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# Which Business models for post feed-in tarif period ?

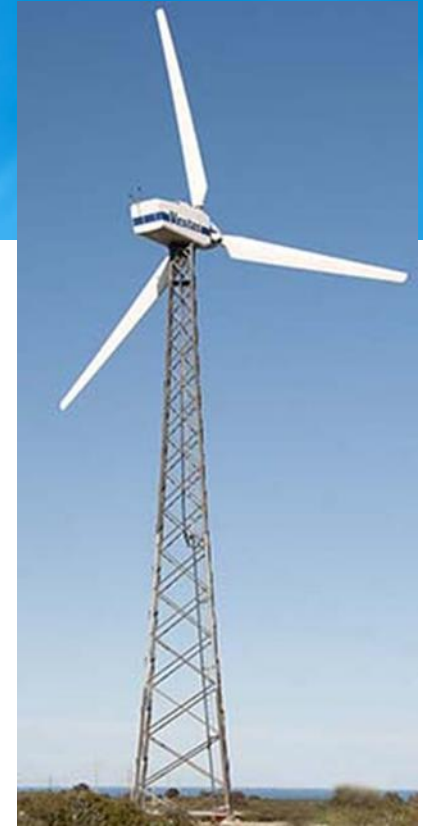
Dominique Moniot, Directeur du Développement Eolien  
La Compagnie du Vent Engie  
Husum Wind 2017

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# Presentation of La Compagnie du Vent

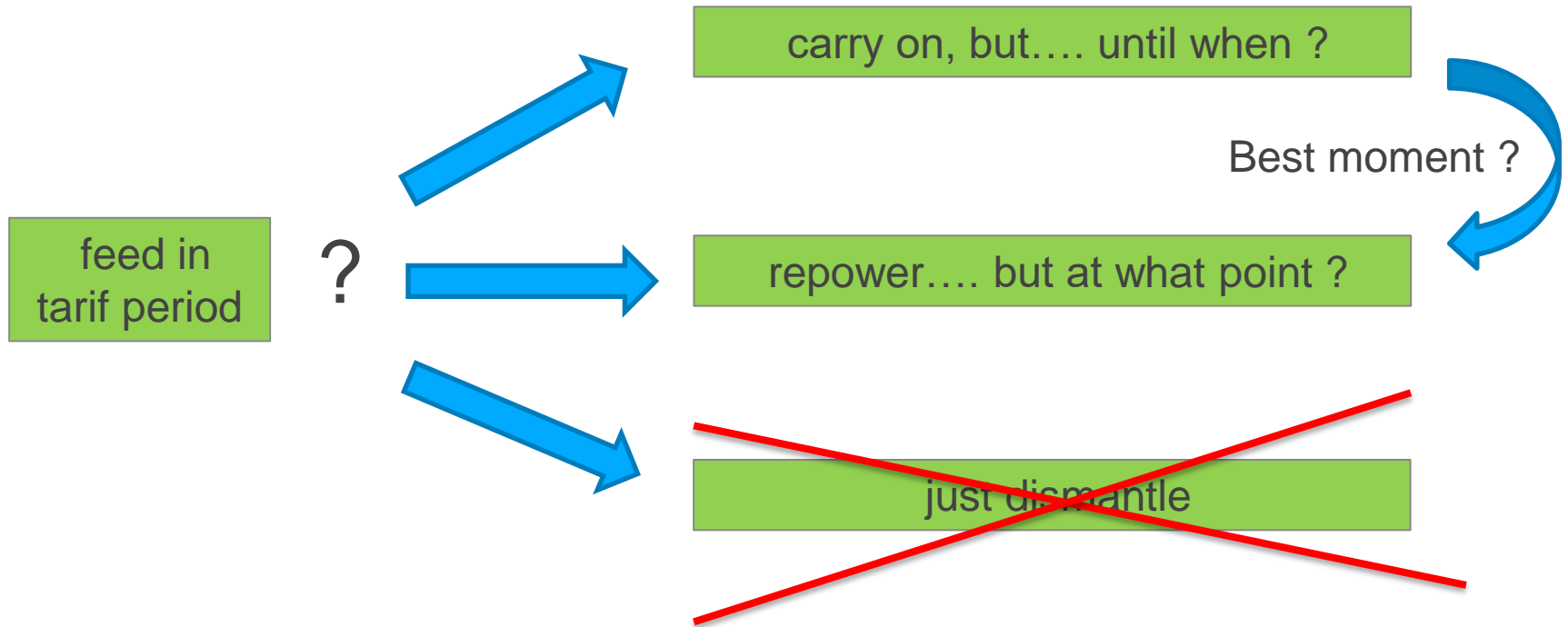
- Amongst the pioneers of wind energy in France and Morocco : created in 1989, installed the first wind farm in France (Port la Nouvelle, 1991) and in Morocco (Koudia al Baida, 2000).
- Important actor in PV : biggest solar carport in Rivesaltes (14 MWc).
- Develops, finances, builds and operates own power plants
- A subsidiary company of Engie since 2007, 100% Engie since June 2017  
=> Merge with Engie Green in process, new Engie Green will operate around 100 wind farms / 1,3 GW in France.



Country	Wind installed	Wind in construction	PV installed	PV in construction
France	440	80	100	70
Morocco	60	0	0	0

*Capacity installed and under construction La Compagnie du Vent, september 2017*

# Which Business models for post feed-in tariffs period ?



## Different types of feed in tariff

- Port la Nouvelle : 4 V39-500 kW commissioned in 1993 / a PPA by agreement based on small hydro feed in tariff / 10 + 10 years,
- Sigean : 10 V47 – 660 kW commissioned in 2000, selected at Eole 2005 tender / 15 + 10 years
- Plouarzel : 5 V47 – 660 kW commissioned in 2000, selected at Eole 2005 tender / 15 + 10 years
- Roquetaillade 1 : 8 G47 – 705 kW commissioned in 2001, one of the first feed-in tariffs based on « June 8, 2001 ordinance » / 15 years
- Nevian : 18 G 52 – 850 kW, commissioned in 2002/2003, based on « June 8, 2001 ordinance » / 15 years

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- Nevian : 18 G 52 – 850 kW, commissioned in 2002/2003, based on « June 8, 2001 ordinance » / 15 years => **next PPA to sign**

# Main differences between feed in tariff and sale on the market

- Feed in tariff allows:
  - (i) Purchase price guaranteed and known for a long period
  - (ii) 100% of production purchased
  - (iii) Counterparty risk → minimum, State guarantee

- Sale on the market :
  - (i) Purchase price not guaranteed for a long period and not always known
  - (ii) 100% of production purchased not obvious
  - (iii) Counterparty risk → depends on contractor

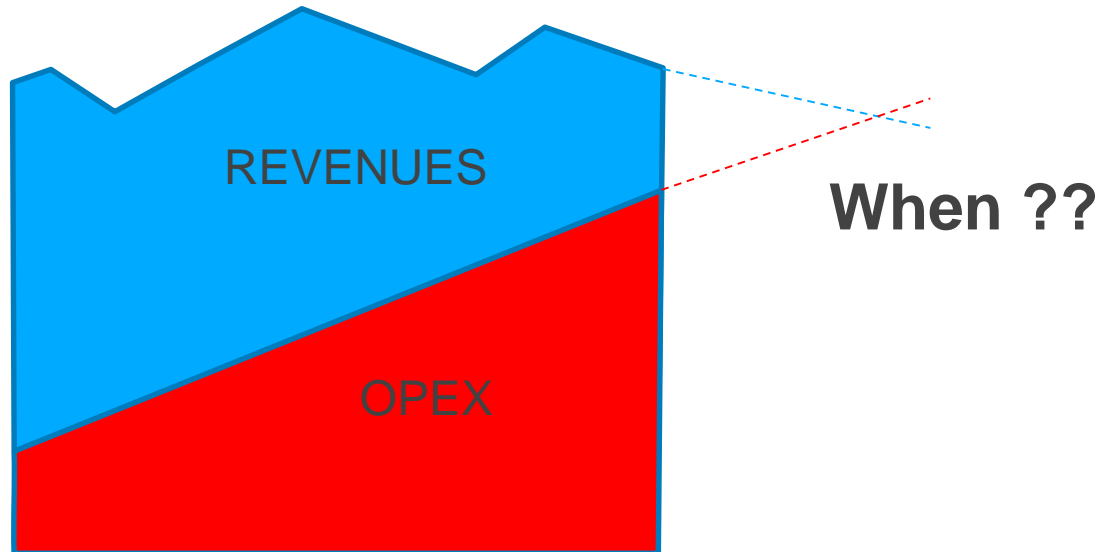
- But some opportunities :
  - (i) Guarantee of origin
  - (ii) Capacities installed



# How to choose a buyer and main issues

- The buyer has to :
  - buy production
  - balance production with demand
- Main issues :
  - price
  - specificities of the purchase contract : duration, informations to give, maintenance and production prediction etc...
  - counterparty risk
- A wide range of offers, that can be tailored depending on what is wanted :
  - « feed in offer » : fixed price guaranteed / no production commitment
  - « market offer » : the buyer is simply an intermediate between the producer and the market, the producer is fully exposed to the market
  - « tailor made offer » : the price and balance risk is shared between producer and buyer

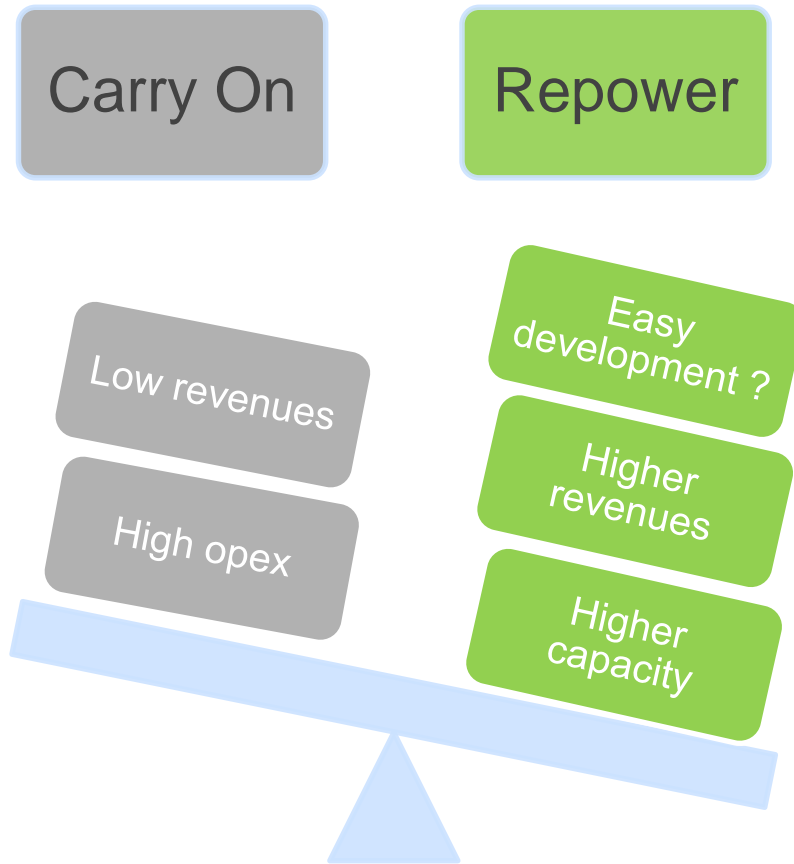
# Contract Duration ?



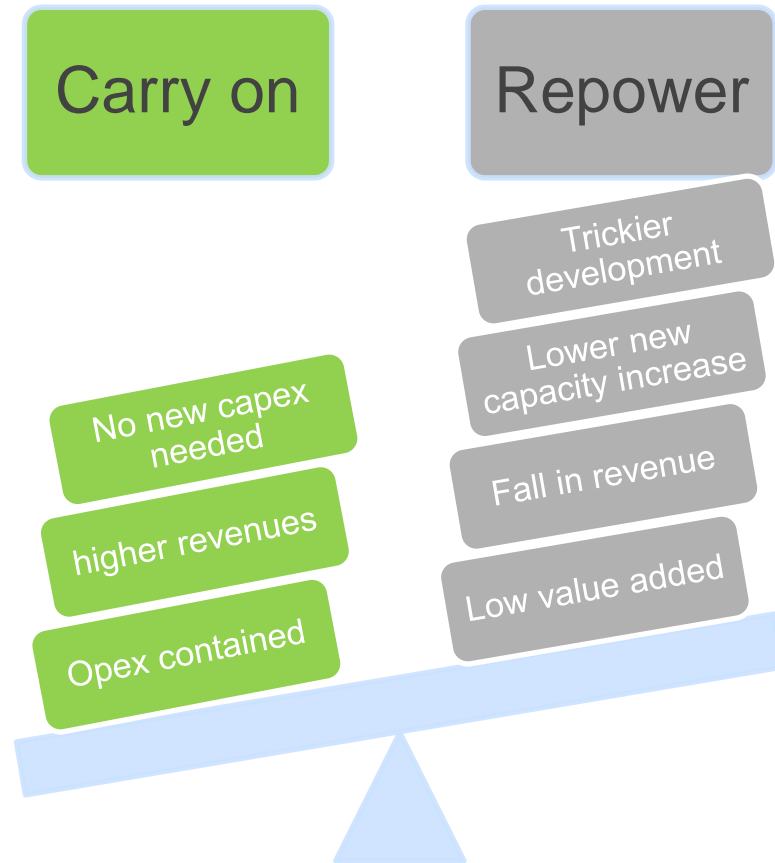
- the duration should not be too long to avoid negative margin ...
- ... and should allow to repower at the best date...



# Repower analysis

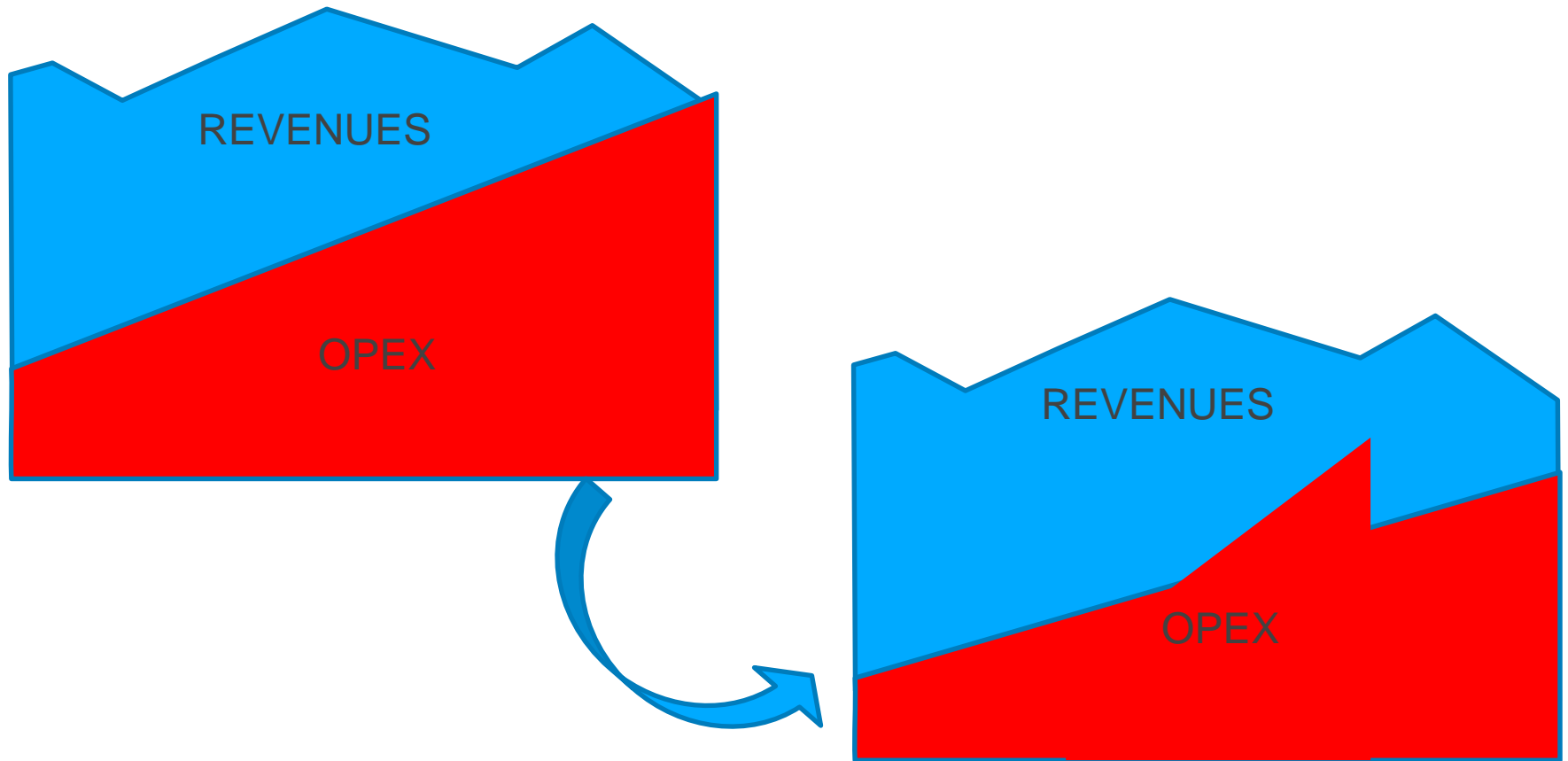


# Repower analysis



# La Compagnie du Vents Experience

- Until recently, legal evolution made it impossible to repower oldest LCV wind farms : radar, loi littoral, etc...



# La Compagnie du Vents experience

- Discussions started in 2016 to simplify legal framework regarding repowering
  - This should allow to repower the majority of oldest wind farms
- ⇒ LCV is working on a « full repowering » of its oldest wind farms in the best case, and on revamping or installing similar new wind turbines in fallback scenario
- ⇒ Repowering is necessary to reach French renewables targets

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**Thank You for listening!**

