

SERIES



# BLUE CARBON MARKET

# How to use the platform

---

## ❖ PARTICIPANTS

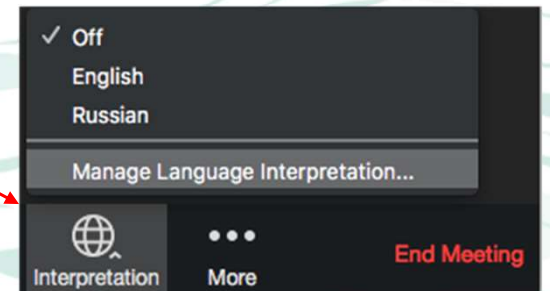
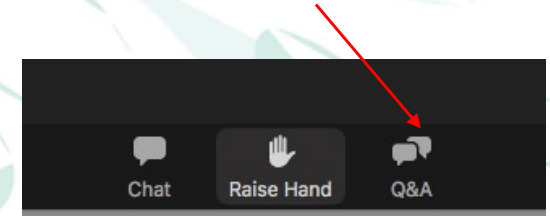
You can ask questions through the « question box ». The moderators see them and relay them to the speakers who will answer them in the "question and answer" sessions.

## ❖ TRANSLATION

If you need interpretation please choose the channel below...

## ❖ SPEAKERS

Think that everyone can see and hear you...and that you are being recorded for future broadcasts! Please turn off your microphones when you are not speaking.



# Context & objectives

---

## Series « Blue carbon market »

**The aim of this series is to answer the questions most frequently asked about this market.**

**What are the blue carbon ecosystems ? The blue carbon market is booming, but is it really efficient ? How does it works ? How it can be used to finance restoration project ? Investments progress ?**



# Context & objectives

---



## ICO SOLUTIONS

Islands, Coasts, Oceans Solutions : Identify and share good initiatives and practices all around the world with our partners



Conservatoire du  
**littoral**

French public institution : acquire parcels of coastline threatened by urbanisation or degraded in order to turn them into restored, developed and welcoming sites that respect the natural balance.



INTERNATIONAL NGO FOR  
**MEDITERRANEAN  
SMALL ISLANDS**

International NGO : promotion and assistance in the management of Mediterranean island areas by the implementation of concrete actions in the field.



**SMILO**  
SUSTAINABLE ISLANDS

Small Islands Organisation, international NGO : supports small islands of less than 150 km<sup>2</sup> towards their sustainable development and the sustainable management of their resources (water & sanitation, waste, energy, biodiversity, landscape and cultural heritage).

# Organizing team



**Fabrice Bernard**  
**Moderator**

Europe & International  
Head-Officer  
Conservatoire du littoral



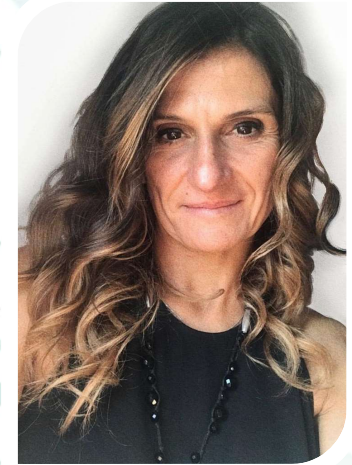
**Enora Tregouët**  
**Organization / Question box**

Europe & International  
Project officer  
Conservatoire du littoral



**Félix Colas**  
**Organization / Back Office**

Europe & International  
Project officer  
Conservatoire du littoral



**Isabella Ranieri**  
**Intepreter**





# BLUE CARBON MARKET

- **June 22th** (4:00 PM – UTC+2) >> **2<sup>nd</sup> Episode : Blue carbon feedback and projects**
- **Last time** >> **1<sup>st</sup> Episode : Understand the blue carbon market**

# Program – Episode 2

---

## Blue carbon projects

### ❖ **Feedback from a certifier** – Valentin Bouvier

10'

- **Q&A** – 10'

### ❖ **Label Bas-Carbon** – Adeline Favrel - 10'

- **Q&A** – 10'

### ❖ **The Coastal Carbon Atlas**– Steven Canty and Jaxine Wolfe - 10'

- **Q&A** – 10'

### ❖ **The carbon market: a mystification ?** – Marie-Christine Cormier-Salem - 10'

- **Q&A** – 10'

### ❖ **Round Table**

### ❖ **Closing**

# Speaker

---



**Adeline Favrel**

Carbon Certification Project Manager



France



# Speakers

---



Smithsonian  
Institution

United States



**Jaxine Wolfe**

Data Manager,  
Coastal Carbon Network

**Steven Canty**  
Research Biologist,  
Marine Conservation Lab

# Speakers

---



**Marie-Christine Cormier-Salem**  
Director of Research in social sciences



France

# Speakers

---



**Valentin Bouvier**

Principal Portfolio & Partnerships Manager

**ecoact**  
an atos company

France





## Retours d'expériences d'un certificateur qu'est-ce qui est nécessaire pour mettre en place un projet qui émet des crédits carbone ?

Valentin Bouvier

*Principal Portfolio & Partnerships Manager at EcoAct*

# EcoAct in a nutshell

## Who are we?

- EcoAct is present in **9 countries**: France, UK, Spain, USA, Canada, Germany, Italy, Turkey & Kenya.
- **International group** with 270+ committed and passionate employees

## Expert in Climate Consulting

### French consulting company, leader in low-carbon strategy

- European leader in Net-Zero strategy
- French leader in the number of Bilan Carbone® and LCA projects

Since 2005, **EcoAct has carried out more than 3,500 missions in 35 countries**, building a unique expertise in climate change mitigation, adaptation and resilience.

## Our partners



## Developer of carbon offset projects

- **Pioneer of carbon offsetting** in France ; **European leader** in voluntary carbon offsetting (**70+ million tCO<sub>2</sub>e offset since 2005 and 13 million tCO<sub>2</sub>e in 2022**)
- **Nature-Based Solutions**: a team of 30 people dedicated to developing nature and community-based projects
- Voted Best Project Developer in the World by *Environmental Finance*

**2005** : Creation of EcoAct, realisation of rehabilitation, environmental awareness and social reintegration projects

**2008** : Registration of the **1<sup>st</sup> VCS-Social Carbon offset project**

**2016** : EcoAct North America opens in New York

**2018** : EcoAct Spain opens in Barcelona

**2022** : EcoAct Italy opens as well as EcoAct Germany

**2007** : First forestry projects in France and opening of an office in Brazil.

**2010** : Launch of the "Hifadhi-Livelihoods" project in Kenya

**2017** : Acquisition of Carbon Clear (EcoAct UK and EcoAct Turkey)

**2020** : EcoAct becomes an Atos company



# EcoAct and Offsetting

## Nature- and Technology based solutions unit (NTBS)

### Project development team

- An innovative and world award-winning project developer.
- Support 40+ carbon offsetting projects.
- 3 clusters: forestry, blue carbon and community-based.
- Supporting development of Blue Carbon projects in [India](#), [Mexico](#), [Kenya](#), [Guinea](#)



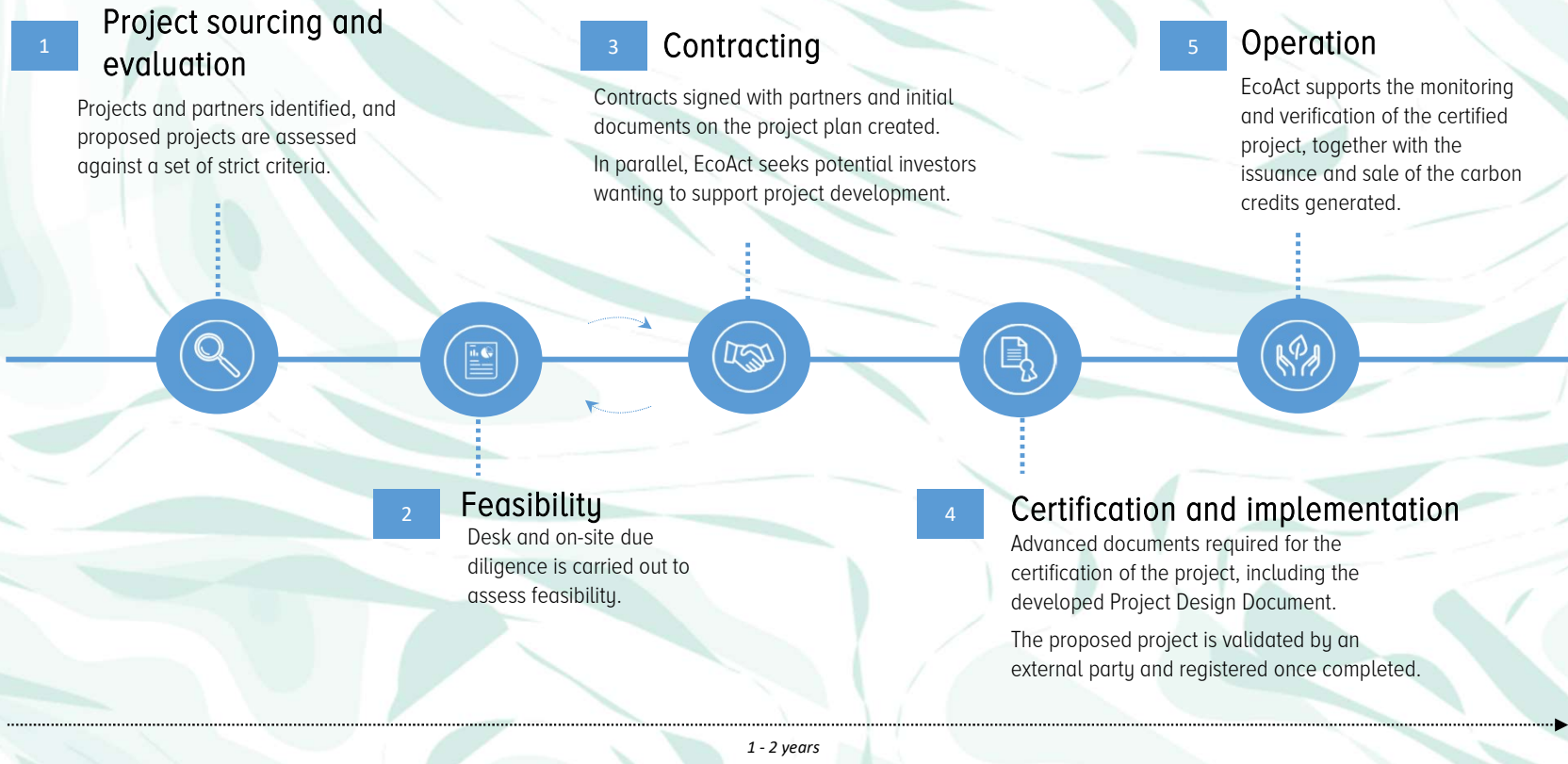
### Portfolio & partnership team

- Strong expertise on projects sourcing and promotion of projects to corporate client base
- Intermediary in the acquisition of certified carbon credits with high social and environmental added value.
- Due diligence and on-site audit work conducted for each project presented to clients
- Upfront investment portfolio





# Developing an offsetting project



# Feasibility Study

## Due Diligence

- Geopolitical context of the project
- Technical foundations of the project
- Arrangements between local communities/ local government – license to operate
- Adaptability of methodologies/ species
- Background check on partner
- Discussions on the project financials and Business plan with partner

## Baseline Survey

- Preliminary calculations of the **ERs expected** from the implementation of the project
- Following the adapted **methodology** to establish the baseline scenario to compare against the project scenario
- In the context of upfront investment, this step is key to be able to present a project to a client as it will form the basis for the abatement cost of the project

## Local Stakeholder Consultation

- **FPIC** (Free prior and informed consent) process to be implemented across project;
- Consulting stakeholders that form part of the project to create **buy-in** and participation;
- Should allow for local stakeholders to disclose their **grievances / questions** regarding the project
- Should also allow for the elaboration of a **Benefit Sharing Mechanism** and a participatory approach to project management and implementation

# Certification / Evaluation

## Standards (International/ Domestic)



## Methodologies

- Each project follows a peer reviewed methodology developed in close partnerships with the standards
- International Blue Carbon Methodologies for Mangrove restoration include **VM0033**.
- EcoAct has developed a methodology for the **conservation of Posidonia Seagrass** in the French mediterranean coast through our R&D team 'CLICK'
- Currently working on the development of Mangrove restoration methodologies for LBC – end goal 2024

## Verification Timeline

- **Writing of a Project Design Document**
- Validation by third party auditor
- Validation by Standard
- **Monitoring reports**
- Verification Report by auditor
- Verification Report accepted by standard
- Credits generated

Upfront investment/  
Offtake

Forward  
Purchasing

Spot  
purchase of  
credits



# Project - Semilla Azul



A community-based mangrove restoration project in the Yucatán peninsula, Mexico.

The project area is located within the "Reserva de la Biósfera Los Petenes", which holds unique, endemic mangrove ecosystems such as the Petén.



Yucatán peninsula  Biodiversity hotspot, including 473 species of flora and 434 of fauna.<sup>1</sup>

 High economic value, such as for the development of ecotourism.

Local partner: **RESILIENCIA AZUL** 

Aims to restore 5,000 hectares of degraded mangroves.



and remove more than 4,000,000 tCO<sub>2</sub>e from the atmosphere.

- 1,200 Ejidos concerned - "communal" approach
- Community- based (heavy involvement of local communities in **planting**)
- Direct benefits through employment/ indirect benefits through additional livelihood creation and BSM;



# *Key Takeaways – Semilla Azul*

## Complex land rights

- Complex communal approach to land tenure
- Ejidos - Parcel based-territories that were awarded by the government to local communities;
- Key agreements must be signed by proponents / Ejidos/ Resiliencia Azul
- Context may differ from project to project, understanding of beneficiaries is key to understanding carbon rights

## Technical

- So far only **one project** has been registered under the new **VM00033** methodology under VCS – Lack of precedence and technical
- One of the largest Mangrove restoration to date
- Relatively new project types means that some aspects will require heavy questions on behalf of standards – which may at times be outside of the

## Community engagement

- **Benefit Sharing mechanisms** linked to the land and Carbon rights discussed with local beneficiaries;
- Iterative process with Ejido communities to revise the ways in which monetary benefits from the project are re-invested;
- Mangroves take time to grow, it's important to keep communities engaged despite this. Also important for investors to have a strong vision of value added of project.



# *Trends for investors*

---

1. Increased demand to fund projects on **ex-ante basis** to secure competitive price and increase commitment/ accountability in project (50% of Market price on average);
2. Interest in innovative and new monitoring technologies (GIS/ remote sensing);
3. Demand for increased transparency on the **breakdown of project budget and costs**;
4. High quality and strong direct and indirect co-benefits linked to blue carbon projects - a demand that goes beyond carbon and requires strong BSM / Stakeholder considerations
5. Guarantees on project budgets and solid projection on ERs + **Risk management**



# *Our Approach*

---

1. Elaborating robust **business plans** according to internal template through iterative process with on the ground partners to set a fixed budget for the project;
2. **Adapt** to specific client requests for innovative monitoring solutions + possibility to rely on in-house experts
3. Open dialog with investors on **budget breakdown** once in advanced conversations
4. **Local Stakeholder consultations** conducted in feasibility stage of project to ensure buy-in from project beneficiaries + integrate **Benefit sharing Mechanism** within business plan
5. Strong requirements for Baseline Studies in the feasibility stage to have reliable carbon projections / Comprehensive project **Due Diligence** prior to client presentation.





# *Some Challenges...*

---



Uncertainty / some lack of visibility on standards timelines and processes. Some delays can be observed with regards to issuance of credits



Uncertainty in upfront investment opportunities will always be present at some level – Ex-ante credits, however robust will always be estimates



Legal and regulatory context of certain countries – application of article 6.4 of the Paris agreement



Blue Carbon Projects are still relatively expensive compared to some technologies – barrier for some investors, however demand remains high



SERIES



# Part I

## Question & Answers



# *Standard carbone :*

---

# *l'exemple du Label Bas-Carbone*



**Adeline Favrel**

Carbon Certification Project Manager



# *L'Institut de l'économie pour le climat*

---



#NotreMission

**I4CE**  
INSTITUTE FOR  
CLIMATE  
ECONOMICS

L'Institut de l'économie pour le climat est une association d'intérêt général, à but non lucratif, fondée en 2015 par la Caisse des Dépôts et l'Agence Française de Développement.

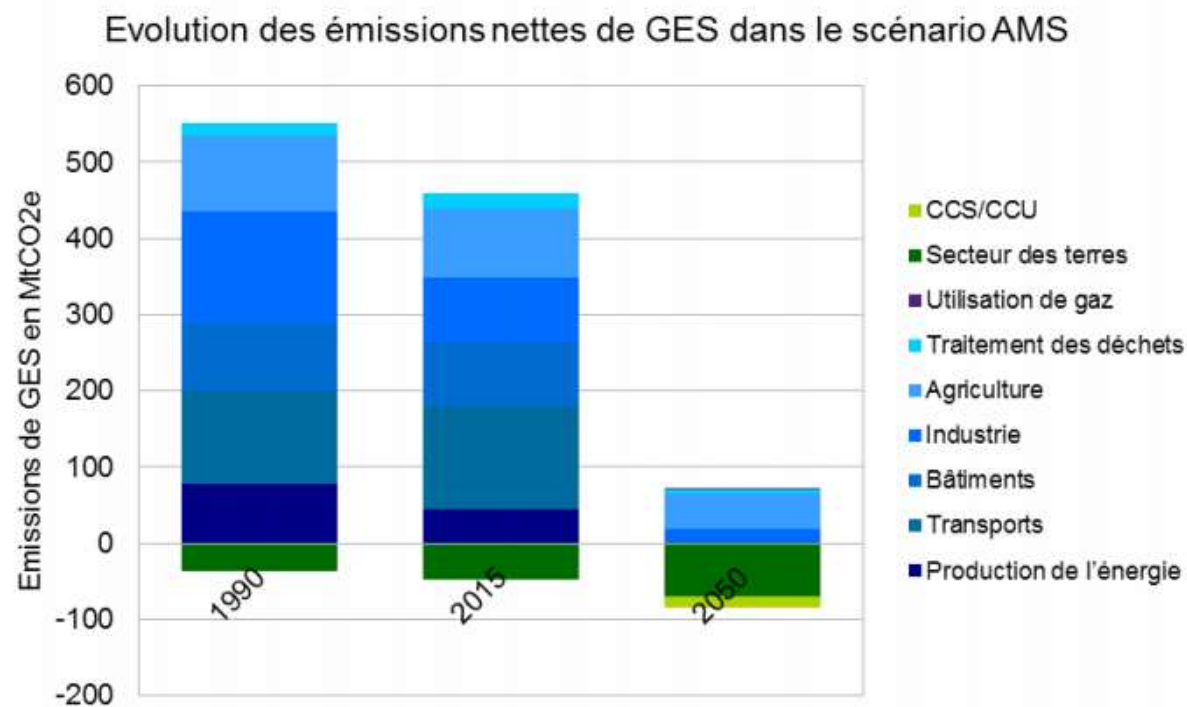
L'Institut de l'Economie pour le Climat (I4CE – Institute for Climate Economics) est un institut de recherche à but non lucratif qui contribue par ses analyses au débat sur les politiques publiques d'atténuation et d'adaptation au changement climatique.

Nos travaux couvrent trois transitions – énergie, agriculture, forêt – et six défis économiques : investissement, financement public, financement du développement, réglementation financière, tarification carbone et certification carbone.

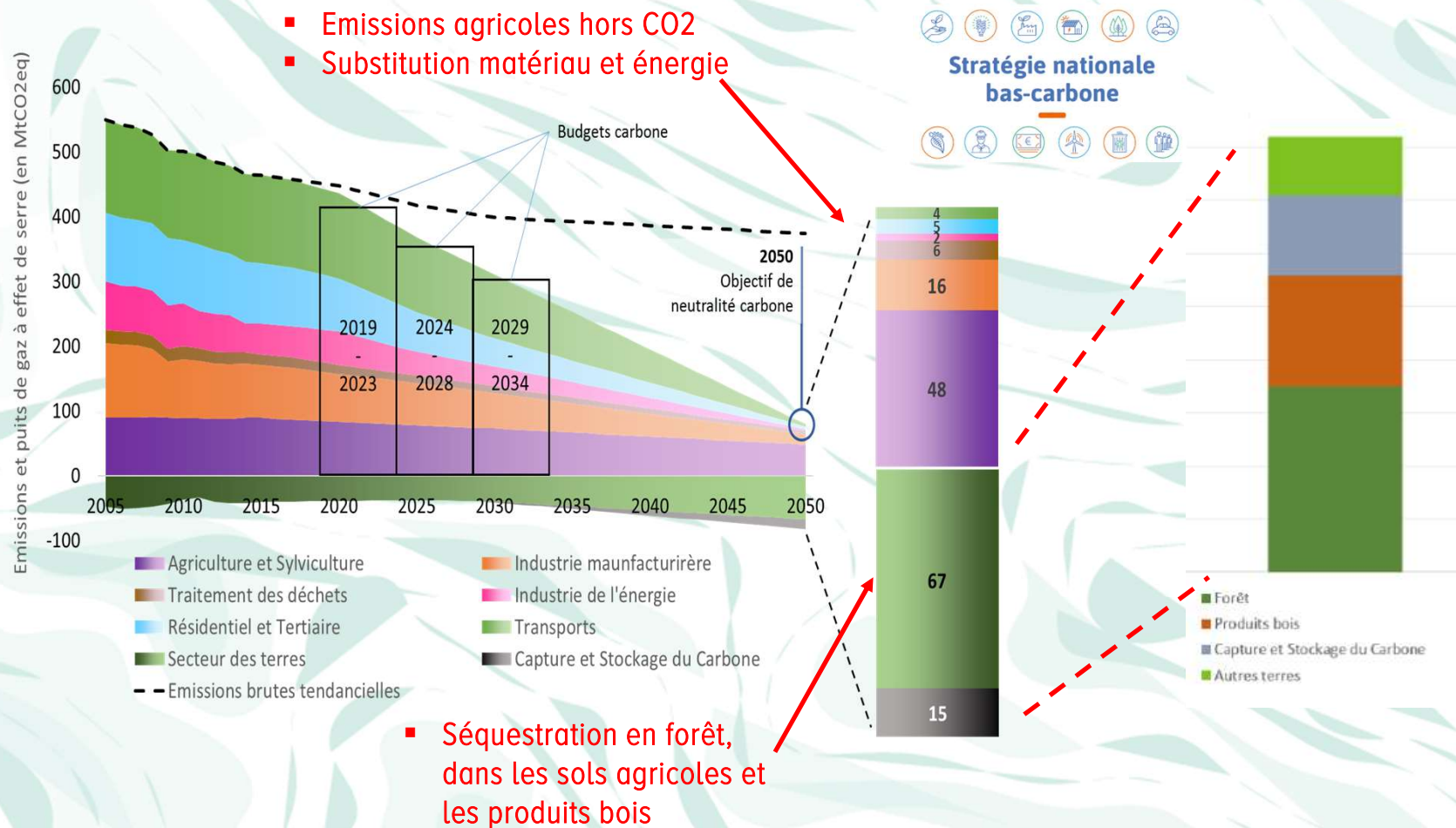


# Un objectif mondial, européen et national : la neutralité carbone à l'horizon 2050

- **Accord de Paris, 2015**
  - *Viser la neutralité carbone à partir de la seconde moitié du siècle.*
- **Loi européenne sur le climat, 2021**
  - *Les émissions devraient diminuer d'au moins 55% en 2030 (par rapport à 1990)*
  - *Atteindre un équilibre entre émissions et absorptions au plus tard en 2050*
  - *Emissions négatives après 2050*
- **En France : objectif de neutralité en 2050**
  - *SNBC 2018-2019*

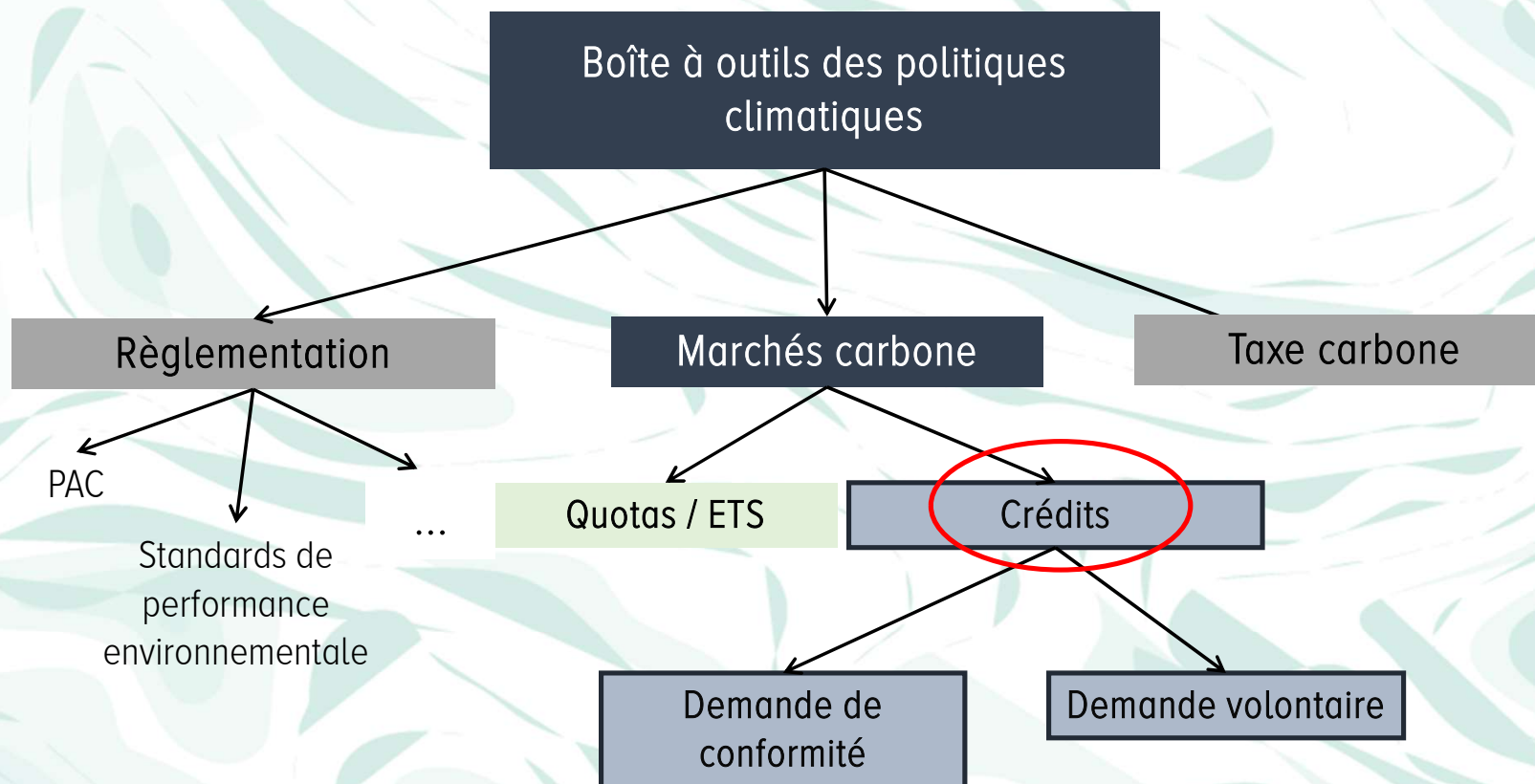


# La Stratégie Nationale Bas Carbone : atteinte une neutralité carbone physique à l'horizon 2050





# *La compensation carbone : un des outils des politiques climatiques*



# La certification carbone: au centre des marchés de conformité et des marchés volontaires





# Une multitude de labels existants de qualités différentes

## HOW ARE EXISTING SYSTEMS CERTIFYING THESE ACTIVITIES?



# *A l'origine : créer un cadre de certification en France pour faciliter le financement des actions 'climat'*

1) Un besoin d'incitations pour déclencher des réductions des émissions ou amélioration de la séquestration carbone dans les secteurs agricoles et forestiers



2) Des entreprises souhaitant financer des projets bas carbone locaux et certifiés

3) Un besoin d'apporter des garanties sur l'impact environnemental des projets



4) De nombreux de labels carbone à l'international mais un manque de cadre de certification carbone identifié sur le terrain en France ...



# Le Label Bas Carbone : un label national issu d'une démarche bottom-up

## 1) L'impulsion des Clubs de recherche-action



## 2) Le projet VOCAL – volet forestier

### Financiers



### Porteurs de projet



### Comité de pilotage



# Label Bas Carbone : outil piloté par le Ministère de la Transition Énergétique

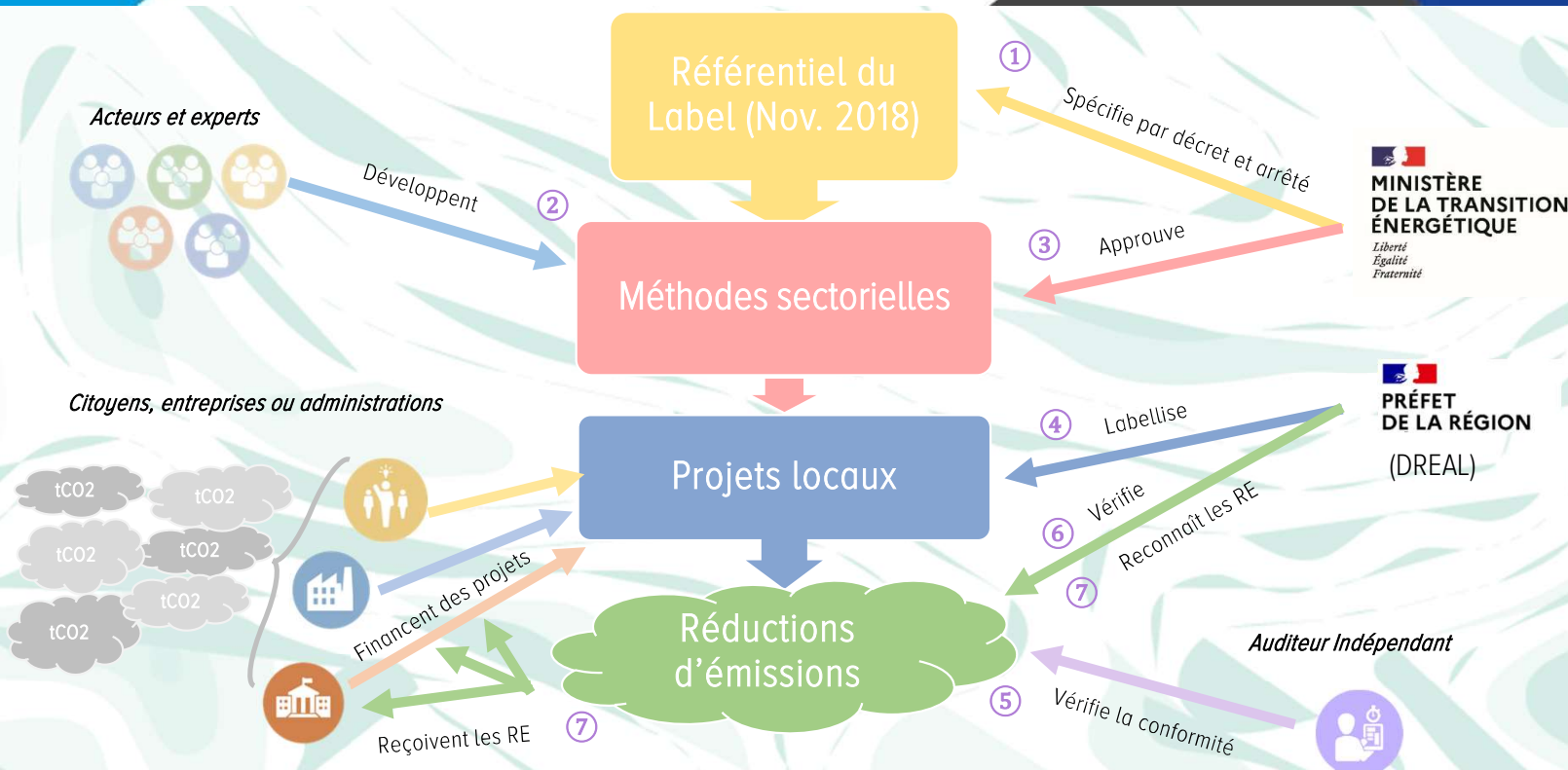


S'inscrit dans le cadre de la SNBC  
et de l'objectif de neutralité  
carbone

- Certifier la qualité et l'impact des projets
- Aider à flécher des financements vers ces projets
- Déclencher de nouvelles actions (additionnelles) pour réduire les émissions et séquestrer du carbone

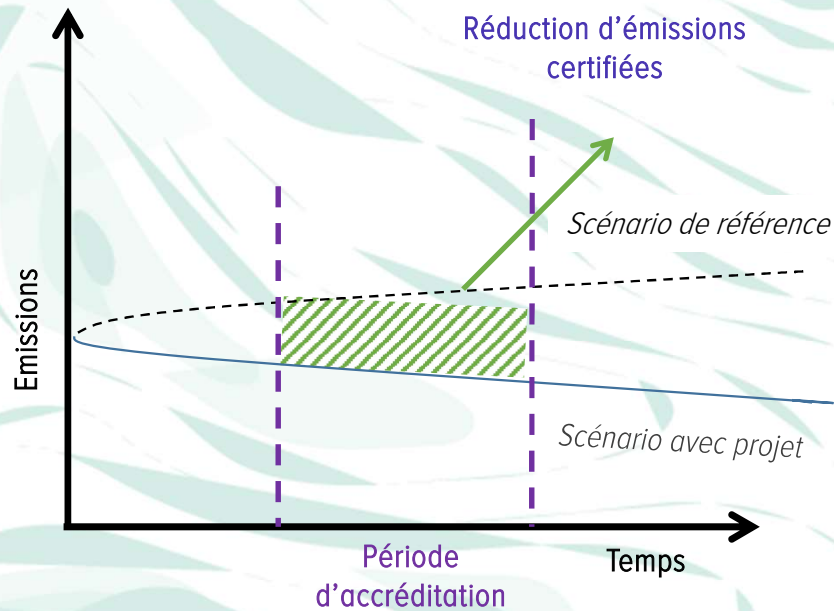


# Fonctionnement du Label



❖ Le financement de projets est ouvert à tout type de financeurs (public ou privé, local ou étranger) mais les projets doivent impérativement être mis en place en France.

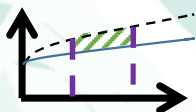
# Qu'est-ce qu'un projet bas carbone ?



- **Scénario de référence** : sans introduction de nouvelles pratiques; suit la tendance; respecte a minima la réglementation.
- **Scénario de projet** : avec introduction de nouvelles pratiques (boisement, optimisation de la fertilisation azotée, plantation de haies, etc.)

- Besoin de certification pour apporter des garanties sur la qualité des projets et leur impact sur le climat

# Les critères de qualité pour permettre le financement carbone



- **l'additionnalité** : démontrer que le projet n'aurait pas pu se faire sans l'incitation carbone
- le suivi des émissions et de la séquestration
- la **vérification par un tiers** pour pouvoir prétendre à des réductions d'émissions
- la **traçabilité** des réductions d'émissions avec mise en place d'un registre permettant d'éviter le risque de double compte
- la **permanence** des réductions d'émissions ou la gestion du risque de non permanence
- L'**évitement des impacts négatifs** et la **valorisation des impacts positifs** du projet sur les autres enjeux (biodiversité, eau, sols, volet socio-économique...)



# Les méthodes approuvées et en développement

13 méthodes approuvées :



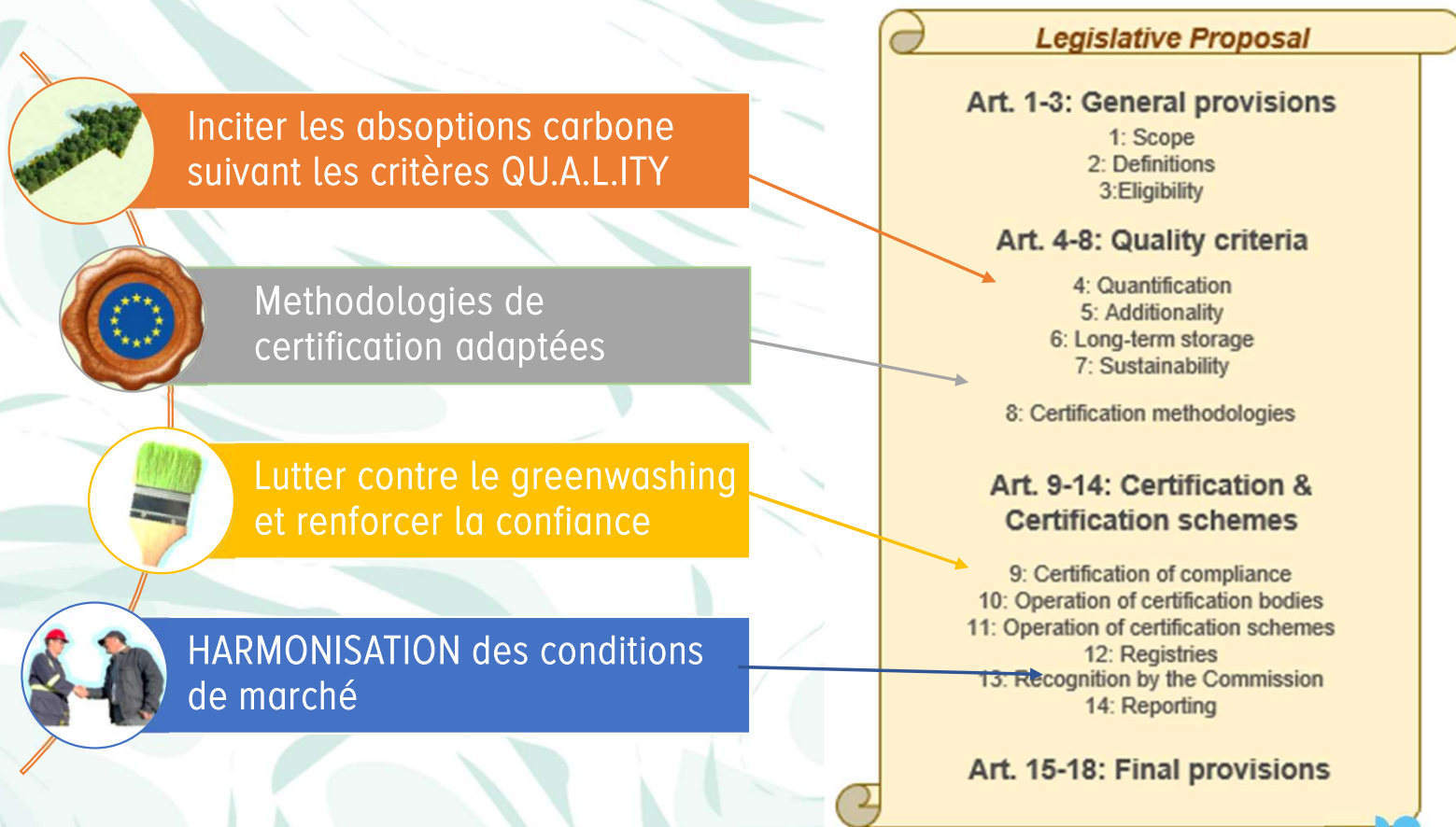
- 3 méthodes forestières : Boisement, reconstitution de peuplements forestiers dégradés et balivage (conversion de taillis en futaies sur souche).
- 6 méthodes agricoles : Carbon Agri (polyculture-élevage bovin) , Haies (gestion durable dont plantation de haies), Plantation de vergers, Grandes Cultures, Gestion des intrants, Amélioration de l'alimentation des bovins
- 2 méthodes bâtiment : Rénovation des bâtiments et utilisation de matériaux biosourcés
- 1 méthode transport : Tiers-lieux (réductions des déplacements des télétravailleurs salariés en zone peu denses)
- 1 méthode marine : préservation des herbiers de posidonie

10 méthodes en développement :



- 10 Méthodes en développement : Agriculture: élevage porcin, viticulture, agroforesterie, ... Forêt: sylviculture à couvert continu, enrichissement ...

# Le cadre de certification carbone européen: des objectifs à la proposition légale



# *Les critères « QUALITY » du cadre de certification européen*



## **QU**ANTIFICATION

*Carbon removal activities are measured accurately and deliver unambiguous benefits for the climate*



## **A**DDITIONALITY

*Carbon removal activities go beyond market practices and what is legally required*



## **L**ONG-TERM STORAGE

*Certificates clearly account for the duration of carbon storage and distinguish permanent storage from temporary storage*



## **S**USTAINABILITY

*Carbon removal activities do not harm the environment or even benefit other environmental objectives such as biodiversity*

- Principaux critères communs à la plupart des grands standards de certification issus des lignes directrices internationales comme la CNUCC ou ICROA etc.



# *Conclusion*

---

- De nombreux standards carbone existants et en développement
- 4 méthodes carbone bleue parmi les principaux standards
- En France : le Label Bas-Carbone répond aux principales exigences de qualité et a développé une méthode de carbone bleue : la méthode Herbière de Posidonie.
- Au niveau européen: proposition pour un cadre de certification des absorptions carbone. Pas de méthodes de carbone bleue à CT.

SERIES



# Part II

## Question & Answers



# *The Coastal Carbon Atlas*

---



**Smithsonian**  
*Environmental Research Center*

United States



**Jaxine Wolfe**

Data Manager,  
Coastal Carbon Network

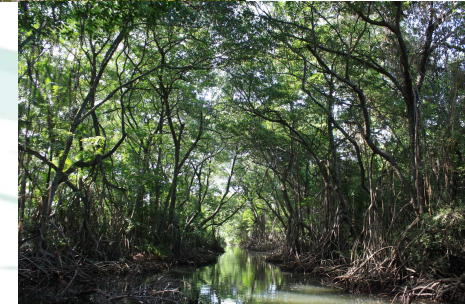
**Steven Canty**  
Research Biologist,  
Marine Conservation Lab



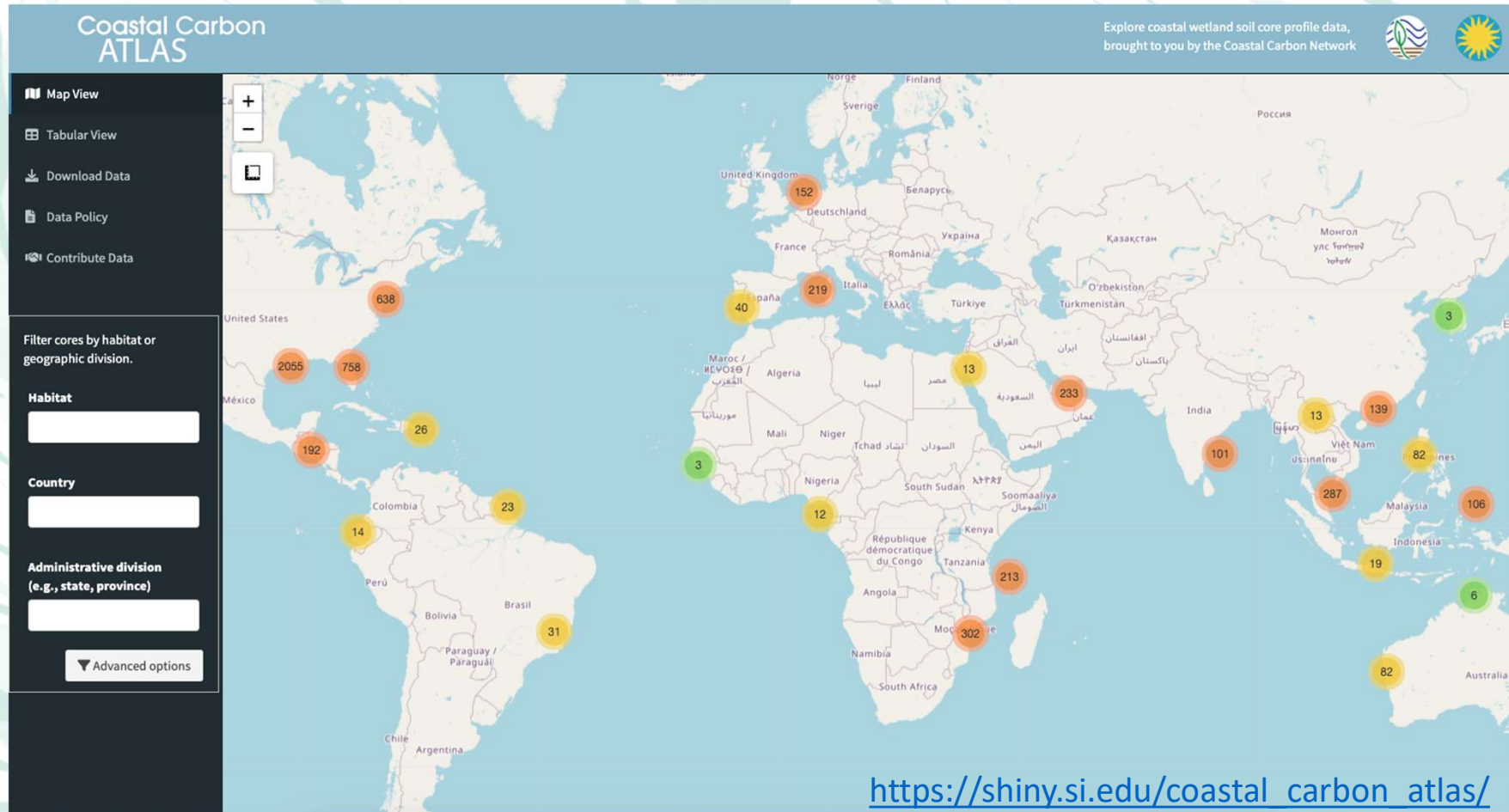
# *The Coastal Carbon Atlas*

---

- High quality blue carbon principles and guidance
- What is needed to determine the feasibility of a blue carbon project? Estimates of:
  - Carbon stocks
  - Accretion rates
  - Permanency



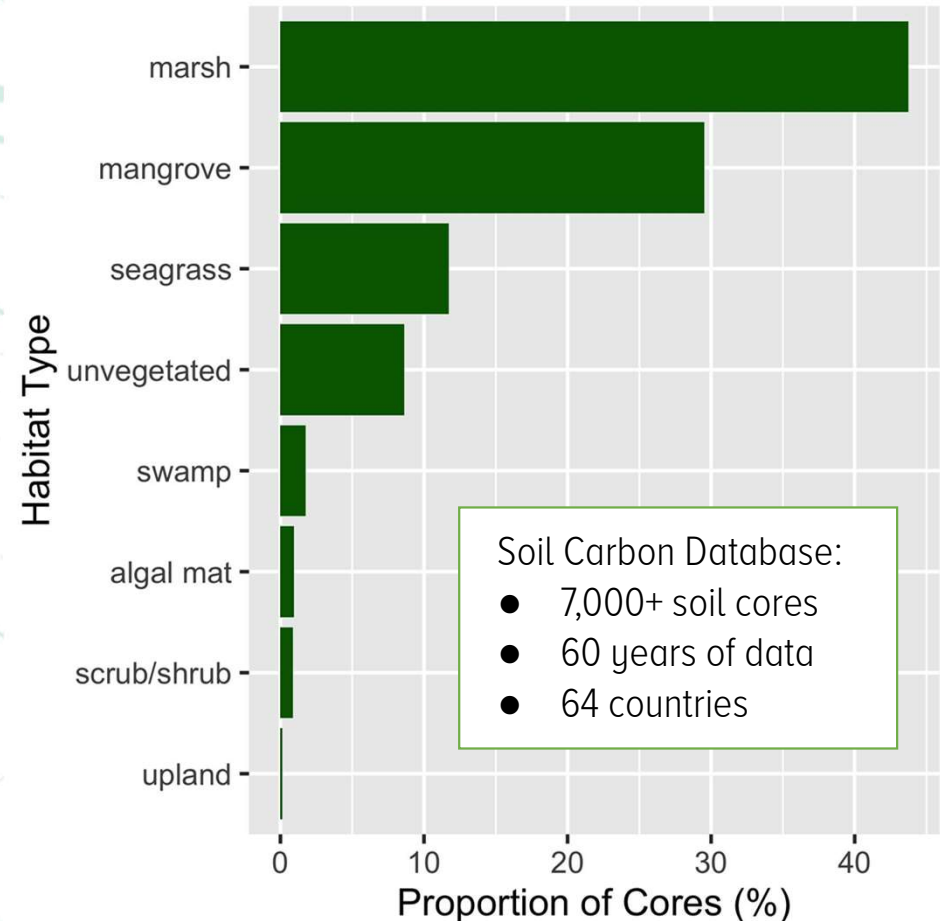
# The Coastal Carbon Atlas





# *The Coastal Carbon Network*

- The CCN is a global convener of coastal carbon data
- Archiving original data promotes transparency and scalability
- Synthesis products are curated to meet end-user needs
- Hosting platforms and tools are developed to serve and communicate data





# The Coastal Carbon

Coastal Carbon  
ATLAS

Explore coastal wetland soil core profile data,  
brought to you by the Coastal Carbon Network



- Map View
- Tabular View
- Download Data
- Data Policy
- Contribute Data

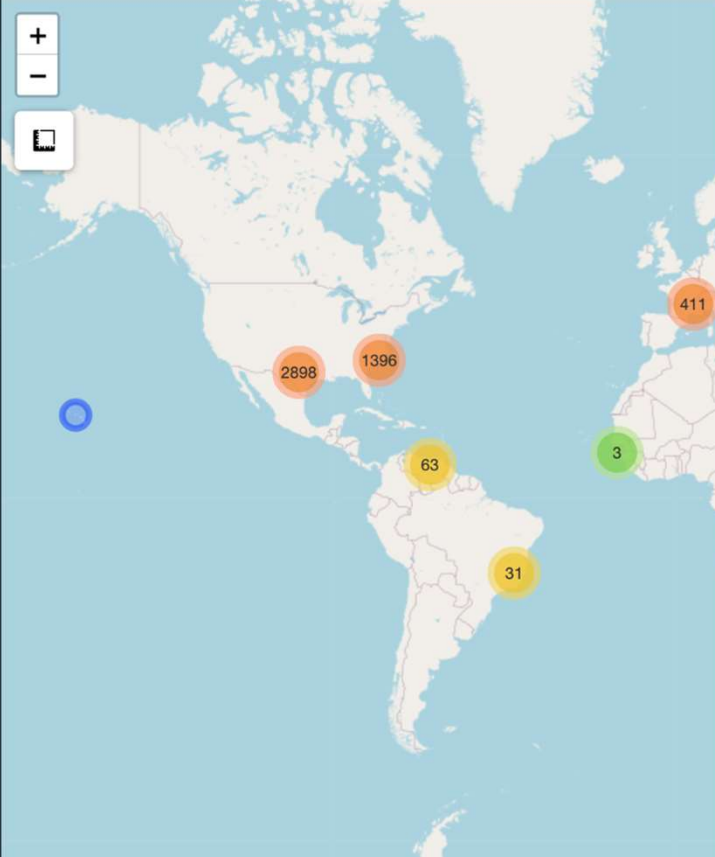
Filter cores by habitat or geographic division.

Habitat

Country

Administrative division  
(e.g., state, province)

Advanced options



## Advanced Options

Set data type and quality tier

### Carbon Stocks

- C2 - Carbon stock data complete, not confirmed to be a complete profile
- C1 - Carbon stock data complete, confirmed to be a complete profile

### Age Depth Data

- B2 - Dating information present, but not complete
- B1 - Dating information present and complete

### Elevation Data

- A3 - Elevation data present but of low quality, dating info present
- A2 - Elevation data is high quality, but dating info present but incomplete
- A1 - Elevation data is high quality, and dating info is complete

## Specify measurement type

Select only cores with specific carbon stock and age depth measurements.

### Carbon Stock Attributes

### Age Depth Attributes

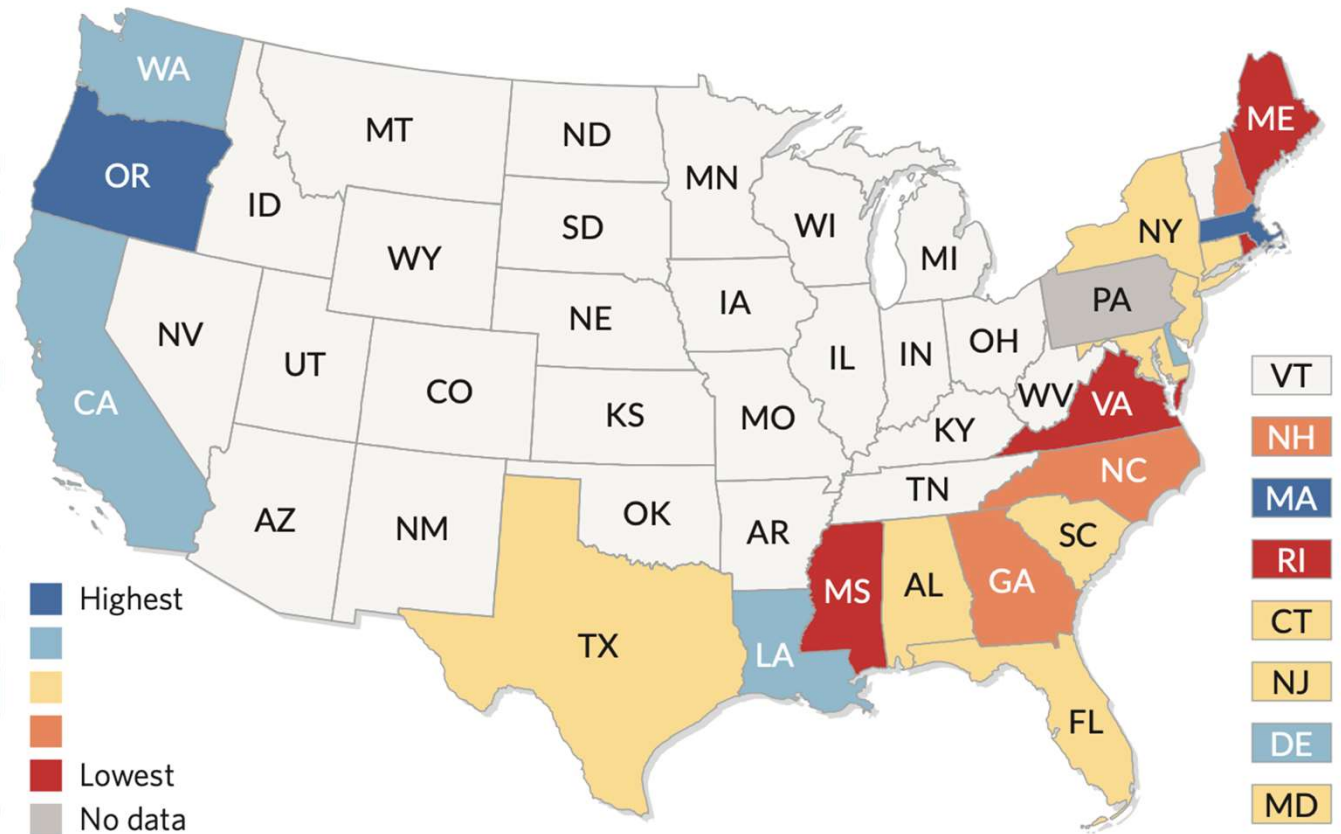
A platform for  
blue carbon data  
exploration,  
query, and  
download

# Leveraging Data

Creating statistics and assessments to identify the strengths and deficiencies in available data

Data metrics: quantity, quality, spatial and habitat representativeness

Provide baseline insight and inform the feasibility of blue carbon projects and assessments

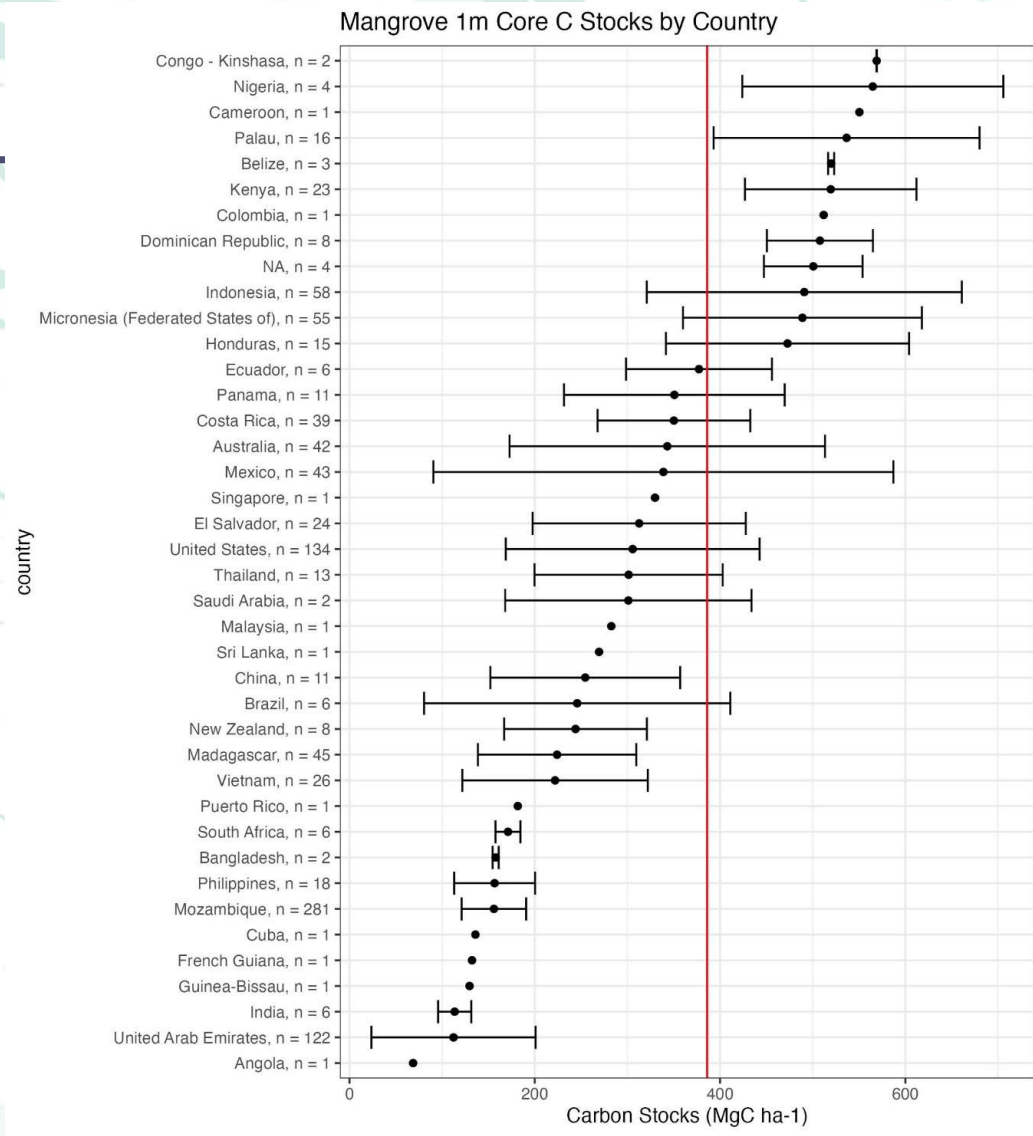


© 2022 The Pew Charitable Trusts  
Adapted from the "CCRCN Blue Carbon Inventory" (Holmquist et al 2021)

# Leveraging Data

Carbon stock estimates scaled from core to country-level

Stock estimates from country-specific data compared with global default values (IPCC Tier I, red line)





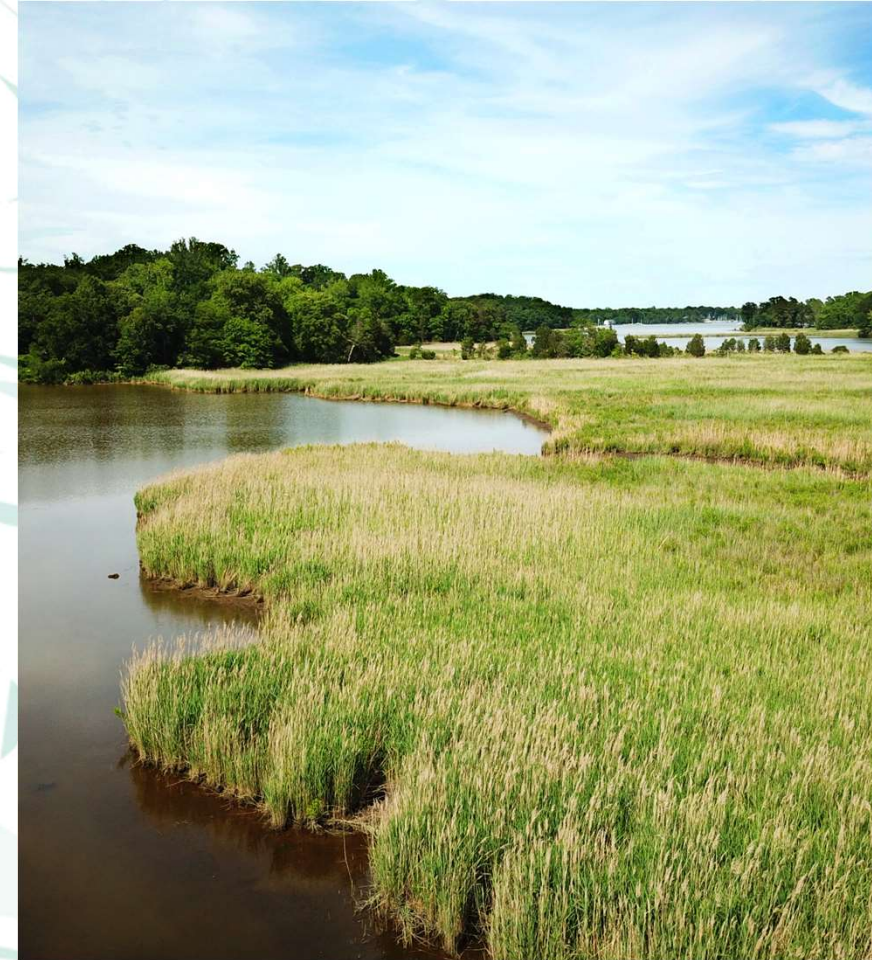
# Conclusions

---

The CCN is an underutilized resource which can and should be leveraged for blue carbon projects.

Applications:

- Querying and inventorying available data
- Carbon stock assessments
- Accumulation rate estimates
- Modeling and forecasting (ex. will coastal wetlands keep up with SLR?)
- Accounting for uncertainty in estimates
- Natural Climate Solutions applications (ex. Identifying potential for restoring impounded wetlands)



SERIES



# Part III

## Question & Answers





**Marie-Christine  
Cormier-Salem**

Director of Research  
in social sciences at  
the IRD



France



# *The carbon market: a mystification?*

---

- A fictitious market: Who's selling? Who's buying? At what price?
- A lack of scientific, technical, ecological and political knowledge;
- Cumbersome and costly certification procedures;
- Certification bodies with their own standards;
- Little or no commitment from IPLCs;
- Divergent interests between public authorities, investors (private companies), operators (NGOs) and local users: short/long term; carbon/other values; profit/heritage; quantity/quality;
- The dazzling success of green finance, promising a bright future (CSR, decarbonization, low-carbon)... But to date, the results in terms of emissions reductions and offsets have been more than mixed (few credits/revenues generated).

# Carbone Policy in Senegal

## Actors and logic behind the "Plant your tree" program

Areas: Casamance (2006) and Saloum Delta (2008)

Donors: FFEM + Carbon Livelihoods Venture Fund

Operator: Senegalese NGO Océanium/ Ali Haidar

Certifying body: Esrnst & Young et associés

## Participatory approach

Raising awareness among local communities

Prescription: harvesting of *Rhizophora* propagules, selected "green" sites and transplanting in rows

Socio-economic emulation (50-kilo bag of propagules paid 3€)

## Main results

Between 2006 and 2013, 1,400 km<sup>2</sup> replanted (10% in Saloum, 90% in Casamance)

Strong involvement of stakeholders (300 villagers)

Remarkable international visibility





# Conclusion

---

## More and more critical scientific work

Biased methodologies

Deficient measurements

Unreliable scientific data to measure the capacity of mangroves to sequester carbon

Differences between reforested and replanted areas

## Monospecificity of reforestation

Inappropriate site selection

Too high density for transplanting row

Lack of long-term monitoring and support

## Dispossession and environmental violence

Unequal compensation for seedling harvesters

Spatial competition between reforestation and other uses

Enclosure and privatization of reforested areas

Conflicts of interest at all levels





# Conclusion

---

## Mystification of market-based regulation

- Instrumentalization of figures and measurements
- Fictitious or invisible credits → low profitability
- Ineffective reforestation → not sustainable
- Exclusionary approaches → not fair



## The limits of international instruments and agreements in the face of environmental urgency

- Tools (non-coercive) not equal to ambitions
- Better to reduce GHG emissions than to offset them
- Financing losses and damage: a political and ethical debate



## Conflicting values, interests and standards of action in different contexts:

- From colonial imperialism to green and, more recently, blue imperialism
- Ongoing and renewed tensions between biodiversity governance models

## Exploring alternatives to the commodification/privatization of mangroves

- projects to co-managing mangroves and qualifying mangrove-based products
- co-benefits likely to be generated



SERIES



# Part IV

## Question & Answers



SERIES



# Round Table





PREVIOUS **BLUE CARBON**  
WORKSHOPS **market**

Watch the **Replay from our first episode :**

**Understand the Blue Carbon Market >> ICO Solutions website :**

<https://ico-solutions.eu/fr/workshops/series-blue-carbon/>

**Thank you for your attention!  
See you soon !**

**Contact us :** [icosolutions@conservatoire-du-littoral.fr](mailto:icosolutions@conservatoire-du-littoral.fr)

**ICO Solutions Calendar :** [www.ico-solutions.eu](http://www.ico-solutions.eu)

