

Transnational Workshop

Brest, October, 3rd





WP4 – Space planning to foster aquaculture activities



WP4 – TRANSNATIONAL WORKSHOP - PROGRAM

11:15 – 12:15 Presentation of Aquaculture regulatory process and issues with invited speakers Nathalie Quillivéré/DDTM29 (Local Authority) André Berthou – Président of Shore Algae professional federation Elsa Pointud – Representative of Chambre Syndicale des AAlues et des Végétaux Marins Anne-Marie Cabon – Brest Métropole

- 12:15-13:45 Lunch (Brunch)
- 13:45 14:15 **Presentation of IEF's methodology** <u>linked to the powerpoint sent in july</u> questions and answers *Aurore Coppens (IEF)*
- 14:15 14:30 **Presentation of the results of the questionnaire** Aurore Coppens (IEF)
- 14:30 15h30 **Presentation of current situation in each country** (15' per country) Access2Sea Partners
- 15:30 16h15 Decisions on what should be transferred Validation of communication Document / Data comparaison (preparation of action 2) All partners together



Access2Sea

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1. Presentation of Aquaculture regulatory process and issues





Invited speakers



Cheffe d'unité cultures marines Ministery ofthe Environment, Energy and the Sea

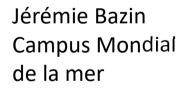




André Berthou President

Syndicat des Récoltants Professionnels Algues de Rive d Bretagne









Anne-Marie Cabon Brest Métropole





Cheffe d'unité cultures marines Ministery ofthe Environment, Energy and the Sea



Cf Pdf DDTM29-Authorization



Le Syndicat des Récoltants Professionnels d'Algues de Rive de Bretagne



colte de Palmaria Palmata, ©S.CUISNIEF

The SRPARB – The Union of professional harvesters of shore-alagae of Brittany was created on January 3, 2008.

Its goal is :

To perpetuate the profession

To settle, as far as possible, firstly harvesters and new-comers To preserve the algal biomass

Currently, there are **21 member companies**.

LA RECOLTE ET LES CHIFFRES EN BRETAGNE





Since 2018, the CRPMEM Bretagne -Regional Committee for Marine Fisheries and Marine Livestock has been managing the harvesting licenses for shore- algae.

The **control** system established is **declarative** : a monthly sheet to be filled with

> the day

> the place of harvest : the Breton coastal linear is divided into squares of 500m side length. Each square has a number of map

> the species

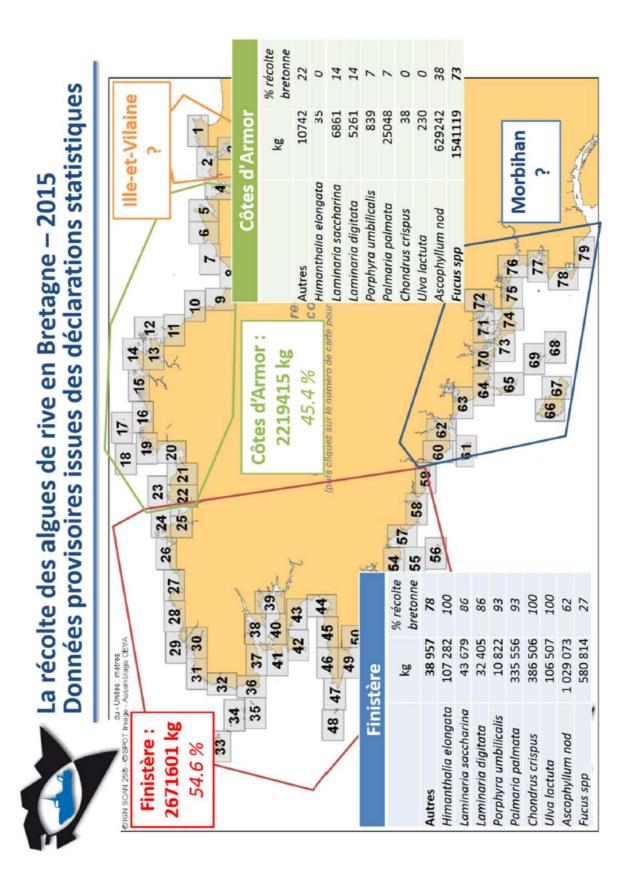
> eight groups of algae

> the tonnage

The difficulties relate to the adequacy between a demand more and more important for marketing algae and the preservation of the algal biomasses.

Within the CRPMEM, we have a work group on shore algae, we voted deliberations on species and depending on the species minimum harvest sizes, harvest dates, pulling (manual remove) or cutting, fallows for a specie Acophylum nodosum.

This WG brings together all the profession harvesters, algae processors but also the administration, the scientific institutions -SBR, UBO, IFREMER, AGROCAMPUS, the Brittany Region, the PNMI etc ...





Chondrus crispus





Laminaria digitata



Porphyra spp.



Ascophyllum nodosum

4



Champs de fucales



Saccharina latissima



Himanthalia elongata





Récoltant à pied d'algues de rive

https://www.bretagne.bzh/upload/docs/application/pdf/2018-07/guide recolte algues v0712.pdf

5

LA RECOLTE ET LES CHIFFRES EN BRETAGNE

In 2018

-79 companies, 140 professional harvesters and 135 seasonal extracts -tonnage harvested 4500 tons with a variation of 4500t to 6000t depending on the years

- the order of the Fucales is the most harvested about 75%

-no number in value



The seaweed culture (macro-algae) in Brittany is done in "open sea" in deep water, There are fifteen companies with concessions but only 5 to 6 in operation. The estimated tonnage is perhaps 100 tons and almost only concerns the order of Laminariales.

The difficulties to implement sustainable farms and develop this activity are:

- the sea "open" many swells, current, storms in winter because the culture takes place from the middle of autumn to the beginning of the following spring

-no control of "crops in bulk" (intensive?) it works or does not work and it is impossible to know the reasons because it is multifactorial

- The market, the capacity of the reproduction of species potentially interesting that precisely for those one we don't control the reproduction

-access to the DPM because of the appeals lodged

-the cost of installation at sea

CONTACT

Our union is currently working on a merger with companies in the harvesting and seaweed sectors, we have answers from Scotland for the moment but we are also looking for companies and research organizations in Ireland, Portugal for example.





Access2Sea

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2. Presentation of IEF's methodology



CONTEXT



DIFFICULTIES of companies of the Finistère To ACCESS TO THE SEA

They are looking for sites to develop their activities and especially real-estate sites with sea-water pumping

An OBSERVATION SHARED by all the local actors



Paradoxically MANY PROSPECTIVES STRATEGIES rely on the ECONOMIC MARITIME POTENTIALS aquaculture, seaweed cultivation, blue biotechnologies

At all levels (European, national, local)

DIFFICULTIES OF SEVERAL NATURES

A default of **VISIBILITY on the offers**A lack of **SUITABLE SITES**A problem of **LEGIBILITY on the** « process »
Problems of **ACCEPTABILITY**The legal COMPLEXITY

a context of COMPETITION

The companies need to find suitable offers in a cost that they can support and in an acceptable calendar

PRESS ARTICLES





Aquaculture> 2 types of sites

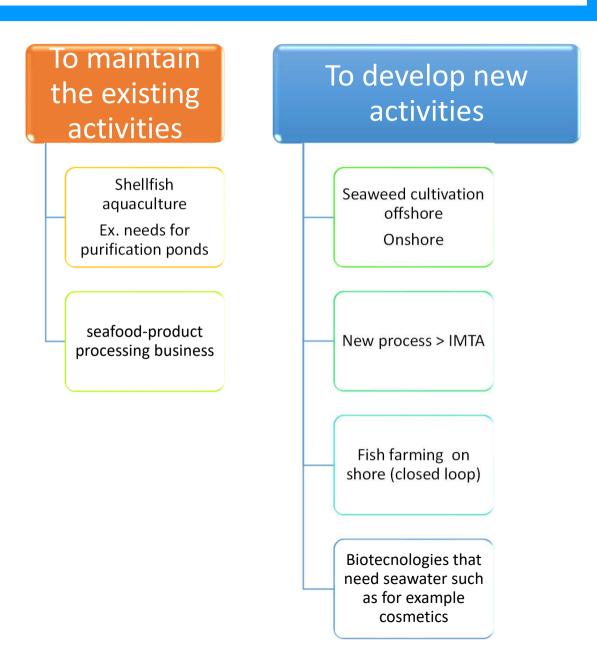


Land-based-sites with

seawater pumping Compounds in the sea and/or ponds (submersibles or unsinkable) An activity at the INTERFACE sea/land Public/private domains Independant or linked Domaine public portuaire

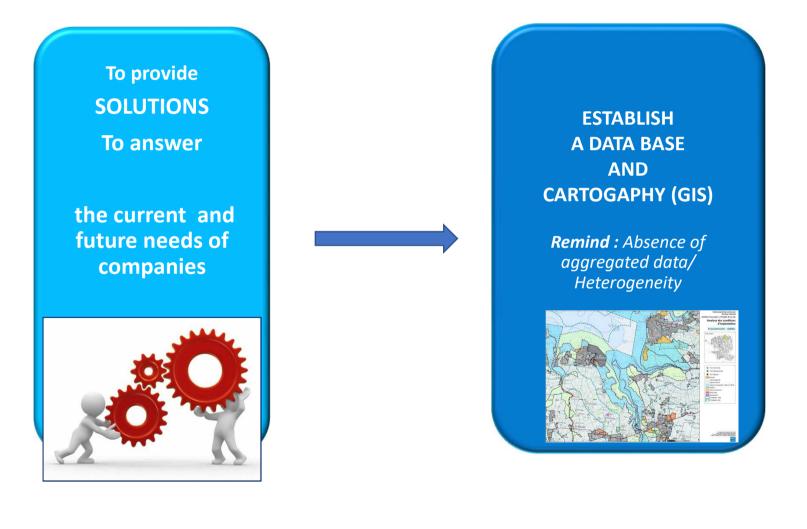
MAJOR ISSUES







Decision taken to tackle the problem => Spatial approach can be a beginning



Beginning of a concerted approach





*Specification : In sum, we asked **To identify , map and caracterize Sea Access in Finistere**

- To map the existing sites and the potential land/real estate spaces taking into account the constraints (legal and regulatory, environmental aspects and other aspects such as residential, tourism, agriculture...)
 = OVERVIEW of the situation
- To rank the areas where investments by public and / or private actors will have to focus as a priority in order to offer as soon as possible capacities for companies.
 = TO DEFINE AND STRUCTURE a strategy
- > To carry out this analysis in **a coherent and unified way** across the department.
- => TO MEET THE CURRENT AND FUTURE NEEDS OF COMPANIES.

SCOPING EXERCICE



Necessity to

DEFINE what is SEACCESS

To avoid confusion

Because Sea Access in French often refers to equipment or infrastructures that permit to embark or unload/disembark such as slipways / dock sides

For our study, SEA ACCESS means

spaces on land

whether bare or built,

- with seawater pumping equipment, in working conditions or not, or which could be assigned priority to aquaculture and benefit later a seawater pumping
- cropping areas at sea, already licensing, or which could be licensed

TO PRECISE THE ACTIVITIES CONCERNED

- **Production activities**= marine farming concessions as defined by the decret (concessions de cultures marines) : <u>Décret</u> <u>du 22 mars 1983</u> :
- Biosciences activities : cosmetics, nutrition, health, needing a seawater pumping

The spatial planning approach doesn't concern sailing or Renewable Marine Energies



The study consortium chosen





Study and consultancy firm for local authorities and economic and institutional actors (construction, planning, environment and land domains)

> Representative of the study group

 Coordination of the study and direct interlocutor of the project manager



Brest Bretagne urban planning agency Expertise in planning, economy and land

> Creation and structuration of the databases

> Cartographic Atlas Development



Consulting firm specializing in aquaculture (design, engineering, project management, aquaculture projects, master plans ...)

> Business support on aquaculture

> Evaluation of the interest of the sites

> Technical analyzes of works / aquaculture interests

> Analysis of environmental conditions



Technical studies office in the fields of water engineering.

> Business support on the hydraulic technical analysis of pumping and piping

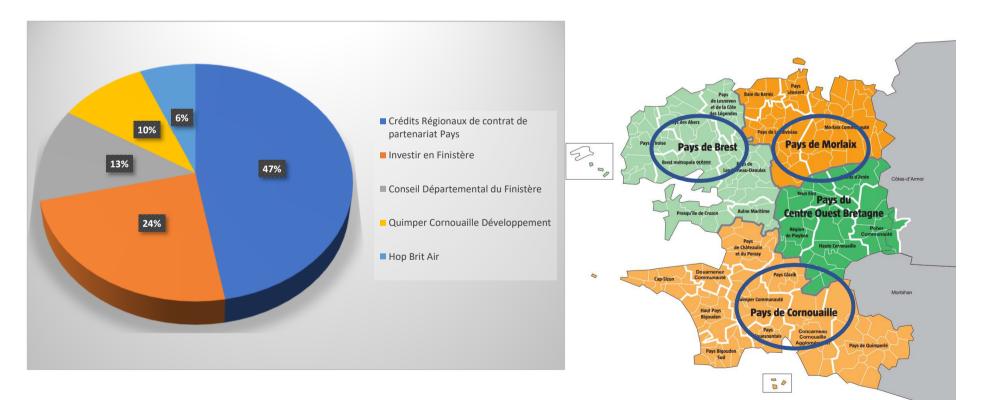
> Analysis of the installation conditions of works

CROSS DISCIPLINARY APPROACH

FINANCING



Cost of the study : 121 000 € TTC Financed by 5 actors => IEF led all the demands /managed the project the cost input has been shared according to the coastline (because some funds are managed by local authority such as « maritime pays » -administrative authority)



16 monthes work : july 2016 > october 2017

FEDERATED AND CONCERTED APPROACH



IEF managed the study but all decisions was taken by the steering comitte The other stakeholders have been concerted and co-decided some elements

Steering commitee



Local actors : public, profesionals and scientists



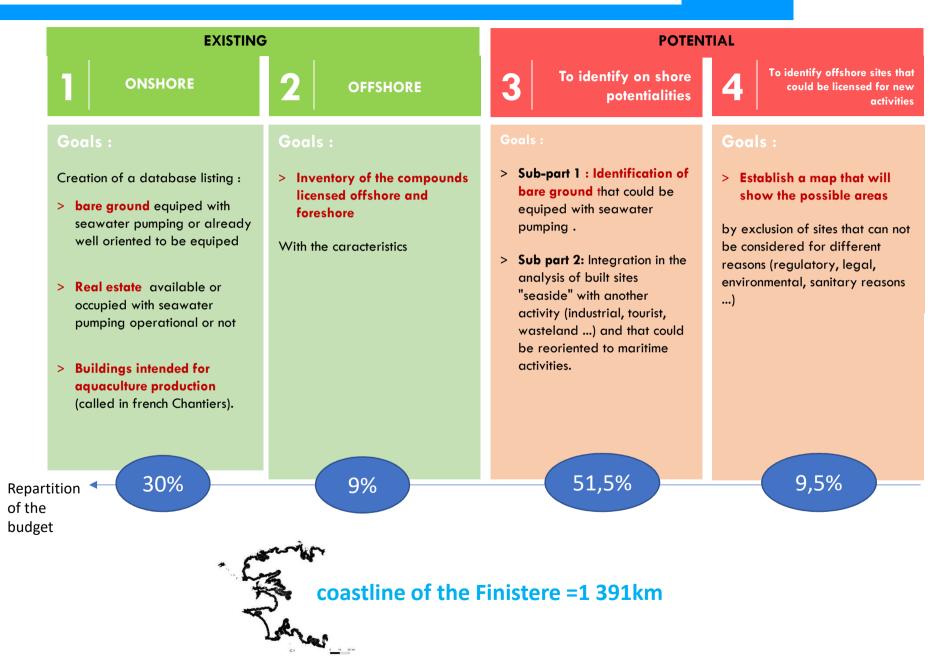
Co-decide

Involve in the construction of the tool

Choose the studies consortium Co-decide

CONTENT of DATA BASE AND GIS

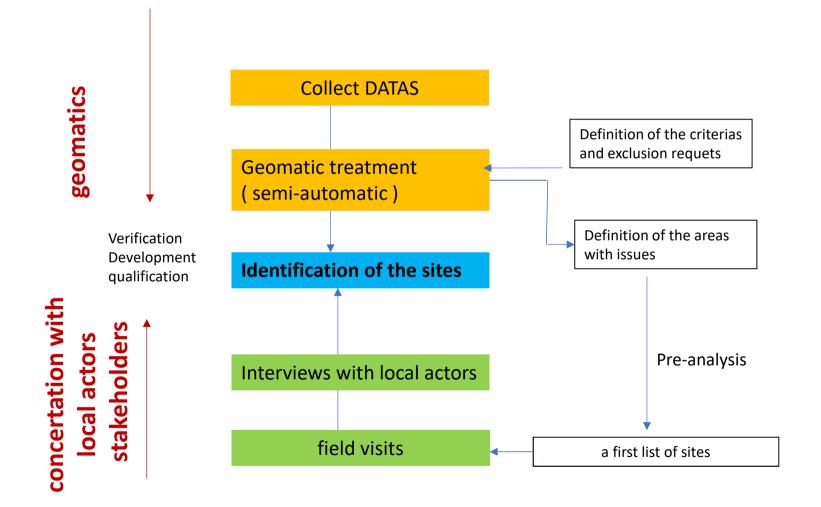




GLOBAL METHODOLOGY

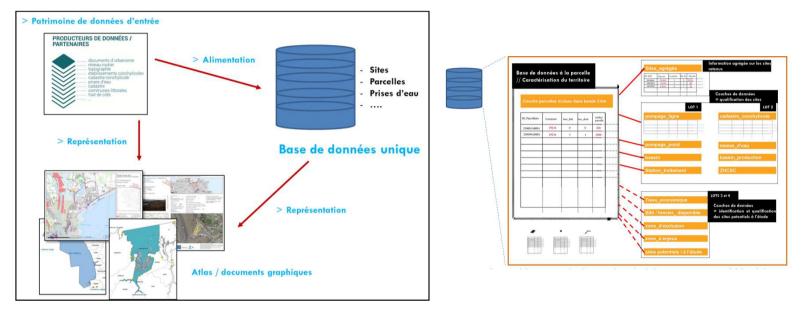


A DOUBLE APPROACH



PROCESS





A DATABASE that can be associated with other data-sources/GIS system

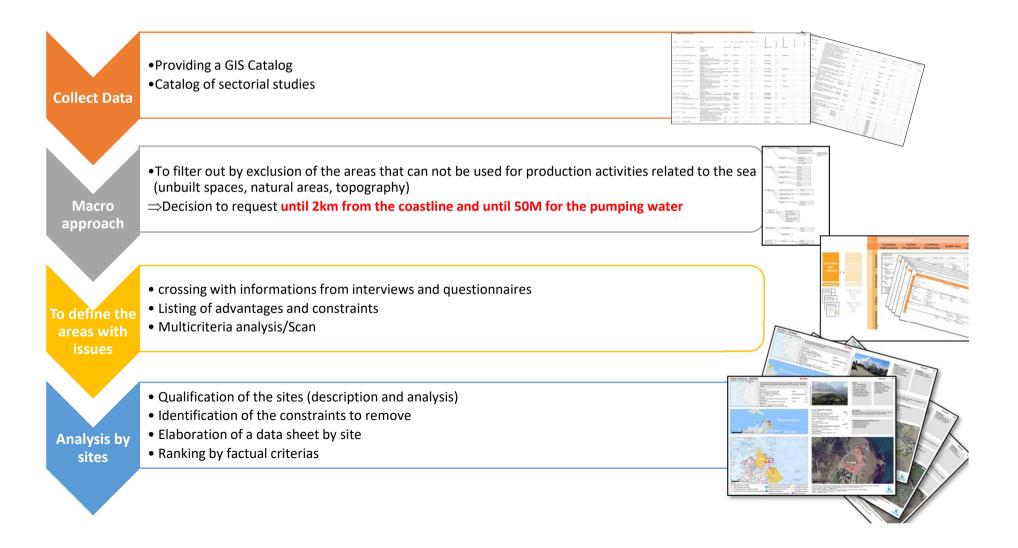
Updatable

linked to the functional and administrative entities

Masse d'eau ⊃ DCE	Bassins de production Bassin de production au sens du « schéma des structures » ZHCSC	Sites → Unités fonctionnelles	Parcelle Cadastre CM4 Création parcelles sur DPM hors CM4 Cadastre conchylicole
Données qualité d'eau : D Etat écologique Etat chinique	Localization des sites au sein des basina de production Données qualitilé d'aus : Classement sonitaire Données prospective : Classement sonitaire Dennées prospective : Papear autorisées	Formalisation de fiches par site : Description et qualification du tire Insertion dans son environnements	Données à la parcelle : Schelle de travail pour la définition des sites existants et potentiels Gualification des sepaces pour interrogation de la base & d'argon 2 et, le ca échéant, selon critières de pondération por filières I Identification de zones à enjeux

Specific works for the potential sites LAND

- \Rightarrow In addition, necessity to lead specific studies
- ⇒ We used a criteria grid organised by « families » (cf next slide) mobilised at different stages and used to select and qualify the potential sites

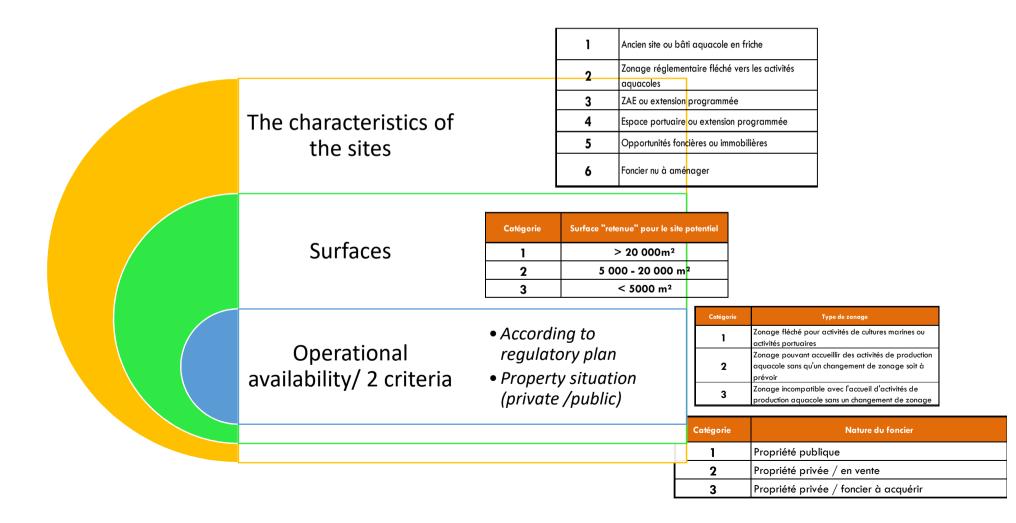


6 families of criterias used to filter

Regulatory Constraints	 Urbanism Legislation Easement Protected areas
Facilty to settle	 Regulatory Politics logistics Possibilities of transformation
Operational conditions	 Topography Risks Situation of the land
Seawater pumping conditions	 Cost for the connection Lenght until the foreshore/low tide Pooling of equipment
Water quality	•Quality •Physical characteristics
The risk of conflicts	

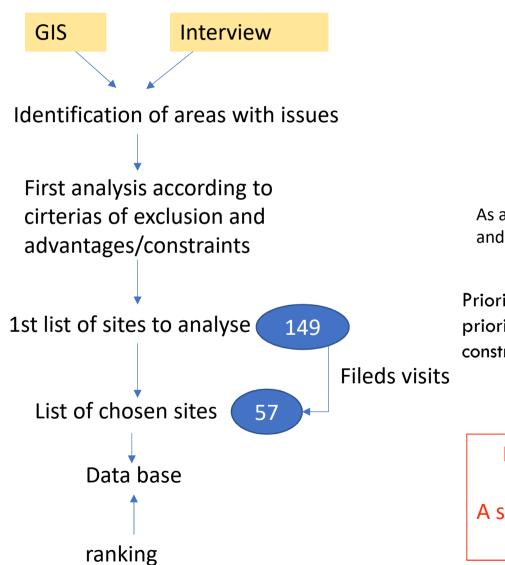
The ranking

A unique ranking is not logical : one site can suit for fishfarmers but not shellfish ... => Decision to have various ranking



RESULTS





As a reminder, integration of existing available sites and wastelands

Prioritization and evaluation of selected sites to highlight priority sites according to typology (site configuration, constraints encoutered, operational availability)

Finally, 57 potential sites (on shore) have been identified A sheet has been edited for each of them with a ranking

Specific works for the potential sites / OFFSHORE

Identification of areas that remain by exclusion

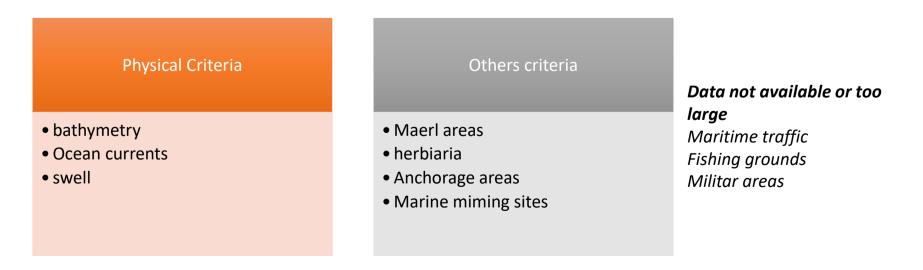
= it is a first approach (9% of the global study) because it exists other work in progress which goal is to define more precisely

1st step : the first step carried out was to define, by family, the criteria to be taken into account according to their impact opposite to the establishment of aquaculture activities.

Given the diversity of activities that can be envisaged, exclusionary reasoning has not deliberately been too restrictive and will have to be refined by sector according to the specific characteristics of each type of activity.

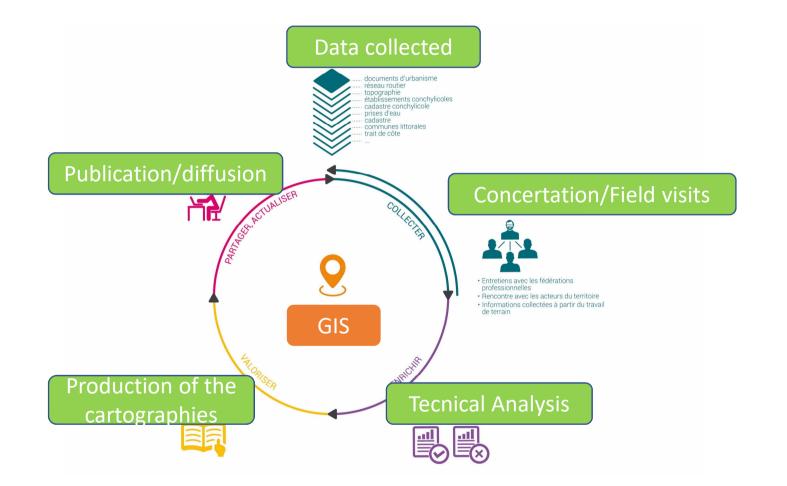
Once the criteria have been identified, the next step has been to prioritize these criteria in the form of "excluding", informative (assets, constraints) or to be considered on a case by case basis depending on the sites, species and cultivation methods.

As part of this study, only the exclusion parameters were then mobilized.



To sum up

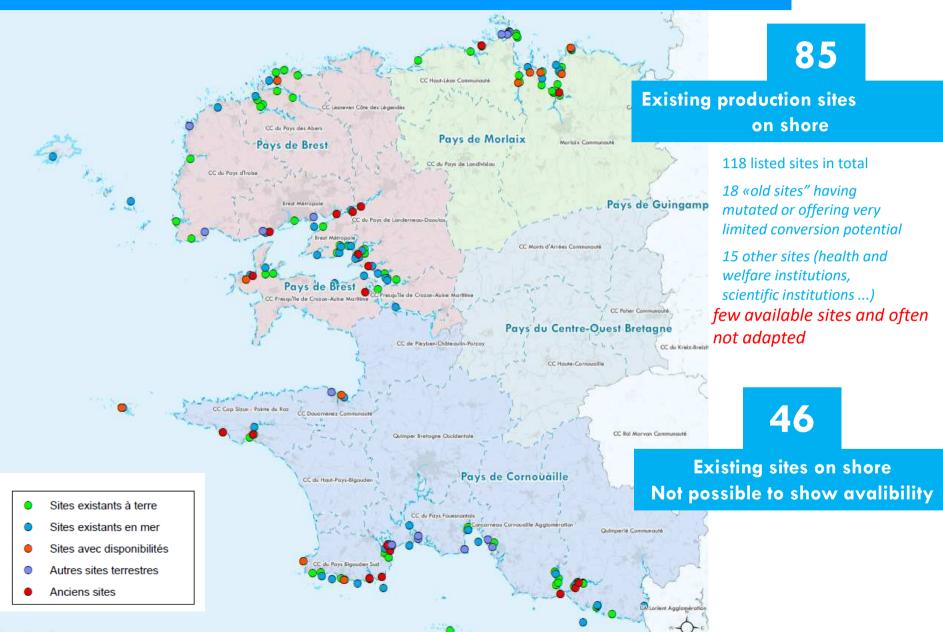




=> TO ESTABLISH AN AUDIT OF EXISTING SITES AND A PROSPECTIVE VISION on shore /off shore of the sea areas dedicated to marine culture activities

RESULTS





21.2

Example of sheet

Beg an Diben

Commune : PLOUGASNOU EPCI : Morlaix Communauté

Masse d'eau : FRGC09 / Perros-Guirec - Morlaix (large) Bassin de production conchylicole :

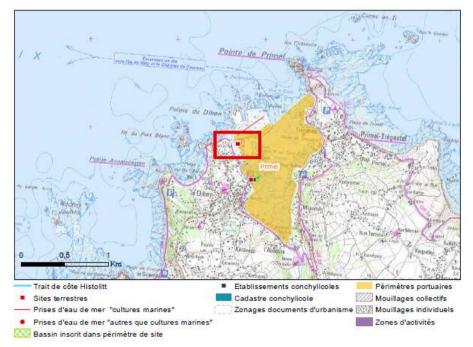
Num. : 5 / Finistère nord - eaux profondes Identifiant du site : 29188002

Etat : 2 - Site actif avec disponibilités

Type(s) d'activité(s) : Mareyage







FONCIER / IMMOBILIER / URBANISME Surface du site :

7 864 m² 1 310 m² Emprise bâtie au sol en domaine cadastré : Nombre d'entités bâties cadastrées : 5

Nombre de propriétaires de parcelles bâties hors DPM : 1 Typologie des propriétaires des parcelles hors DPM : Public : 100 % Privé : 0 % Pers. morale : 0 %

Espace économique : ZAE du Port du Diben Nord

Document d'urbanisme en vigueur (Avril 2017) : PLU 29/07/2010 Approuvé le :

CARACTÉRISTIQUES TECHNIQUES ET PHYSIQUES Nombre de prises d'eau de mer alimentant des bassins situés "hors DPM" : Nombre de bassins inscrits dans le périmètre de site : Équipements d'accès à la mer : Cale / Terre plein / Bord à quai Altitude mini : 5 m

Altitude maxi :

ENVIRONNEMENT

Zonages environnementaux présents sur le site : ZNIEFF 2 / ZICO / SITE INSCRIT



Étude financée par : le Consell régional de Bretagne (dans le cadre des contrats de partenariat des Pays de Brest, Moriaix, Comouaille), Investir en Finistère, le Conseil départemental du Finistère, Quimper Cornoualle Développement, HOP ! Version du 25 septembre 2017 Sources : © IGN SCAN25© 2015 - ORTHO 2015 - E-mégalls Bretagne - DDTM du Finisitere - DREAL Bretagne -ADEUPa - Quimper Cornouallie Développement - Moriaix communauté

Contact : contact[at]investir29.fr



Fiche N°: 2

10 m





Example of sheet

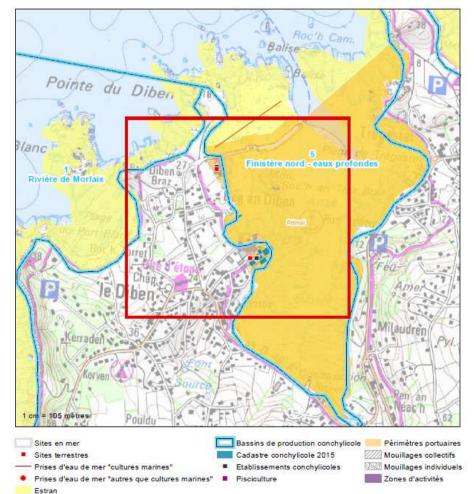
Pointe du Diben

Identifiant du site : 1

Masse d'eau : GC09 / Perros-Guirec - Morlaix (large)

Bassin de production conchylicole : Num. : 5 / Finistère nord - eaux profondes

Schéma des structures / Planification Espèces autorisées par bassin de production : Se rapporter aux tableaux situés en annexe



SURFACE	
Surface totale des concessions du site :	437 m²
Nombre de concessions :	1
Surface moyenne des concessions :	437 m²
QUALITÉ D'EAU	
Classement microbiologique pour les coquillages :	NR
CARACTÉRISTIQUES PHYSIQUES	
Nombre de concessions au-delà de l'estran :	0
Surface totale des concessions au-delà de l'estran :	0 m²

ENVIRONNEMENT

10	en alexandra.	
Natures d	l'exploitation	Dépot bassin submer
D	épot bassin insubmersibi	e



Étude financée par : le Conseil régional de Bretagne (dans le cadre des contrats de partenariat des Pays de Brest, Moriaix, Comouaille), investir en Finistere, le Conseil départemental du Finistere, Quimper Comouaille Développement, HOP 1. Version du 25 septembre 2017 Sources : © IGN SCAN258 2015 - ORTHO 2015 - E-mégails Bretagne - DDTM du Finistere - DREAL Bretagne -ADEUPa - Quimper Comouaille Développement - Moriaix communauté Contact : contact[at]investir23.fr



EXISTING AVAILBALE













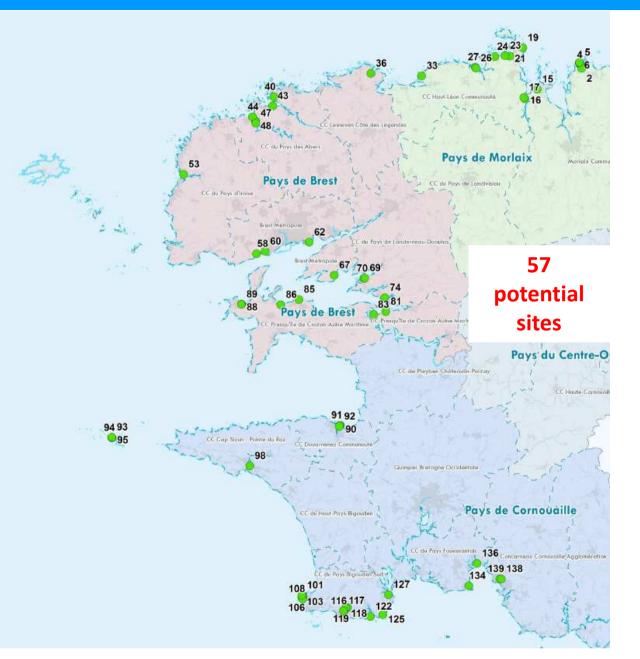


Cartography and sheets on the website <u>https://www.accesmerenfinistere.fr/Accueil-865-0-0-0.html</u>



POTENTIAL/ON SHORE

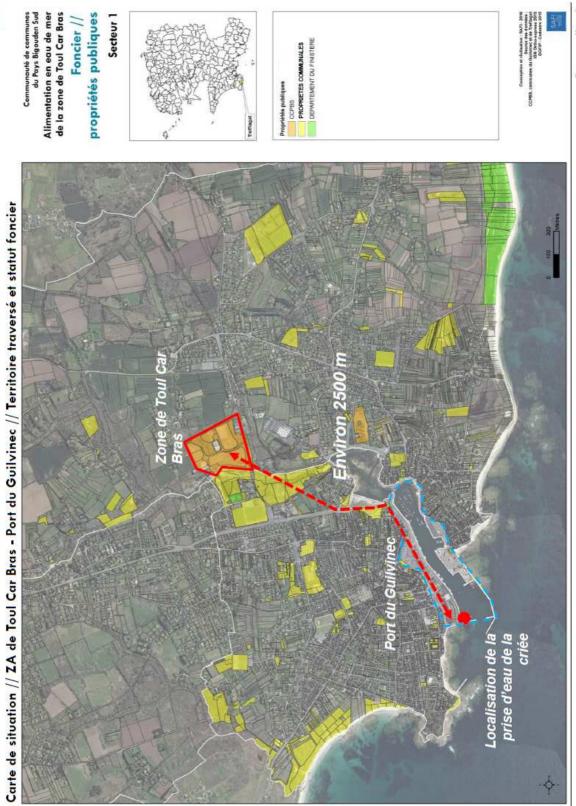




Private information = presentation on demand

A sheet by site cf next slide







Example of sheet

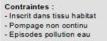
L'Abbesse - 29188x01

RETENU

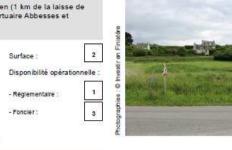
Document de travail - Ne pas diffuser

Fiche N° :

2









Surface du	7 616 1	mª				
Emprise bâtie au sol en domaine cadastré :					0 1	mª
Nombre d'entités bâties cadastrées :						0
Nombre de	propri	étaires de p	arcelles bâtle	s hors DPM :		4
Typologie d	les pro	priétaires de	es parcelles h	IORS DPM :		
Public :	0 %	/ Privé :	100 % / Pe	ers. morale :	0.96	
Espace éci	nomiq	ue :				
Document d'urbanisme en vigueur (Avril 2017):					PL	U
Approuvé le :					29/07/20	10
CARACTÉ	RISTIC	UES TECH	INIQUES ET	PHYSIQUES		
Équipemer	ts d'ac	cès à la me	r.:		Ca	ale
Attitude mit	11 :	6 m / Alth	tude maxi :	15 m		
ENVIRON	EMEN	IT				
Zonages e ZNIEFF 2/		ementaux p	présents sur le	este:		

Avis global

Atouts :

- Proxi, immédiate mer

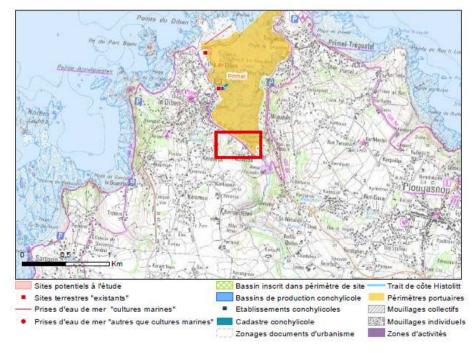
- Zonage compatible

- Proxi, act. maritimes

- Infrastructure support PE

Site bénéficiant de la proximité d'activités maritimes. Pompage possible à marée haute. Risque conflits d'usages.

Prochaines étapes et contraintes à lever : - Etude faisabilité pompage et rejet - Qualité d'eau à vérifier



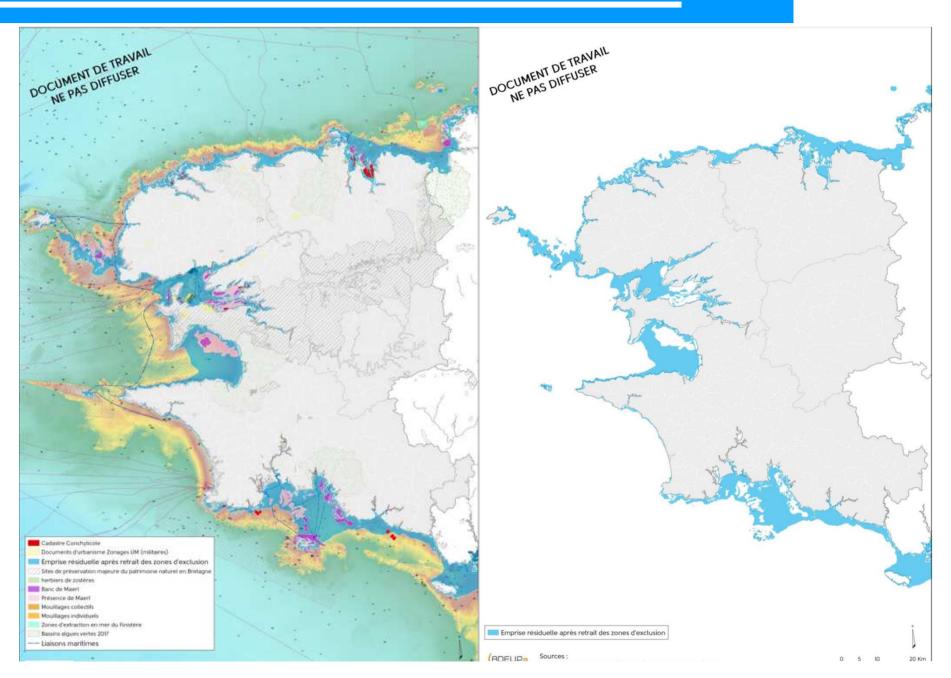


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POTENTIAL/OFFSHORE





Conclusions

Need to PRESERVE THE EXISTING

IEF contributes to public inquiries for local urban plans

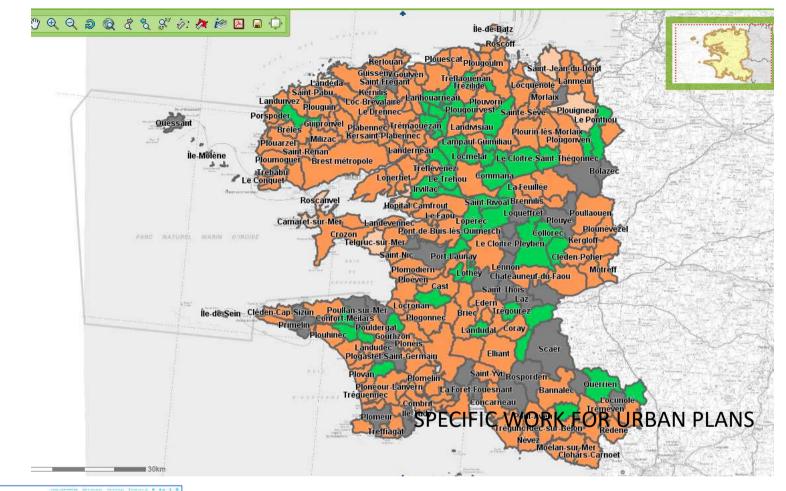
// to help to raise public and political awareness

The challenge of arriving at CREATING NEW SITES

The 57 sites are not going to be equipped

=> current work with the professionals/local authority to select the best sites

The challenge of getting possibilities where there are no more











Access2Sea

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3. Results of the questionnaire





A questionnaire in order to :

Evaluate current situation in each AA coutry

Compare spatial approach

Assess the transferability of IEF's work

4 sections in the questionnaire



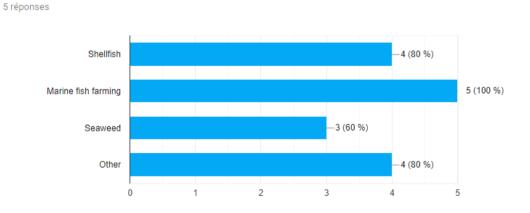


SECTION 1 : NEEDS OF BUSINESSES

All the partners have companies <u>that are loooking for aquaculture</u> <u>sites</u>

The demands concern both on shore and off shore sites.

The activities concerned are :







SECTION 1 : NEEDS OF BUSINESSES

All the partners have companies <u>that are loooking for aquaculture</u> <u>sites</u>

The demands concern both on shore and off shore sites.

The activities concerned are :

- 1/ Marine Fish farming (all partners)
- 2/ Shellfish (England/Portugal/Spain/Ireland W)
- 3/ Other (Portugal/ Spain/ Ireland)
- 4/ Seaweed (England/Spain/Ireland-W)

The companies have difficulties finding sites except in Spain.





SECTION 1 : NEEDS OF BUSINESSES

Spain/Ireland have problems with the transfer of existing premises England = NO Portugal NA

"It depends on the degree of protection of the area. For instance, there are locations where marine aquaculture is allowed, however the development of other activities (housing, hotel business, etc.) are not permitted". Spain

"Aquaculture sites are available, licensing is difficult and there can also be community and other sectoral concerns" Ireland



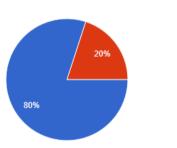


SECTION 2 : AQUACULTURE EXISTING SITUATION

YesNo

Do you or any of your partners have a tool listing the aquaculture EXISTING SITES ?

5 réponses



Portugal	Spain	Ireland - W	Ireland - U
Both	Both	Both	On shore
Private	Public	Public	Private
Excel	GIS	List	

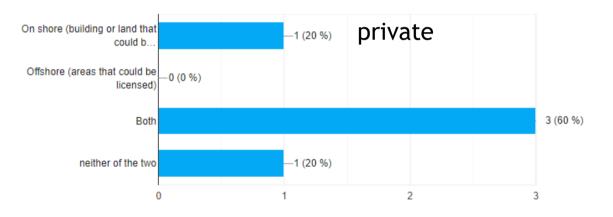




SECTION 3 : POTENTIAL SITES

Are you able to indicate potentially available aquaculture sites ?

5 réponses



Spain = Public Ireland-U = partially Public Ireland-W Private





SECTION 3 : POTENTIAL SITES

All partners have ongoing creation or development of aquaculture areas

« As part of the Welsh Marine Plan a spatial planning methodology is being developed to locate specific aquaculture growth area and areas where potential aquaculture site would be most easily developed. This is still in draft forma t present but should be produced in the coming months."

Projects submitted to get funding for new aquaculture sites onshore and offshore

The regional government of Andalucía is working on the selection of AREAS OF INTEREST FOR MARINE AQUACULTURE. At the moment, it is focused on the Mediterranean costa line and will be also developed in the Atlantic area of Andalucía.

An area of interest for marine aquaculture it is defined by the regional government of Andalucía as an area where marine aquaculture activities are administrative compatible with the uses assigned to this area and the development of this activity is also compatible with the ecosystem, socially accepted and technical and economically viable.





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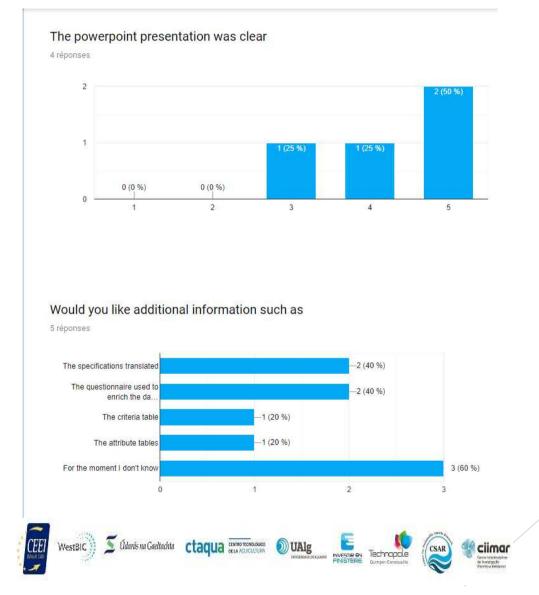
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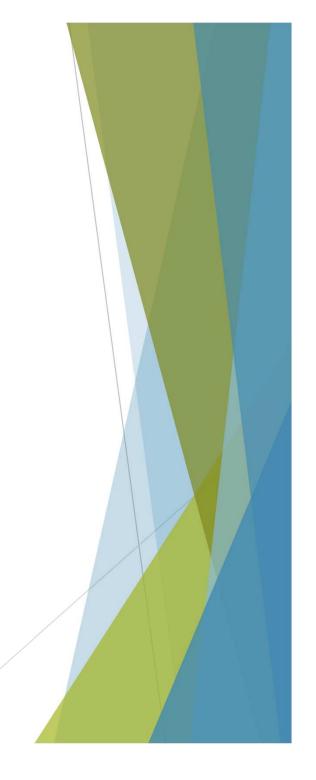
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SECTION 4 : EVALUATION







15:30 - 16h15 Decisions on what should be transferred Validation of communication Document / Data comparaison (preparation of action 2)

1.1 Decision on what should be transferred

Situation : the partner has already a tool for both onshore/offshore

Situation : the partner has partially a tool

Situation : the partner has no tool





Proposal of a grid

	Spain	Portugal	Ireland	Ireland	England
On shore					
Off shore					
Both					





15:30 - 16h15 Decisions on what should be transferred Validation of communication Document / Data comparaison (preparation of action 2)

Suggestions

To compare situation : proposals of a few indicators

Coastlile Linear Number of existing areas Number of potential areas

Comparaison of the criteria





Next step / ACTION 2 => January 2020

