

# Développement EDF RE aux US

## Focus Offshore



M.FOUCAULT

Deputy Director Asset Operation

Nantes le 12 Février 2020





# **SOMMAIRE**

## **1. Présentation EDF Renewables North America**

**Histoire**

**3 métiers**

**Principaux chiffres**

**Pipeline**

## **2. Focus Offshore Wind**

**Présentation Atlantic Shores**

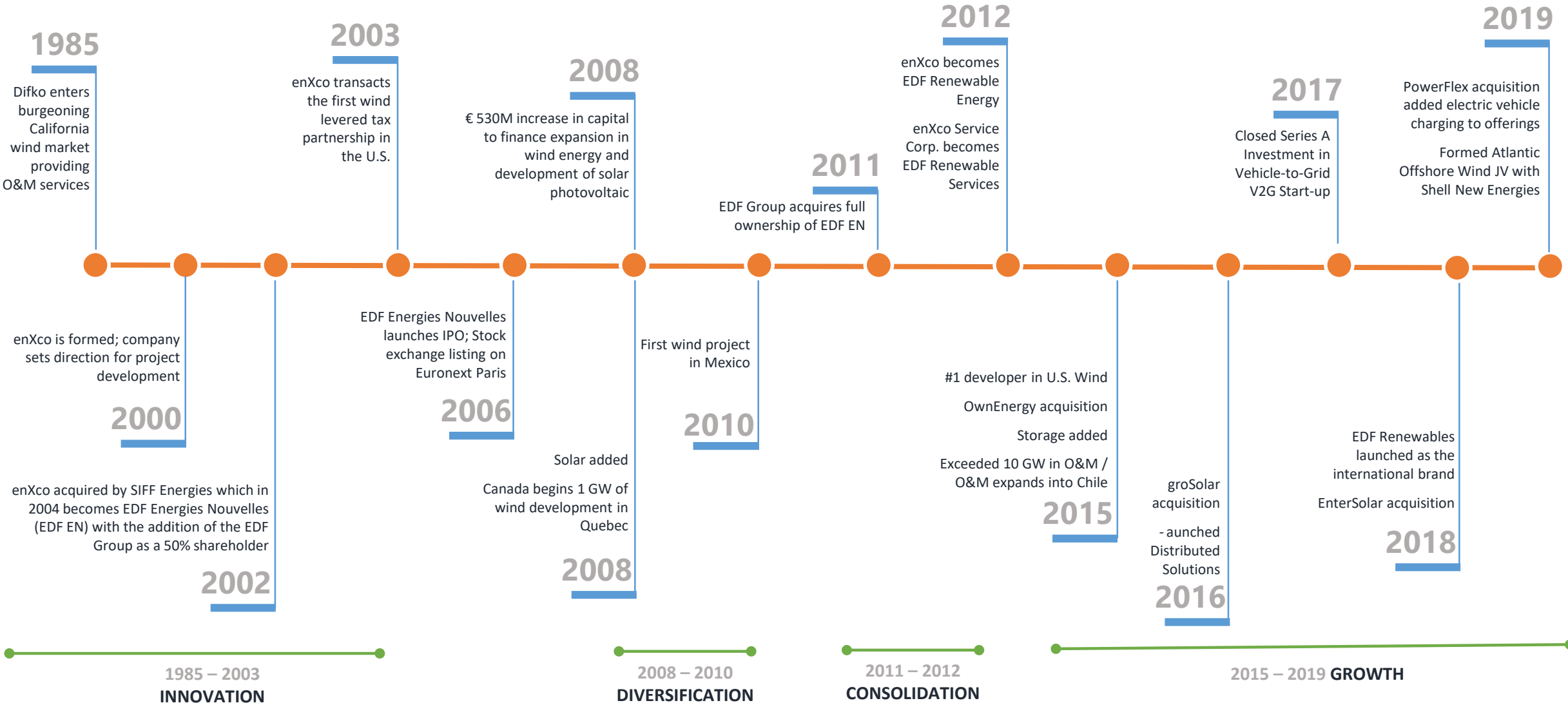
**BOEM lease**

**Marché North East**

**Conseils / Contacts**



# 35 Years of Renewable Energy Experience & Expertise



# EDF Renewables North America



## GRID-SCALE POWER

**Bigger projects. Bigger impact.**

EDF Renewables' Grid-Scale Power team; provides origination, development, transaction and construction services for large-scale wind (offshore and onshore), solar power generation and storage projects across North America.

Our team of leaders can solve energy challenges facing businesses and communities no matter the size or complexity.



## DISTRIBUTED SOLUTIONS

**Simple. Reliable. Integrated.**

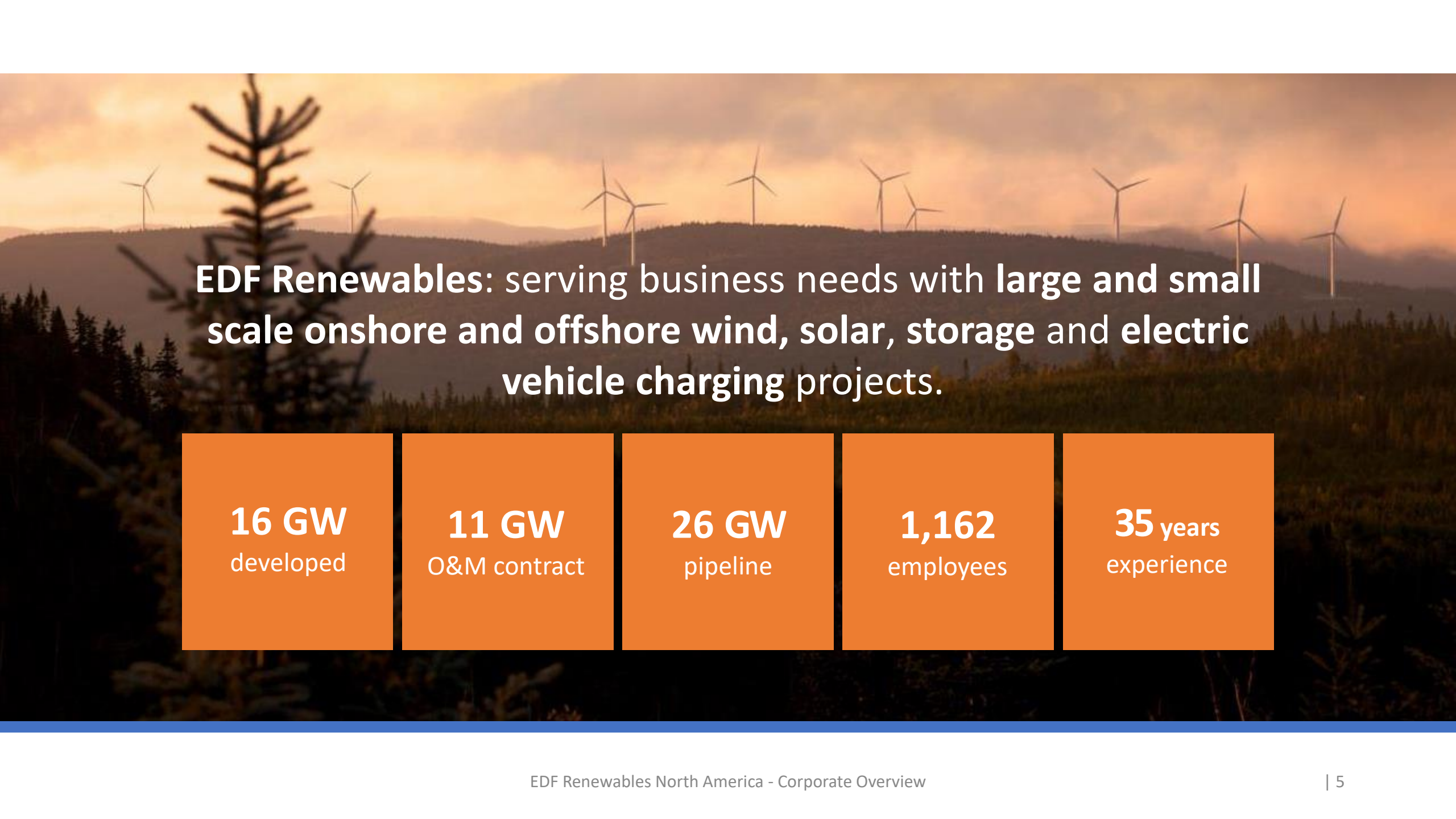
The Distributed Solutions team can create a fully integrated bundle for energy projects with solar, storage, electric vehicle charging and energy storage management. We provide end-to-end service from development, engineering, procurement and construction to operations, and finance. Our solutions are customer focused and customized to utilities and co-ops, landowners, and institutions.



## ASSET OPTIMIZATION

**Maximize power production, efficiency – and your investment.**

The Asset Optimization team offers a full range of services for all phases of renewable energy projects – operations, management, procurement, routine and emergency maintenance, retrofits and upgrades. Our experienced on-site team of over 450 full-time technicians, supervisors, managers, and support staff, means EDF Renewables is fully equipped to manage the balance-of-plant and day-to-day operations of your wind or solar project.



**EDF Renewables: serving business needs with large and small scale onshore and offshore wind, solar, storage and electric vehicle charging projects.**

**16 GW**  
developed

**11 GW**  
O&M contract

**26 GW**  
pipeline

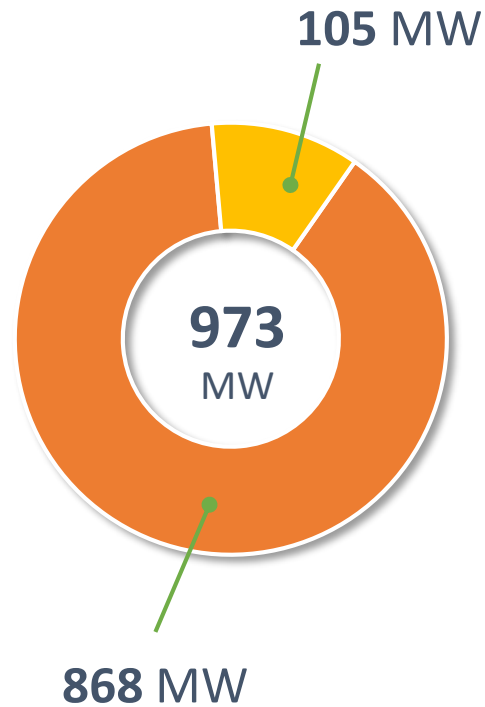
**1,162**  
employees

**35 years**  
experience

# 973 MW Placed in Service in 2019

## Grid-Scale Power

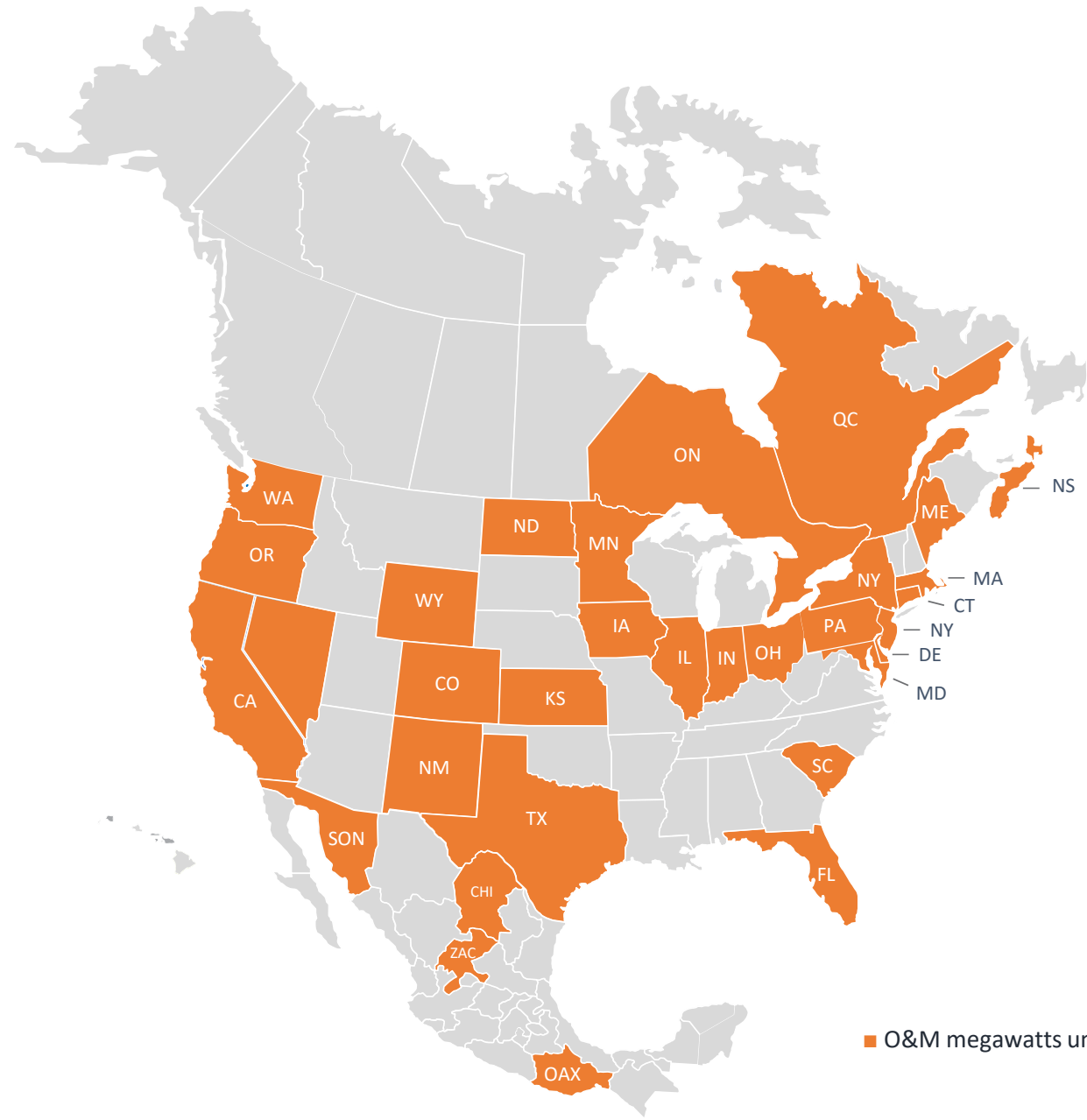
PROJECT	STATE	MWp	OFFTAKER	TECHNOLOGY
Stoneray	MN	65	SMMPA	Wind
Bobcat Bluff Repower	TX	162	ERCOT	Wind
Glaciers Edge	IA	203	Google	Wind
Golden Plains	IA	124	Alliant Energy	Wind
Romney	ON	60	IESO	Wind
Valentine	CA	135	SCE	Solar
Gutenberg	NC	118	Sold to Dominion Energy	Solar



## Distributed Solutions

PROJECT	STATE	MWp	TECHNOLOGY
EnterSolar Projects	Various	48	Solar
MN Com Solar	MN	17	Solar
Novel	MN	14	Solar
Milton	VT	7	Solar
Ferrisburgh	VT	6.5	Solar
STEC Portfolio	TX	5	Solar
Runway Solar (Santee Cooper)	SC	2.7	Solar
Sysco – Ventura	CA	1.1	Solar
Sysco – Lancaster	CA	1.1	Solar
San Diego Zoo	CA	1	Storage
Weathersfield	VT	0.8	Solar
Innovation Dr	CA	0.4	Solar+Storage+EV

as of /12/31/2019



**CANADA**  
**1,533 GW Wind**  
**473 MW Solar**

**U.S.**  
**7,526 MW Wind**  
**312 MW Solar**  
**20 MW Storage**

**MEXICO**  
**521 MW Wind**  
**495 MW Solar**



A leading provider of third-party **Asset Optimization Services**

**11 GW**  
 Operations & Maintenance contract

**8.6 GW**  
 Remote Monitoring

**6.7 GW**  
 Asset Management



robust pipeline / continuous  
**GROWTH**

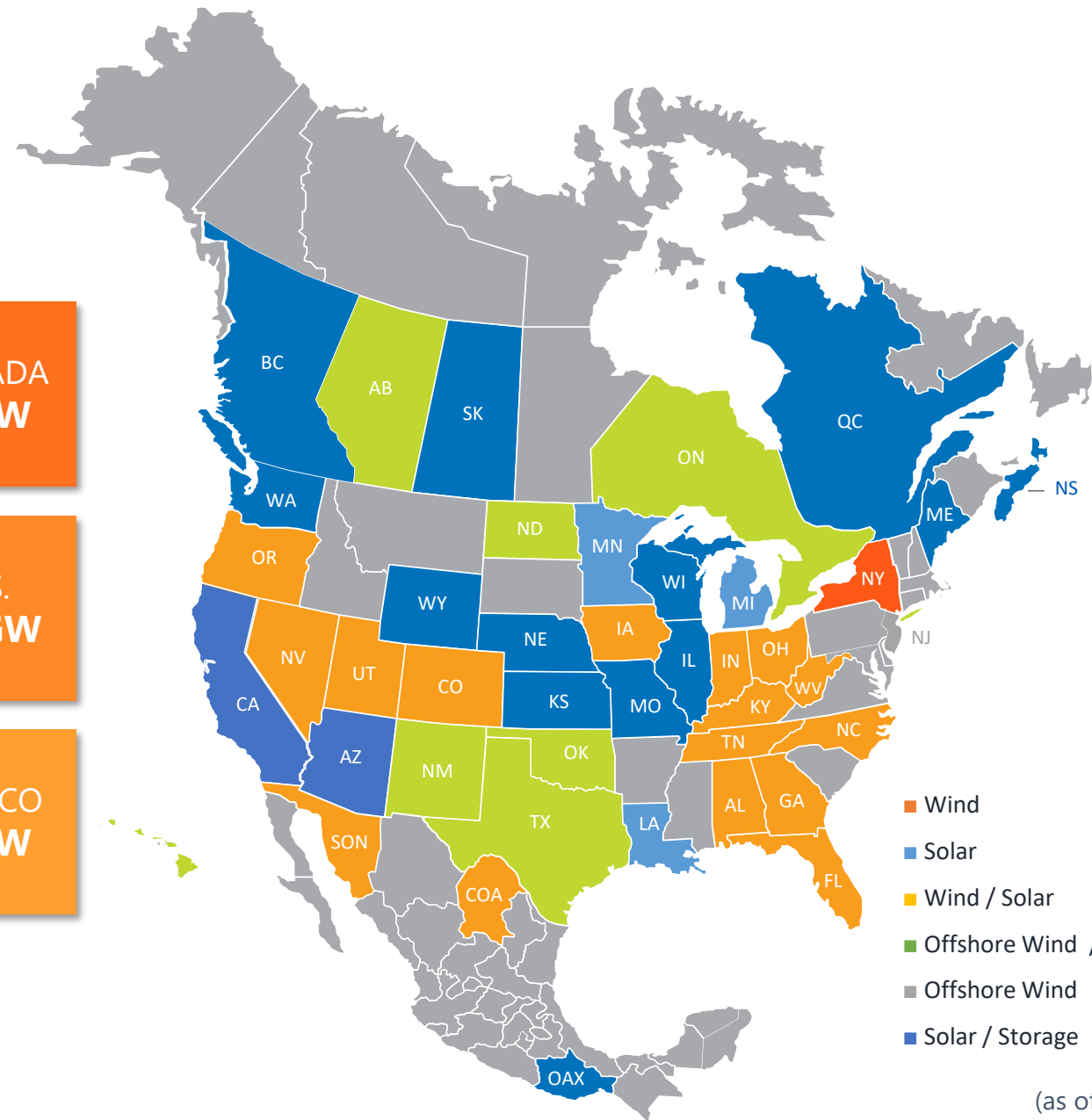
**26 GW**

of development in various stages  
across North America

**CANADA  
3 GW**

**U.S.  
21 GW**

**MEXICO  
2 GW**



- Wind
- Solar
- Wind / Solar
- Offshore Wind / Solar / Storage
- Offshore Wind
- Solar / Storage

(as of 12/2019)



# Atlantic Shores Reference Deck

## 50/50 Joint Venture between EDF Renewables and Shell New Energies



30+  
years experience in the US  
including in PJM, NYISO markets

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4.8 GW

Offshore wind projects developed  
and/or in operation in France,  
Belgium, UK, Germany and the US

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\$17.3 B

EBITDA EDF Group



40+  
years experience in the US oil & gas  
offshore industry, 15 years in wind

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4.9 GW

Offshore wind projects developed  
and/or in operation in The  
Netherlands, Belgium and the US

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\$61.5 B

EBITDA Royal Dutch Shell

# Combined Offshore Wind Experience



- Shell projects
- EDF Renewables projects

# Meet the Team



**Chris Hart**  
Managing Director



**Jennifer Daniels**  
Development Director



**Joris Veldhoven**  
Commercial Director



**James Cotter**  
Technical Director



**Nathalie Jouanneau**  
Planning Manager



**Jessica Dealy**  
Project Developer

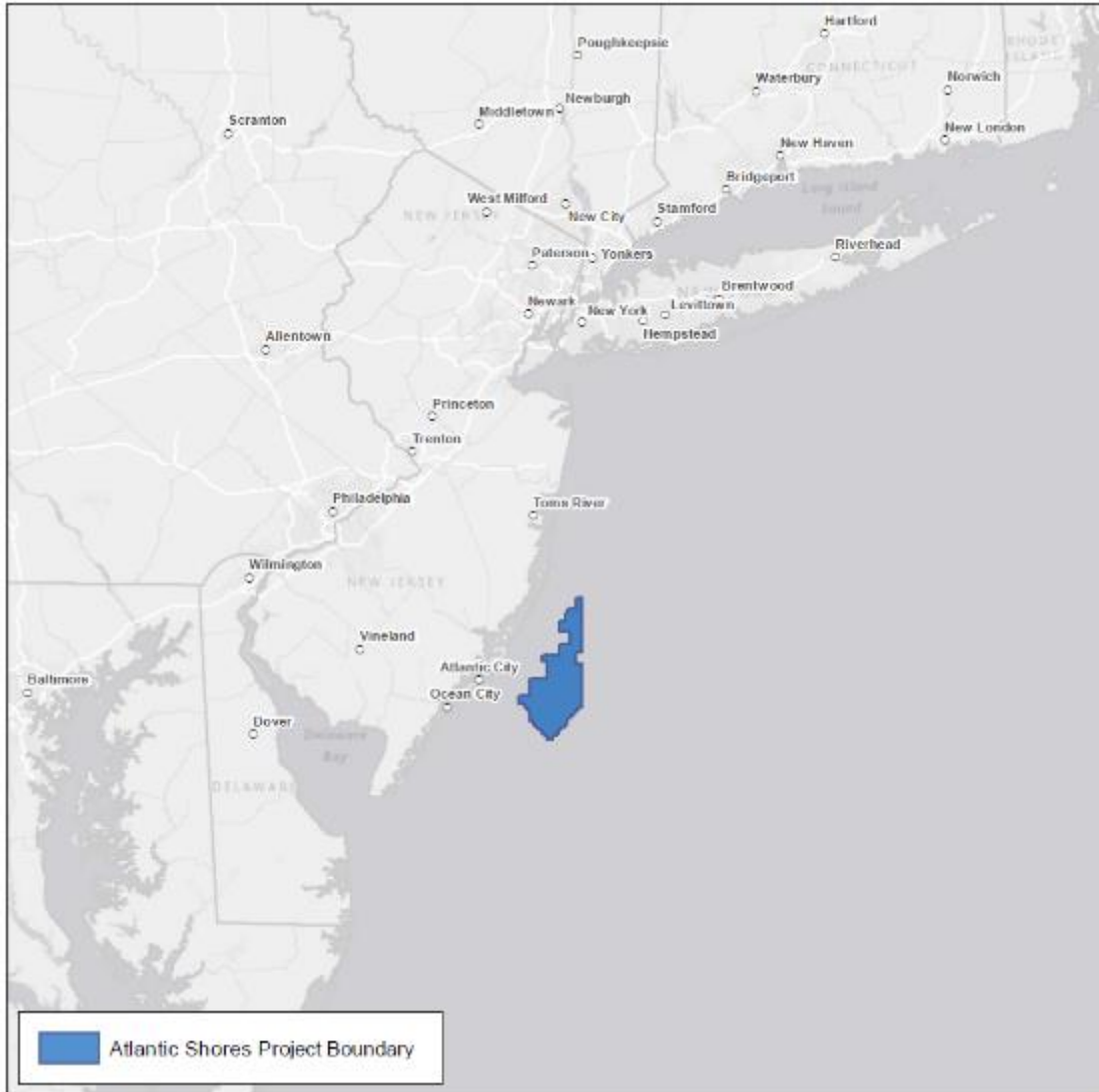


**Doug Copeland**  
Development Manager



**Julia Pettit**  
Legal Advisor

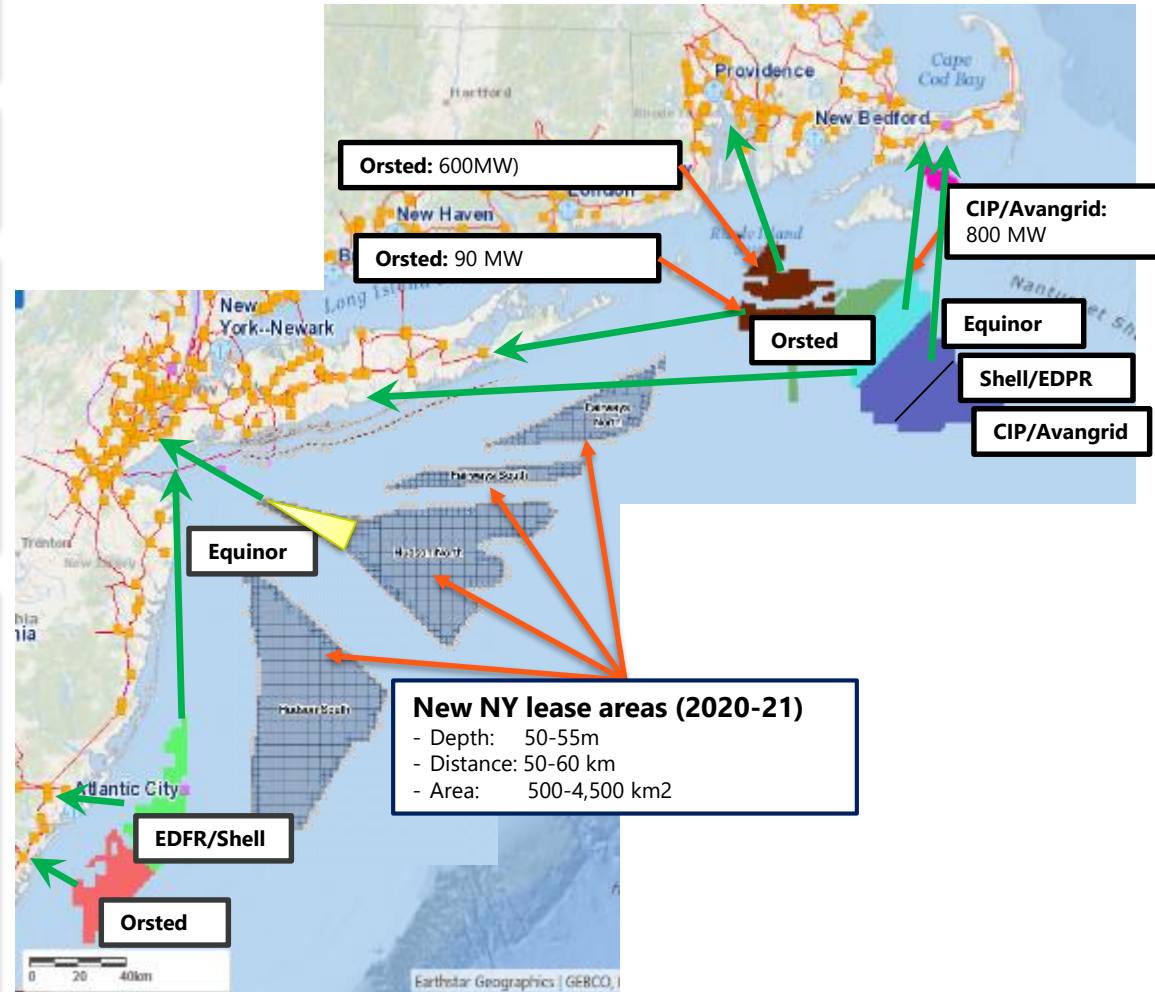
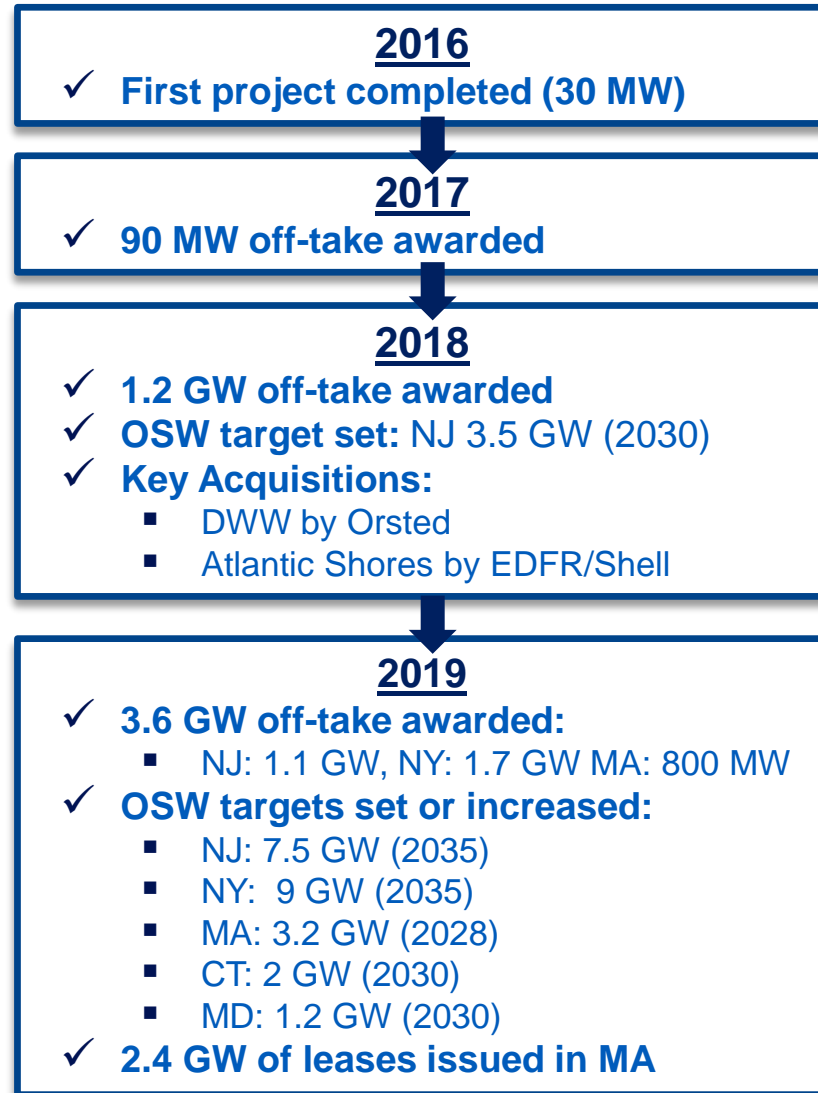
# Atlantic Shores BOEM Wind Energy Lease Area



## BOEM Lease Area 0499

- Up to 2.5 GW of offshore wind projects
- 183,000 acres
- Approximately 8-20 miles off the coast of New Jersey
- 60-100' water depth
- Site originally awarded in auction in 2016 to US Wind, acquired in December 2018
- Site surveys begin in 2019
- Strategically located to deliver to the State of New Jersey (PJM) and the State of New York (NYISO)
- Expected to deliver MW in the mid-2020's

# US North-East



# EDF Renewables North America Work Areas

## Atlantic Shores

- Joint Venture between EDF R and Shell
- Develop lease OCS-0499 with 2.5 GW potential and secure offtake to New York and New Jersey

## New Markets

- East Coast (NY Bight, Virginia, Gulf of Maine) or West Coast (California)
- Greenfield or Acquisitions

# Quelques conseils pour aborder le marché US

- Prendre contact avec **les réseaux de développement de l'éolien offshore**: AWEA, Business Network for Offshore Wind / participer aux conférences...
- S'appuyer sur les **chambres de commerce franco-américaines**
- **Développer des partenariats locaux** pour répondre aux souhaits de Local Content (exemple du Jones Act)
- **Agir rapidement** avant que le savoir faire local se développe et que les partenariats soient noués avec des concurrents



# Where to find us



## **Boston, MA:**

Atlantic Shores Offshore Wind, LLC  
1 Beacon St  
Boston, MA 02108

## **Brooklyn, NY:**

Atlantic Shores Offshore Wind, LLC  
81 Prospect St  
Brooklyn, NY 11201

## **Atlantic City, NJ:**

Atlantic Shores Offshore Wind, LLC  
[upcoming]



# MERCI POUR VOTRE ATTENTION!



12/02/2020 Nantes

TEAM  
FRANCE  
—EXPORT—



solutions & co  
L'agence de développement économique PAYS DE LA LOIRE