

Invest in Bretagne

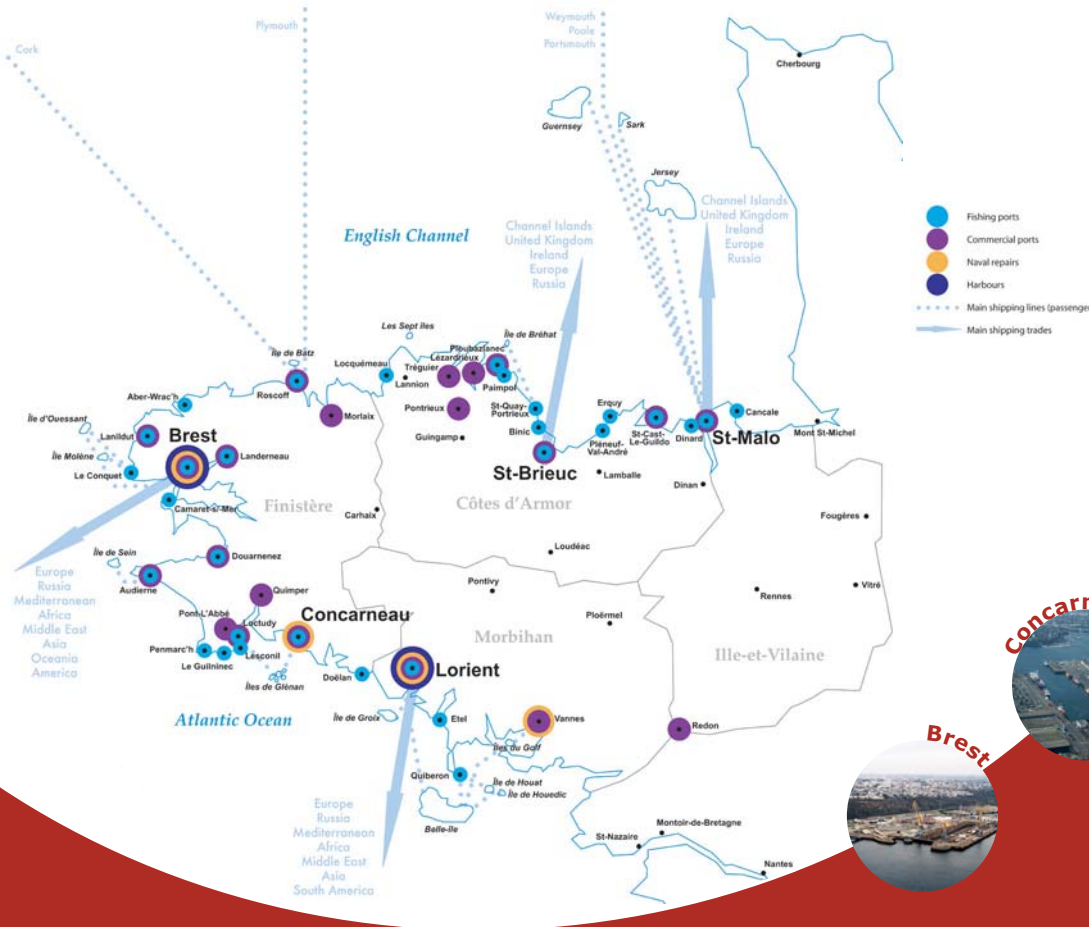
Shipbuilding

Refit & repair

Naval architecture

TIC

Environment



Fitted industrial onshore facilities Brest, Concarneau, Lorient, St-Brieuc, St-Malo

- 12 dry docks from 66 to 420 meters long and from 11 to 80 meters wide
- 5 mobile lifts from 70 to 650 tonnes
- One fixed lift of 2,000 tonnes
- 4 slipways for ship until 400 tonnes
- Industrial deep-water quays, with platforms for heavy loads and handling systems

**Bretagne,
Land of excellence & innovation in Shipbuilding**



R&D Centers

- CEDRE, Centre of Documentation, Research and Experimentation on Accidental Water Pollution
- CNRS, National Scientific Research Centre
- IFREMER, France research institute for sea development
- IPEV (Institut Polaire Français-Paul Emile Victor), French Polar Institute
- SHOM (Service Hydrographique et Océanographique de la Marine), French Hydrography Office
- UBO, Western Bretagne University, including IUEM, the European Institute of Marine Studies

Technology Parks & Clusters

- Bretagne Pole Naval, Bretagne Maritime Cluster
- Concarneau Cluster (IPC), Joint Trade Organization of the port of Concarneau
- Pole Mer, Sea Innovation & Business Cluster
- Technopôle Brest Iroise, Technology Transfer and Research Center

Higher Education Establishments

- AFPI and CFAI, Vocational Training Schools for Industry
- Ecole de la Marine marchande (St-Malo), French National Merchant Marine School
- Ecole Navale (Lanvéoc-Poulmic), French Naval Academy
- ENIB (Brest), National Engineering School
- ENSTA (Brest), National Graduate Engineering Institute, training both civilian and military students
- ENST Bretagne (Brest), IT Graduate Engineering School and International Research Centre
- Lycées maritimes (Paimpol, Guilvinec, St-Malo, Etel), Maritime High Schools
- Rennes 1 University
- South Bretagne University
- Western Bretagne University (UBO)

Events

- Safer Seas, international conferences, workshops, exhibitions about maritime security, 10>13 May 2011, Brest
- Itch'Mer, sea industries meeting-place, 27>29 October 2011, Lorient
- Sea Tech Week, international marine science and technology week (conferences, round tables, trade show, events, tours), 8>12 October 2012, Brest

The Bretagne naval industry is focused on 5 keys sectors

• Shipbuilding: Merchant, passengers, military, fishing, transport, ferries, offshore

Companies: CHANTIERS NAVALS BERNARD, DCNS, GLEHEN, PIRIOU, RAIDCO MARINE, SIBIRIL, STX...

• Refit and repair:

Companies: NAVTIS, SDMO, SMCO, SOBRENA, TIMOLOR-LEROUX & LOTZ...

• Naval architecture, project management, equipment design and supply:

Companies: ACEPP, AGIR, ATLANTIDE, CAMKA TECHNOLOGIES, SOFRESID...

• Products and services: Software engineering, on-board electronics, underwater technologies, robotic and automation, marine paints

Companies: DCNS, ECA, ENAG, IXSEA, MARINELEC, MARTEC, NAUTIX, NKE, PLASTIMO, SEMIM, SLCE, SPIE, THALES, USHIP...

• Oceanography, Signal processing, Materials, Environment:

Companies: ACTIMAR, BOOST TECHNOLOGIES, DCNS, HOCER ENVIRONNEMENT, INSTITUT DE LA CORROSION, IN VIVO ENVIRONNEMENT, LE FLOCH DEPOLLUTION, MAAC HYDRAULIC, METEOSTRATEGY, PAUMIER, TES ELECTRONICS, VEOLIA...

Facts & figures

1st national position for naval repairs (civilian and military)

1st national position for military naval construction

2nd national position for civilian naval construction

12,500 employees

2,000 graduates/year in sea sciences or related subjects

11 shipyards and over **350** companies (50 having more than 100 employees)

Tidal amplitude: **5** metres

Important depths near the coast

2,700 km of coastline

Some success stories



Following a long tradition of shiprepairing in Brest (our Drydock no.1 was probably the largest drydock in the world when it was commissioned in 1910) Groupe Meunier brought in a new style of management. Nowadays, Sobrena is the major shiprepair yard in France. With three drydocks (up to 80 m width and 420 m length) Sobrena can accommodate nearly all the ships in the world, with only very few ULCC exceptions. Sobrena is proud of its long reference list including major operators in North Sea Shuttle Tankers, LNG Carriers, Tankers, Car Ferries, OBOs, Ro-Ros, etc. Our dedication is to provide our customers with high standards of quality, competitive prices and very reliable delivery time.

Michel FAOU, Managing Director, SOBRENA



7 reasons to set up your business in Bretagne

1. Join France's 1st region for naval construction and repair
2. Work among a pool of appr. 12,500 jobs in the naval sector
3. Enjoy public and private research with strong maritime orientation
4. Find 1st rate education and research centres open to the world
5. Work with highly trained and experienced workforce
6. Enjoy support from local authorities strongly involved in maritime issues
7. Join numerous performing and innovative companies

Focus R&D

Pôle Mer Bretagne

The Bretagne Maritime Cluster, a globally focused hub of economic competitiveness, brings together major companies, SMEs, public and private research laboratories, universities and selective higher education institutions located in Bretagne.

Their areas of excellence and fields of research encompass undersea technology, engineering, merchant and naval ship repair and maintenance, fossil and renewable marine energy, biotechnology, fishing and fish farming and environmental and coastal management.

The Bretagne Maritime Cluster combines its skills and expertise with those of the Toulon-based PACA Maritime Cluster on joint project work. Their ambition is to develop innovative products and services based on key technologies in order to achieve a competitive edge on world markets and to create opportunities and jobs.

Their collaborative projects come under five working themes:

- Theme 1: Maritime safety and security
- Theme 2: Shipbuilding and leisure boat-building
- Theme 3: Marine energy resources
- Theme 4: Marine biological resources, fishing/fish farming, biotechnology
- Theme 5: Coastal environmental planning and development



Some relevant projects :

- **EX-TREME**: high-speed transmission of data at sea for all types of vessels using radio and satellite link compatibility depending on a vessel's position.
- **MODENA**: a platform for marine environment modelling and simulation of complex monitoring systems. An essential tool for developing new "intelligent" sensors and surveillance systems.
- **CORONAV**: system for detecting hidden corrosion on the most inaccessible parts of a ship. The inspection system combines electro-magnetism and ultrasound technology.
- **PAINTCLEAN**: environmentally friendly antifouling paint for ships and submerged equipment, composed of biodegradable molecules, some of marine origin.
- **GIRAC**: integrated management of coastal waste water treatment based on simulation of waste water networks and their impact on the coastal area. Use for monitoring plant efficiency, assisting in decision-making process and providing information to public.
- **STRACES**: passive sensor for detecting trace elements of so-called emerging contaminants, pharmaceutical product residues.
- **L-CAT**: aims to construct a hybrid vessel prototype (landing barge+catamaran): coastal operations system and landing craft.

www.pole-mer-bretagne.com

Focus industry

Bretagne Pôle Naval



This cluster created to federate all actors of the Breton shipbuilding, design and repair industry brings together already 60 Breton companies, among them:

DCNS, GAMELIN, GLEHEN, LOTZ, NAVTIS, PIRIOU, SNEF, SOFRESID ENGINEERING, SPIE, STX, TIMOLOR-LEROUX & LOTZ...

They bring expertise in naval architecture, project management, shipbuilding and repair, equipment design and supply, onboard integrated systems, tests and commissioning, logistics, maintenance and related services.

They offer product and services for all marine and naval ships: merchant, passengers, military, fishing, transport, ferries, research, supply, yachts.

Together they strive to:

- build up and modernize the harbour infrastructures
- develop the activity of the companies and increase their visibility worldwide
- provide training focused on technical evolutions...

www.bretagnepolenaval.org

Tax Credit for Research and Development

The Finance Law of 2011 updates the tax credit for R&D in France

Applications can be made simply by completing a straightforward form to be submitted at the same time as the corporate tax return.

The amount of tax credit given to the company is equal to:

- 40% of R&D expenses the 1st year
- 35% of R&D expenses the 2nd year
- 30% of R&D expenses the 3rd year and for all of the following years
- These rates apply to the first 100 M€ of R&D expenses, over and above this amount the tax credit is equal to 5%

The R&D expenses

All R&D expenses are taken into account:

- Staff costs (gross wages and social contributions) for researchers, engineers and technicians working directly on research
- Patent filing and maintenance costs
- Amortization of patents acquired for research purposes
- 50% of standardization costs
- Spending on patent defence and technology watch done within the European Union.

Bretagne International

Bretagne International is a non-profit association of private companies located in Western France. We have been commissioned by the Regional Government of Bretagne to assist Breton companies in their international development, to identify and support foreign companies planning to expand their business into Europe/France through presence in Bretagne.

We provide free confidential assistance through the different stages of your project to expand your business.

Data collection

- Market validation
- Supplier, partner and customer identification
- Availability and skills of workforce
- Financial incentives
- Cost assessments (salaries, taxes...)
- Labour laws

Business meetings

Based on your requirements and your project, we tap into our long experience with Breton companies, our excellent knowledge of the regional know-how and the region's economic environment. We will work with you to set up a series of meetings with key business leaders in the region.

Site proposals

With the support of **Bretagne Développement Innovation**, we can submit to you a selection of sites according to your needs (greenfield, industrial buildings, offices...).

Assistance before, during and after your installation

We help you with all your administrative formalities:

- Law firm, accounting firm, bank and insurance recommendations
- Capital raising orientation
- Creation of your local structure
- Staff recruitment
- Arrival of your expatriates and their families...

Bretagne International

16 C, rue Jouanet - CS 20834
35708 RENNES cedex 7 - FRANCE

Tel.: +33 (0)2 99 25 04 04

Fax: +33 (0)2 99 25 04 00

fdi@bretagne-international.com

www.bretagne-international.com

Meet us at:

- **Kormarine**, October, Busan, South Korea
- **Nautic**, December, Paris, France

In cooperation
with

