

GAMESA experience in RE policies

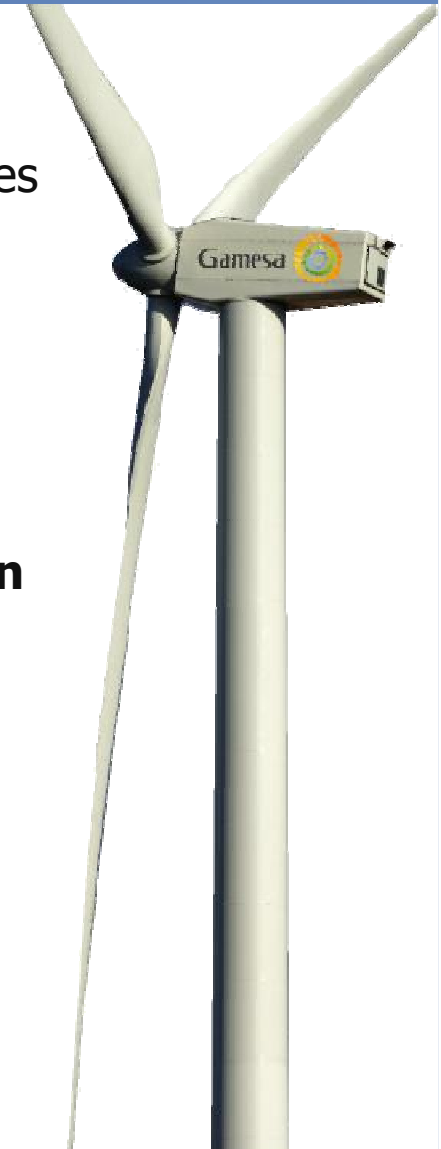
*Dr. Isabel Blanco
Head of market regulation*



COMPANY PROFILE



- © **1976. Gamesa begins operations**, developing new technologies in emerging sectors, including robotics, microelectronics, the environment and composite materials
- © **1994. Wind Turbine manufacturing** business unit is incorporated.
- © **1995: Development, construction and wind farm operation** activities begin.
- © **2000.** Gamesa is officially **listed on the stock exchange.**
- © **2006. The company focuses on renewable technologies**, mainly wind power. Divestment in Aeronautics and Services is completed.
- © **2008. Gamesa focuses on wind power.** Divestment in Solar.



LEADING WIND ENERGY PLAYER



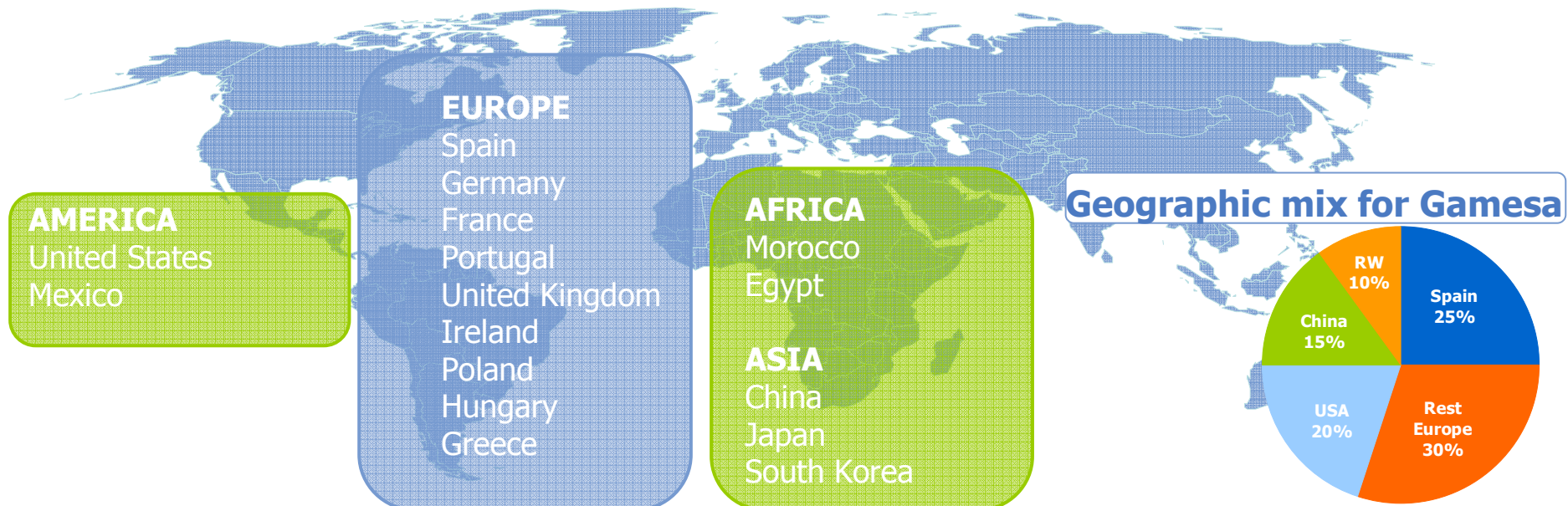
Gamesa ranks among the three main WT manufacturers in the world: *

13,000 MW supplied worldwide

Leading independent wind farm developer in the world: **

Installed capacity up to 2,800 MW with grid connection

Countries with MW delivered in 2007



* Source: BTM Consult World Market Update March 2007

** Source: Emerging Energy Research

WIND ENERGY DEPLOYMENT AND SUPPORT MECHANISM



Country	% growth	MW 2007	Support mechanism *
Germany	8%	22,247 MW	Feed-in during 20 years
Spain	30%	15,145 MW	Feed-in during 20 years
Italy	28%	2,726 MW	Electricity price + green certificates during 15 years
France	56%	2,454 MW	Feed-in during 15 years
United Kingdom	22%	2,389 MW	Electricity price + green certificate up to 2027 (different by technology)
Portugal	25%	2,150 MW	Feed-in during 15 years
Greece	17%	871 MW	Feed-in during 20 years
Sweden	38%	788 MW	Electricity price + green certificate during 15 years
Poland	80%	276 MW	Electricity price + green certificate up to 2020 (but there is cap and floor)
Bulgaria	95%	70 MW	Feed-in during 12 years
Romania	166%	8 MW	Electricity price + green certificate (but there is cap and floor)

Feed-in generally perform better, but Gamesa can “live” with other systems.

KEY CONSIDERATIONS FOR WIND ENERGY INVESTMENTS

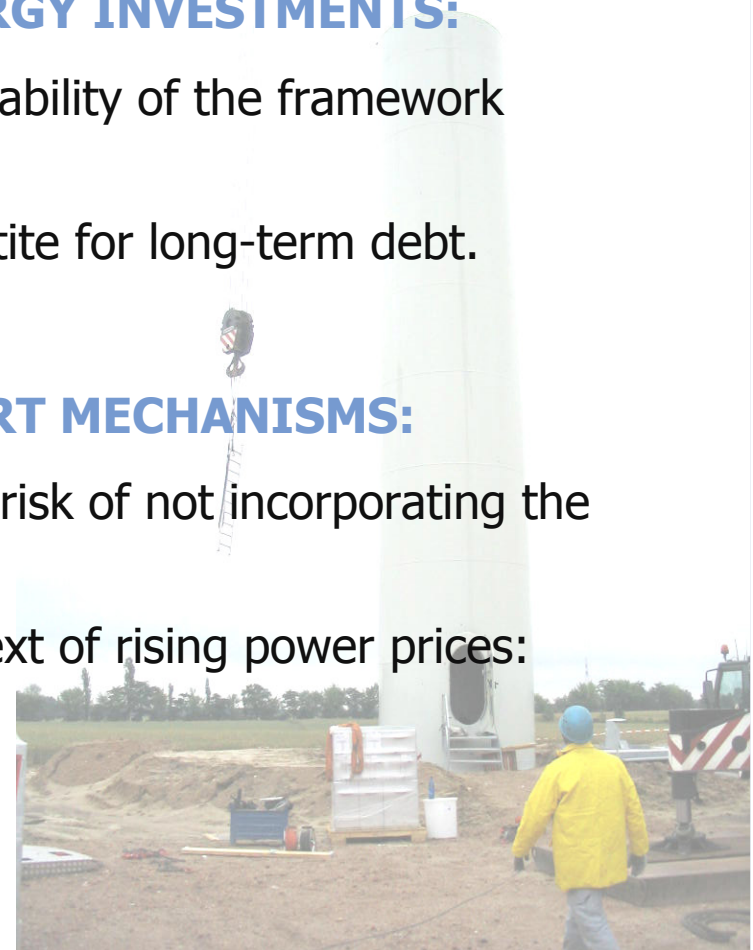


CAPITAL INTENSIVE NATURE OF WIND ENERGY INVESTMENTS:

- 80% of the cost is spent in the first year; the stability of the framework conditions and of the income expected are key.
- Possible effects of the financial crisis: less appetite for long-term debt.

PROS AND CONS OF THE DIFFERENT SUPPORT MECHANISMS:

- Feed-in and their long-term stability versus the risk of not incorporating the the evolution of prices and of production costs.
- Green certificates and power prices in the context of rising power prices: short-term gains versus long-term stability.



ECONOMIC VERSUS NON ECONOMIC BARRIERS



- Greece, Italy, Poland and United Kingdom: attractive remuneration but insufficient growth of the installed capacity. A paradox?

THE IMPORTANCE OF THE NON-ECONOMIC BARRIERS:

- 1) Grid access barriers
 - 2) Administrative barriers
 - 3) Unfair access conditions, dominant players.
- Gamesa is concerned that these aspects have not been sufficiently tackled in the current proposal, where the international trade of GoO has dominated the political debate.

- © **Article 14** must be reinforced. In the long term, the support mechanisms may disappear, but the priority of dispatch will remain key for a technology of variable nature.

KEY ELEMENTS TO BE PART OF THE DIRECTIVE:

- 1) Governments must plan the grid taking into account the needs and the foreseen locations of RE facilities.
- 2) The grid reinforcement and connection costs have to be shared on an equitable basis.
- 3) New RE installations should have priority of connection.
- 4) RES-e must have priority of dispatch.
- 5) Sufficient international connection has to be built.

The final responsibility must remain in the MS, not in the TSO; and the words "**priority grid access**" must appear on article.

- **Article 12** has been **progresively weakened** during the negotiation process and has not received the attention that it deserves. However, administrative barriers (cost, discrimination between applicants, non-transparency, long leadtimes) remain one of the major obstacles for wind energy deployment.

KEY ELEMENTS TO BE PART OF THE DIRECTIVE:

- The proposal of a “one-stop-shop” procedure, which has disappeared from the text, would have been a good step towards the simplification of a very complex process.
- The establishment of less burdensome authorisation procedures for small projects is appropriate, but some quantification on what is meant by small should appear on the text.
- The definition of technical specifications should not become an excuse for public authorities to refrain wind energy investments.

- © The current proposal regarding the flexibility mechanisms seems sufficient to allow MS to fulfill their targets, while not endangering the stability of RE investments.

KEY ELEMENTS TO BE PART OF THE DIRECTIVE:

- © **Article 7** on **statistical transfers**: transfers should only be allowed when a MS is well on track of achieving its own national objectives. This requires the definition of intermediate targets.
- © **Articles 8 and 9** on **joint projects** is not clear to Gamesa: what is the role of RE companies (the real investors) in these projects?. The article should not be approved before its implications are well defined.

The discussion on the flexibility mechanisms **should NOT be re-opened** in the short and medium term. The joint projects can be used to test other methods.

OTHER ASPECTS IN THE DIRECTIVE

- **Article 3: Interim targets** can be an appropriate tool to monitor the timely development of RE investments. Member States should not be allowed to postpone most of their plans till the end of the legislative period.
- **Article 5:** exceptions to the 2020 deadline should only be applied to very **large projects** (5 GW as stated), but cannot become an excuse for not fulfilling a Member State obligation.
- **Article 5: "Force majeure"**. The directive has been progressively filled with sentences that allow Member States to fail their targets. The circumstances under which this may happen are not made explicit and again constitute an obstacle to the effective application of the Directive.
- **Article 13** on **guarantees of origin**. GoO should remain a monitoring tool only, in order to avoid confusion and overlaps with the green certificates, the green tariffs or the statistical transfers.

ABOUT THE FEED-IN COOPERATION

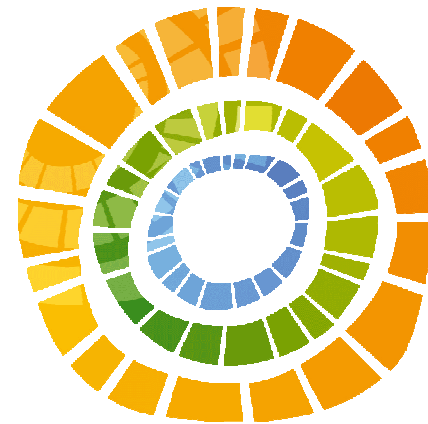


- The agreement has proved effective in defending the role and effectiveness of feed-in tariffs versus other support mechanisms.
- Gamesa considers that the work of the Feed-in cooperation is useful and should continue in the future, maybe opening up to new areas.

PROPOSED FIELDS OF COMMON WORK:

- National feed-in systems remain very different. More effort could be put in analysing the best practices and trying to find a common methodology.
- The co-operation could be extended to cover the non-economic barriers, mostly administrative and grid access issues.

Gamesa



Thank you for your attention