both

personal and professional advancement. Governance, Education Levels & Skills





• Universities and research institutions in Portugal play a key role in adult education, by offering courses, training programmes, research opportunities etc.

adult education in the Bioeconomy.

• The Portuguese Government is responsible for setting policies and strategies related to

• Industry associations in Portugal represent the interests of businesses involved in the circular Bioeconomy

• National Qualifications System that provides a framework for the recognition and validation of competences

Universities and vocational schools offer

designed for adults that desire to update their skills and knowledge or acquire new

continuous education programmes

qualifications Vocational education and training system providing practical training and education for those who wish to acquire a specific set of skills and competences related to a particular sector or industry

· Adult education centres that offer a wide range of programmes and courses

Bioeconomy Education

• Art as a stimulus of the needed skills

companies and individuals

Art addressing learning styles

young adults.

- There are some companies which offer design thinking workshops for different

Linking Art &

- Some companies offer workshops on collaboration skills and entrepreneurial - There are some art expositions by

Portuguese artists that are in the field of sustainability, reused materials and awareness of the environment

Juventude, is a governmental organisation that promoted a creative competition called "Bioeconomia na minha vida" (Bioeconomy in my life) for

- IPDJ- Instituto Português do Desporto e

In Portugal, several marginalised, disadvantaged, and minority groups face challenges and barriers in accessing opportunities and services. Among these groups are young adults, people living in

Marginalised Groups

Minho (Braga) University of Trás-os-Montes and Alto

research centre located at the University of

Douro (UTAD) offers higher education curriculums in sustainable agriculture,

• Centre of Biological Engineering is a

of Porto and businesses

No organised structures for Bioeconomy

• CBQF (Centre of Biotechnology and Fine Chemistry) is an Associated Laboratory of

the Catholic University of Portugal in Porto

UPTEC is a meeting point of the University

biotechnology, renewable energy, waste management GreenUPorto - Research Centre on

Sustainable Agri-food Production

schools and centres of vocational qualification/training • Associação Portuguesa de Educação Ambiental (ASPEA), coordinates

environmental education programmes

No organised structures for Bioeconomy

Other providers are vocational training

· Injecting the Bioeconomy in design, art,

architecture, etc. professions

Inspirational case studies from Art to **Bioeconomy Education** - Zet Gallery promotes sustainability through art by offering a prize "arte em

public places and sustainability)

espaço público e sustentabilidade" (art in

rural areas, and individuals in situations of poverty. These groups are particularly prioritised when it comes to creating opportunities for social and economic inclusion.

The bioeconomy sector presents relevant job

opportunities for disadvantaged and marginalised individuals, particularly in agriculture and forestry. There are also opportunities in bioenergy production, including the installation, maintenance, and

production of bioenergy systems.

Additionally, the ecotourism sector, which is growing, may offer future job prospects for these groups. The main needs of individuals from marginalised groups as they integrate into the bioeconomy revolve around acquiring

specialised knowledge and skills. To meet

these needs, education and training programmes tailored specifically for the bioeconomy sector must be provided. It is important to personalise training to accommodate different learning styles and education levels, ensuring that individuals from various backgrounds can successfully enter this sector. Efforts should also focus on maintaining existing jobs while creating new,

STRENGTHS

• Increasing transition to horizontal value

• Increase of employment / available job

Existing Educational Activities oriented to



Promoting activities and sectors that create added value within marginalised communities is equally important. Currently, there are no established educational or development activities in Portugal specifically addressing the integration of marginalised groups into bioeconomy activities, leaving a gap in efforts to meet their main needs and

promote inclusion in this growing sector.

WEAKNESSES

 The resources and products are not fully valorised Due to the lack of a National

Strategy, Bioeconomy is not fully aligned with the socioeconomic priorities of the

attractive opportunities in rural areas.

 Fragmentation of activities and priorities • Lack of an organisational umbrella for Lack of Research on Bioeconomy Education Lack of specific research on Bioeconomy Lack of Educational activities and programmes for marginalised groups

· Existing of lateral opportunities, Life-Long learning, Vocational training, mass information, education for

Blue Economy

Education Institutions and Art

Overlapping between the Bioeconomy

- 0 **OPPORTUNITIES** · Expansion in new sectors and new
- Making Portugal a recognised centre of Bioeconomy development in Europe The existing General Education background can be the seed for a

• Further exploitation of the developed

digital background

- country can be the driving force for a wider development

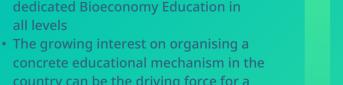
Q-PLAN

 Potential decrease of resources by 2050 due to dynamic harvesting A potential brain-drain due to the lack of

THREATS

of an educational programme for the marginalised groups will be an inhibitor to the integration of these groups and this might have social and economic

The lack of identification and organisation



LOBA°



btg 🕻

SWOT

Analysis



consequences

For more detailed information, visit Portugal regions page in

Funded by

Consortium

CIVITTA

ZVT | Agricultural Research

BioGov.net

© (*) (\$) (=) CC BY-NC-ND 4.0

PEDAL