



**VALOREM**

opérateur en énergies vertes

**RE-SCANDINAVIA**

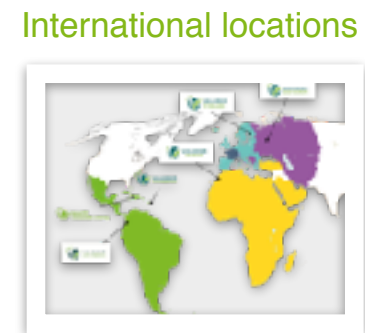
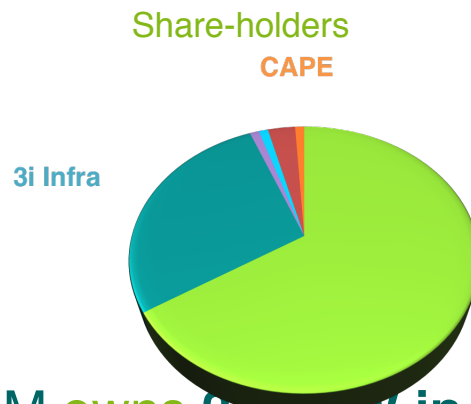
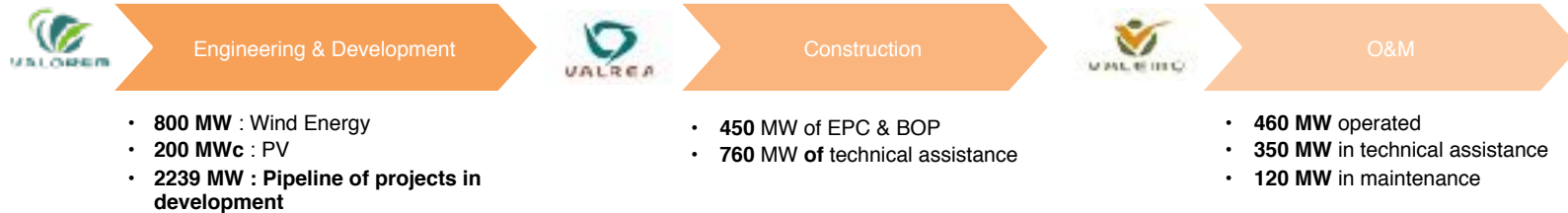
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**VALOREM is a green energy operator, created in 1994, pioneer in wind energy in France.**

A multi-energy approach :

WIND SOLAR HYDROELECTRICITY MARINE

An integrated operator :

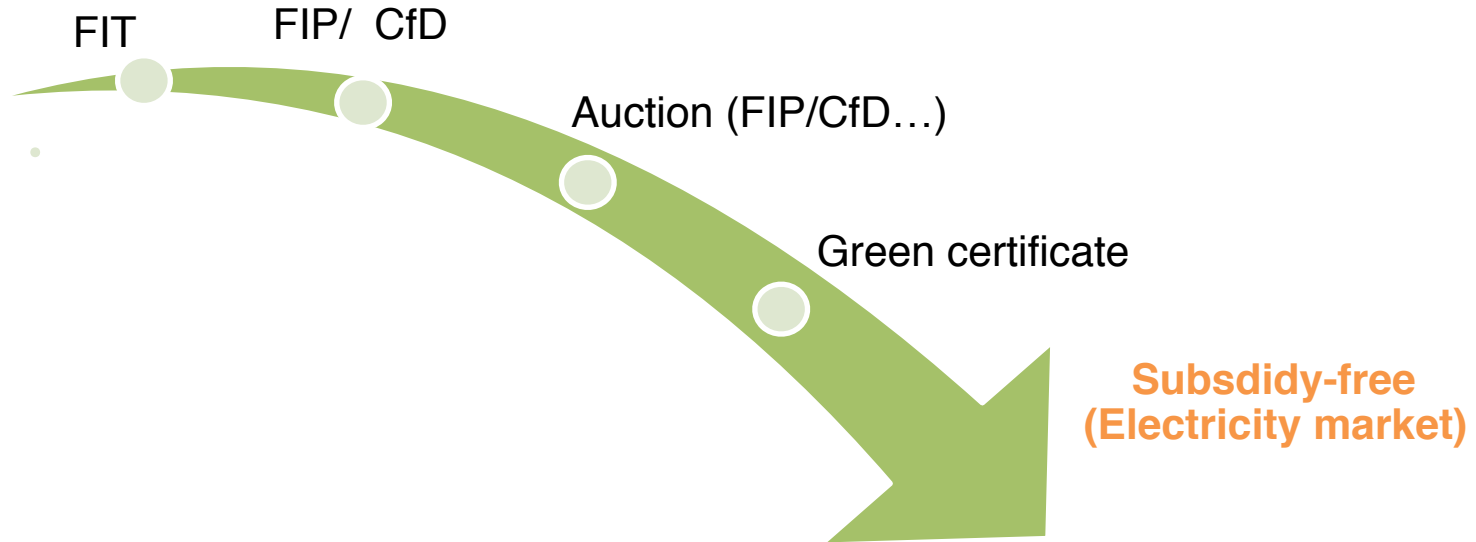


VALOREM owns **204 MW in operation** <sup>Historicals</sup>

**200 people**

# Governmental support goes lower...

REN needs to be managed more and more on electricity market



...but we need long term revenue stability to finance

→ **PPA**

The developer approach change completely

# What change?

**To develop high-quality project good enough to go subsidy-free and to be creative**

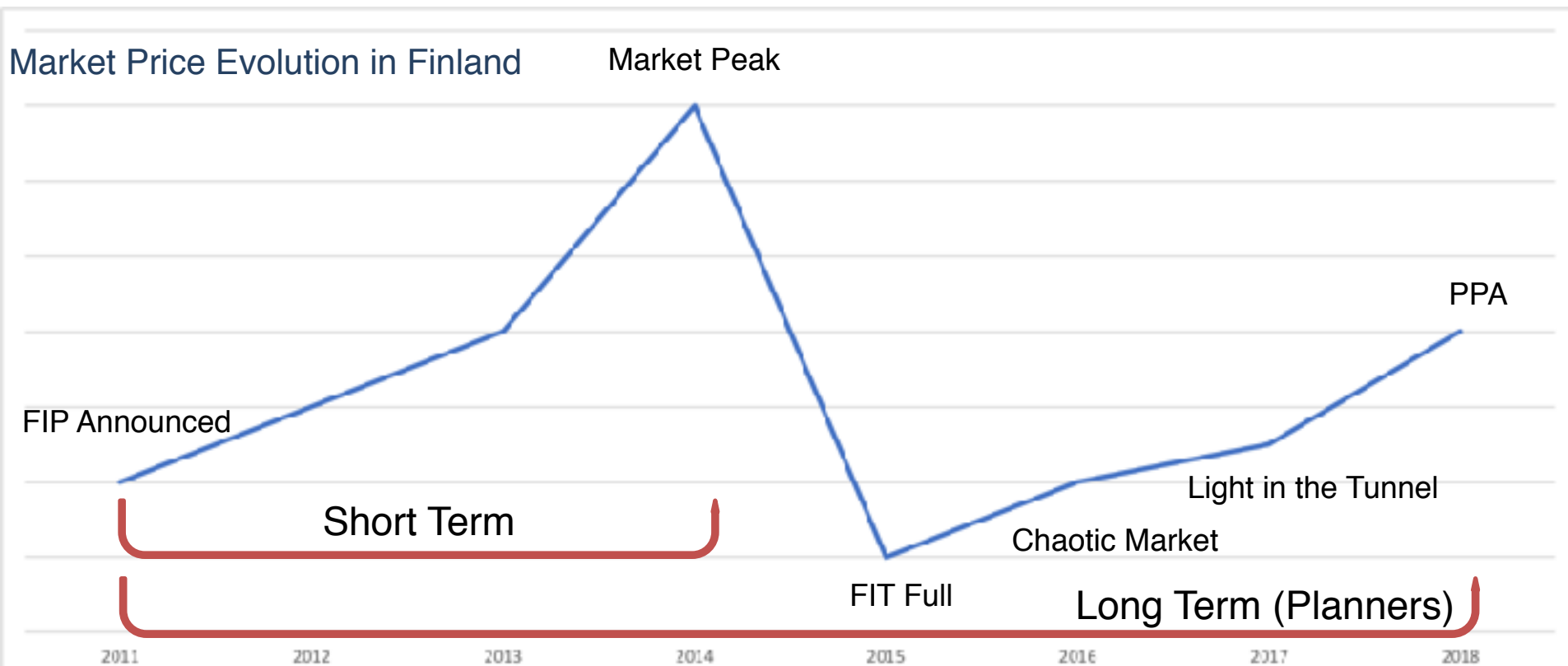
**To manage revenue structuring on the market... and to find a customer**

→ **Anticipation: to imagine the future when screening/developing**

## The Finnish example

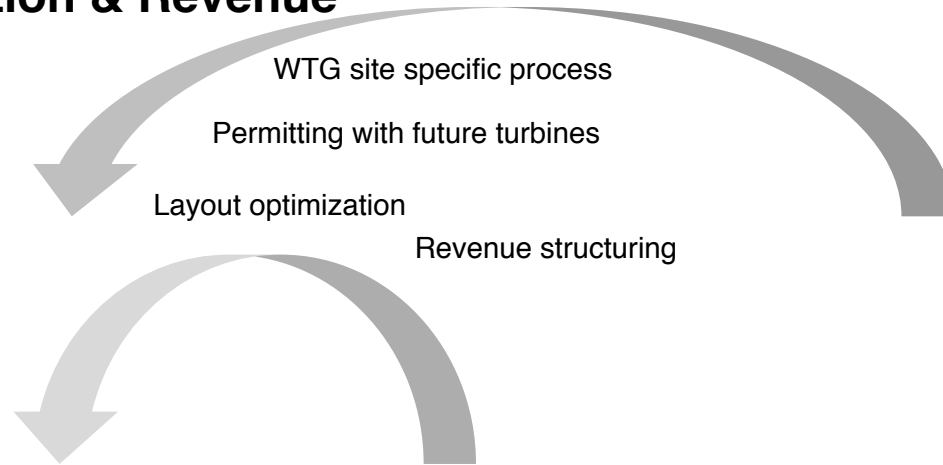
**What is the future environment?** EU winter package → Go to the market & inter-country

**What projects to develop?** → Even if good system (FIP), to screen & develop projects allowed to produce without.



Use the knowledge of the full value chain to optimize project, reduce and consolidate costs

**Decrease OPEX/CAPEX/Financing costs**  
**Increase Production & Revenue**

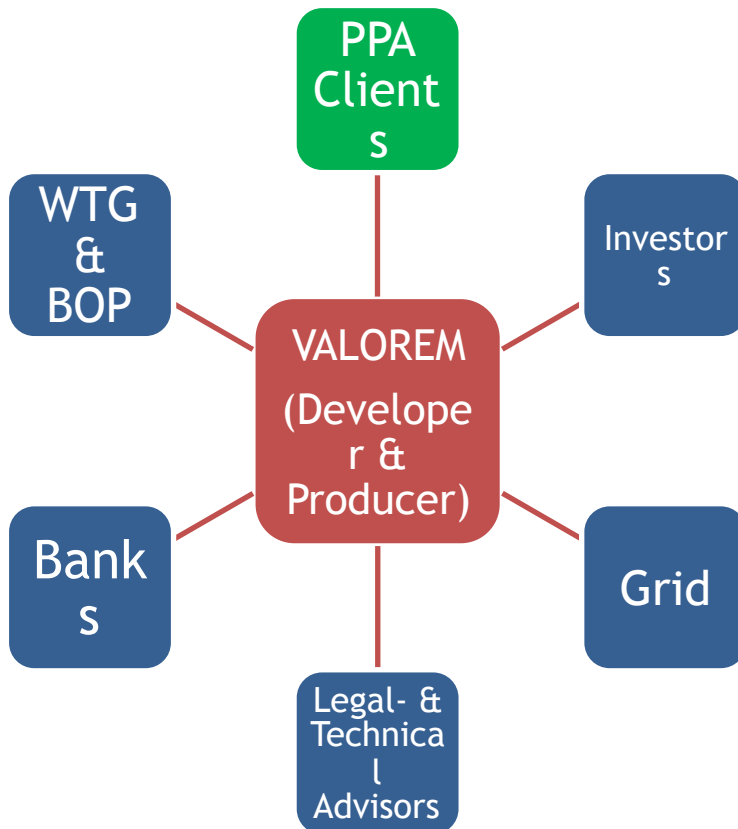


# The project has to be flexible to adapt to client needs

From a sequential....



...To an adaptive parallel mode



With innovative thinking (R&D):

Organization, electricity services & storage, mixed energy, structuring (financing, revenue), repowering/reconditioned WTG...

**(no more « constraints » required to enter a support scheme)**

# WE NOW NEED A CLIENT !

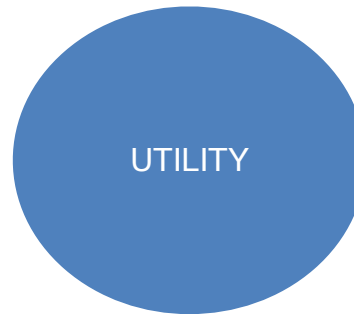
## WIND FARM ELECTRICITY SALES

Government Support System

Market



PPA/Balancing/Merchant



- ✓ Access to market & futures
- ✓ Balancing
- ✓ Structuring
- ✓ Hedging

PPA



- ✓ **Could allow:**
  - ✓ Better price
  - ✓ Longer duration
  - ✓ Larger volumes
- ✓ **But more complex:**
  - ✓ Customer identification (consumption, motivation, bankability,...)
  - ✓ Customer commitment
  - ✓ Project match (schedule/size compliance)
  - ✓ Seller/buyer needs : Specific design contract (duration, volume, guarantees, penalties, default, invoicing...)

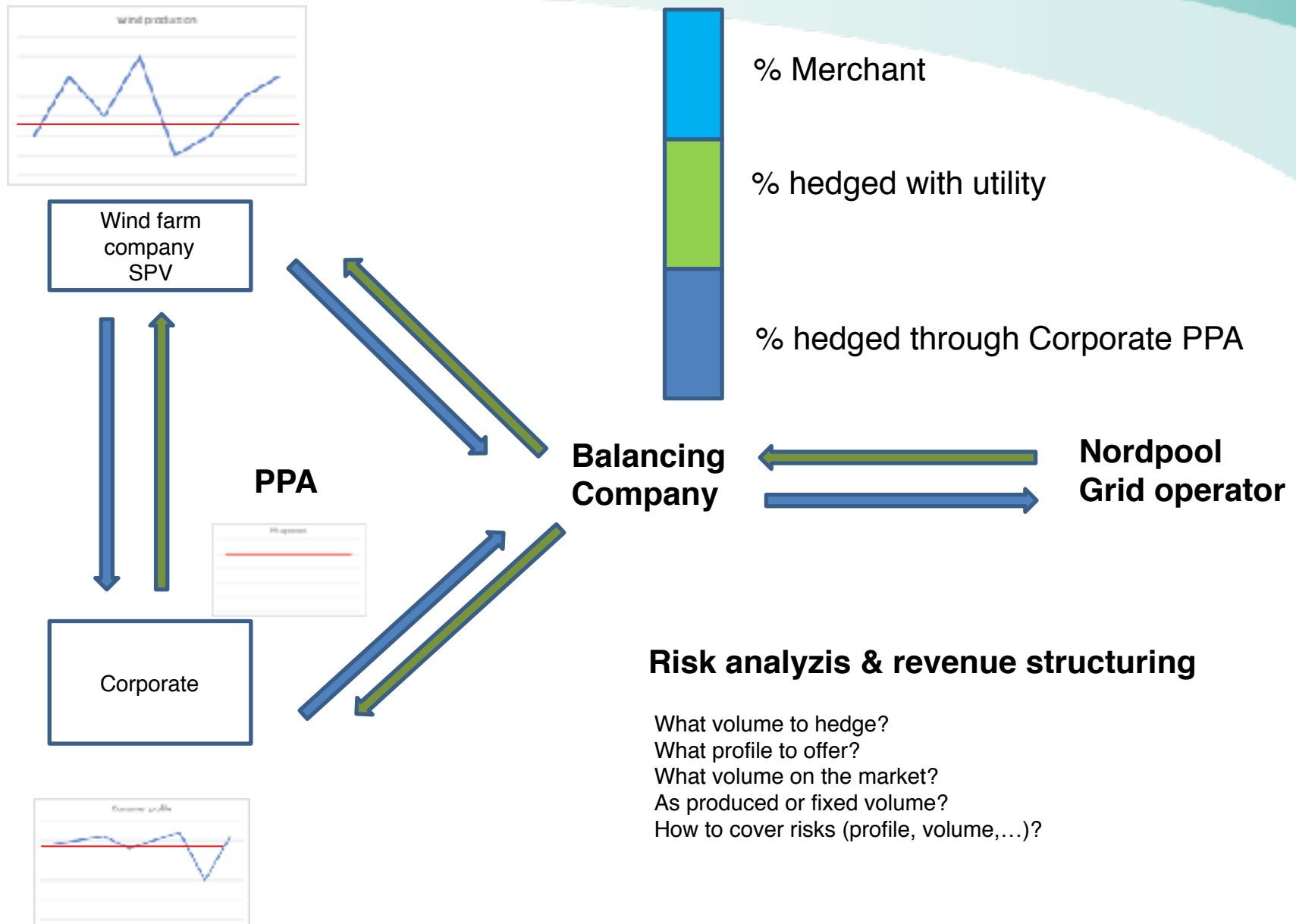
NO  
"REAL"  
CLIENT

→ New PPA specific team

→ C-PPA deal



But also we need to manage the **balancing**, to optimize **revenue structure** and to **mitigate the risks**



### Risk analysis & revenue structuring

- What volume to hedge?
- What profile to offer?
- What volume on the market?
- As produced or fixed volume?
- How to cover risks (profile, volume,...)?

## Lack of PPA buyers

### → Needs to be educated & motivated:

- ✓ To understand why it could be interested for them to secure a long term electricity procurement contract with monthly fixed price without indexation on 15+ years.
- ✓ To be convinced on the electricity forecasts
- ✓ To be convinced with renewables
- ✓ To have enough consumption

### → Needs to be bankable (Very few buyers today)

### → To be aligned with the project schedule

**Main issue to boost the PPAs** is to find a solution for local (small/medium) industry outside the big international companies (Google, H&M, Coca-cola, Amazon, Facebook,...) to be allowed to sign also long term PPAs:

- ✓ To be educated
- ✓ to have enough consumption
- ✓ to be bankable.

## Concrete solutions to be found!

- Aggregation of medium/little players ?
- Credit support to make them bankable and more competitive?
- Tax incentive for industries to incitate them to sign long term PPA?