

Bretagne, a land of blue biotechnology



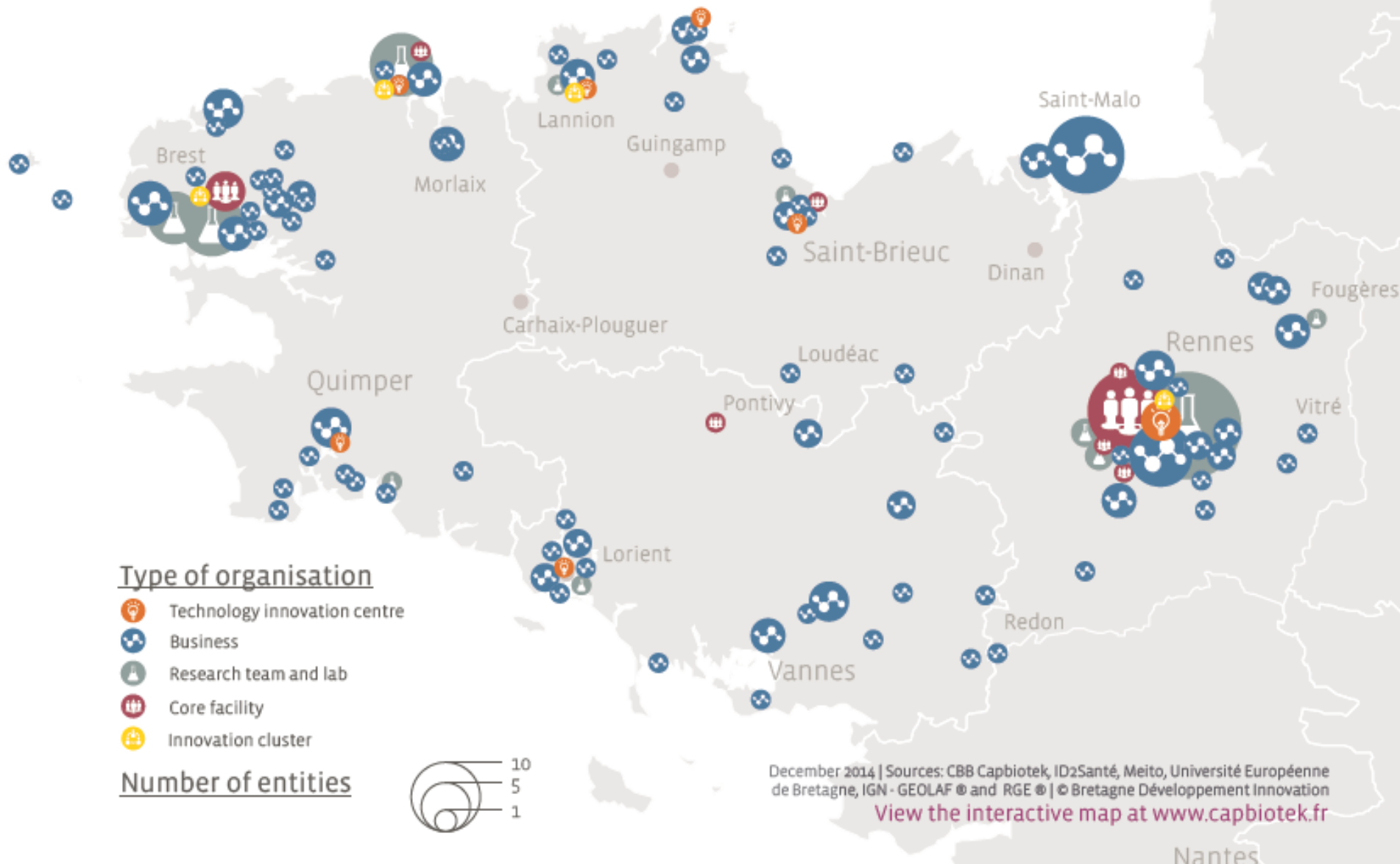
→ Bretagne Region and blue biotech



- A bio-region leader in blue biotechs
- A concentration of strengths in our territory :
 - peninsula with 1800 km of coastline*
 - a unique marine biodiversity : more than 800 species of macroalgae listed, 3500 species of macrofauna*
 - industrial tradition in agro-food and ICT sector :*
 - crossing sector with biotech*
- Valorisation of marine biomass and blue biotechs : a priority of our **Smart Specialisation Strategy (S3)**



Bretagne's biotech ecosystem



→ A strong regional biotech ecosystem



More than 150 companies operating in the biotech sector

- Large groups such as Yves Rocher, Roullier, Lactalis, Sanofi, etc.
- Innovative SMEs and start-ups

CBB Capbiotech : a cluster dedicated to the biotech industry



Scientific research excellence : several excellence research centers in the region

3 marine biology stations : Concarneau, Dinard and Roscoff



The Biological Station of Roscoff, a leading center of EMBRC, the European Marine Biological Research Center, exploring the secrets of marine organisms and part of the European Strategic Forum For Research Infrastructures (ESFRI - ERIC EMBRC)

Marine Biotech applications

- Production of marine molecules for health and cosmetics
- Production and processing of algae as ingredients
- Sustainable use of marine coproducts
- Use of biomass to produce energy



One of the world's first
suppliers of marine ingredients
for cosmetics

Examples of actions developed by the Region



- Breizh'alg : a specific programme to foster the development of the algae value-chain
- Call for proposals for biotech (Pole Mer Bretagne Atlantique) : to develop cooperation between companies and research centers
- Blue Train : a 5-year, specific program to develop new skills in blue biotechs
- Blue Valley : a marine biotechnology science park backed by the Station Biologique de Roscoff
- ERANET on blue biotechnology, together with 20 partners (*approved in march 2018*)
- H 2020 projects : EMBRC, EMBRIC, ILICO (INFRAIA), GENIALG (Blue Growth)

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L'Europe s'engage
en Bretagne / Avec le Fonds européen
de développement régional



Take Home Message



- Blue biotech is a promising, fast evolving sector that is not yet fully exploited
- Overall lack of funding for innovative marine biotechnologies
- Funding gaps for scaling up projects from pilot to demonstration and from demonstration to the industrial scale
- Illustrates the importance of European Structural and Investments Funds (ESIF) and of Regional Strategies for Smart Specialisation (S3)
- FP9 and post 2020 « missions » : need for a real ambition regarding marine science and technology in EU's programmes
- Need to continue and reinforce the cooperation at the EU level : in line with EMBRIC and EMBRC
- Need to develop the convergence of regional, national and European policies