

St.Gallen Forum for Management of Renewable Energies

INVESTING IN THE WIND SECTOR IN FRANCE

Dominique Darne – France Energie Eolienne

Saint Gallen, 22th May 2015



France Energie Eolienne

- Created in 1996, France Energie Eolienne (FEE) represents, promotes and defends wind power energy in France
- FEE has branches throughout France. Members reflects all types of market players of the sector: developers, investors, IPP's, manufacturers, suppliers, consulting firms, etc...
- FEE has about 200 members, having built more than 90% of installed capacity on the French territory and operating more than 85% of it.
- FEE is the spokesperson of Wind power professionals to public institutions, politics, media and society



Wind power in France

- > 9 GW of installed capacity at the end of 2014 (+1,4 GW -vs- 2008)
- ➤ About 10 000 jobs in France
- > A competitive market:
 - More than 23 developers & operators (70% of the capacity is operated by 18 companies)
 - More than 11 turbines manufacturers (75% of the capacity has been built by 4 companies)



SWOT matrix

Strenghts

- Contractual and permits stability for installed projects
 - Good financial offer for financing
 - Good and diversified wind ressource

Weaknesses

- Changing legal framework
 - Unstable tax regime
- Long and complex authorization process and numerous litigations against permits
 - Protracted grid connection procedures

Opportunities

- Low installed capacity regarding objectives
 - Curent FiT valid for 10 years
 - Ambitious national objectives
 - Effort for administrative simplification
 - Regional planning

Threats

- New remuneration scheme
- Strong opponents to wind power
 - Radars and military zones



Strengths

- Contractual and permits stability for current installed projects guarantee a stable remuneration and provides visibility for investors and lenders
- > Very active secondary market for investments
- National objectives are translated into regional planning, providing visibility to developers and investors
- The national and international financial offers for Wind projects are good (rates and availability)
- France enjoys good and diverse wind resources exposures



Weaknesses

- The legal framework for developing wind projects is unstable
- Recent years brought unstable and increasing tax regime
- Numerous and time consuming litigations from wind power opponents
 - 43% of construction/operation permits are subject to litigation
 - 75% of them are rejected
 - Litigation often last more than 4 years (when different courts levels)
- Long permits processes
- Figure Grid connection delays and costs are rising
 - Delays increased by 50% in 5 years
 - Costs increased by 100% in 5 years



Opportunities

- Installed Wind capacity in France remains low, especially regarding national objectives and resource (9GW -vs- 19GW objective in 2020)
- The current Feed-in-Tariff is legally valid for 10 years following 2014 EU Commission decision
- ➤ Objectives in the new national law are ambitious
 - 23% of renewable energy in 2020
 - 32% of renewable energy in 2030 with 40% of electricity from renewable energy in 2030
- Covernment attempts to simplify and shorten authorization procedures
- Regional planning



Threats

- As a result of the bill currently in Parliament, a new remuneration scheme compliant with EU guidelines will be set up and could introduce new risks
 - Wholesale energy market (low liquidity, volatile, concentrated,...)
 - Guarantees of Origin and Capacity markets exposure
 - Annual limits and global decreasing remuneration
- > Strong lobby of opponent associations against wind power development in France
- > Strong civil and military radars and military zones pressure that could drastically reduce wind power capacity development



Conclusions

- The development potential for wind power capacity in France remains important, but is facing different challenges:
 - Unstable legal framework
 - Powerful opposition
 - Rising radars and military zones constraints
 - Administrative procrastination
 - Grid connection delays, costs and unstable contracts with grid operator
 - Potential new risks introduced by the future remuneration mechanism introduced by the energy bill being discussed in Parliament
- France Energie Eolienne is active on all fronts to secure best environment possible for strong wind energy development



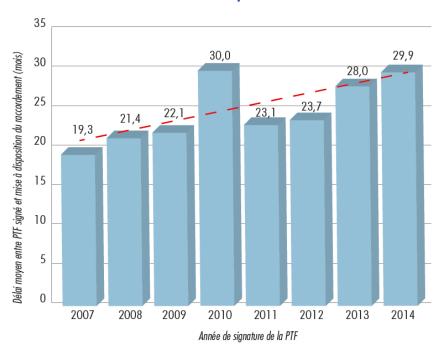
Annexe

$$CR = P. Min(N; N_0). (\alpha T_e - M_0) \rightarrow \text{Prime à l'énergie ex-post} \ - (Nb_{capa}. p_{ref\ capa}) \longrightarrow \text{Déduction de la valorisation des certificats de capacité} \ - (Nb_{GO}. p_{ref\ GO}) \longrightarrow \text{Déduction de la valorisation des garanties d'origine} \ \rightarrow \text{Ajout d'une prime de gestion}$$



Annexe

Évolution du délai moyen de raccordement



Évolution des coûts de raccordements

