

## Why Policy Alone is Not Enough for Developers 2nd Quantum Leap in Wind: Overcoming Challenges and Building Momentum in Asia

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### **Energy: preliminary considerations**

# Energy markets are always the result of political choices



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## **Energy: preliminary considerations**

- o These political choices take into account:
  - Energy needs and growth perspectives
  - Cost of energy
  - Energy independence / security
  - Environmental impacts of energy mix
  - ... and, increasingly, socio-economic aspects of energy mix (rural development, employment, brain power...)
- o But also:
  - Voters interests
  - Economic interest of different groups



## Energy: preliminary considerations

 In approaching energy market regulation, the initial debate is whether to "internalize" the hidden costs of conventional energy sources (e.g., adding CO2) or instead to provide incentives for the development of alternative sources

In this context, renewable energy incentives clearly are not "subsidies" but rather re-balance the market





Alternative mechanisms to stimulate renewable energy promotion

	Tariff is regulated	Volume is regulated
Investment-based	Subsidies / Grants or Tax incentive	Auctions/Tenders
Production-based	Price mechanisms	"Green" Certificates
	Most effective*: feed-in tariff	

Why most effective? Investor confidence – Continuity – Security: most developed

wind markets = feed-in tariff

- In Spain, wind energy supplied 16.4% of demand in 2010 and in March 2011 was the first technology of the system with 21% of production
- In Spain, wind energy reduces electric prices by 6€/MWh, because it enters the pool at 0€/MWh

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#### Price mechanisms: Feed-in tariffs

- Renewable energy producers have the right to sell all their production to the grid, at a remuneration level fixed by law and depending on the technology used
  - The tariff can be a fixed price with the advantage of cash flow certainty – or a "bonus" on wholesale market price
- o Guaranteed remuneration for a determined period
- o The system is widely deployed in Europe, with prime examples in Germany and Spain
- The system requires that the tariff be sufficiently high as well as temporal stability



#### Price mechanisms: Feed-in tariff

- o This system has proven to be a simple and efficient system
  - Supports the introduction of small and mid-sized companies
  - One of the most cost-effective ways to produce renewable energy
  - Creates transparency and provides market security
  - Proven ability to develop wind capacity when fixed tariffs are sufficiently high





## Why policy alone is not enough

- o There is enough experience for analysis
- Harmonization is useful only if it is an efficient development tool for renewable energy
- No mechanism is efficient if not combined with pertinent and effective regulation facilitating wind energy implementation in terms of siting and permits, grid planning and connection
- o Efficient means that:
  - Investment is stimulated in an stable, profitable, "selfassessable" and clear environment

## Why policy alone is not enough

- Both a feed-in system and a Green Certificate system can stimulate development if they are well defined, although feedin tariffs are more efficient and cost-effective
- Forced harmonization, without an adequate transitory period,
  could be a shock to the market
- Transitory periods should be defined in such a way as to allow recovery of the investments made in a fixed economic environment



## Why policy alone is not enough

- Investors should be able to choose between continuing with 0 the former system or moving to the new one
- o We cannot forget that a system to promote wind energy requires more than economic incentives. To achieve efficiency, administrative procedures and grid connection procedures must also be homogenized
- o Incentive schemes must be sustainable in the long term. Overly generous systems can cause uncertainty



#### Conclusions

#### **Regulation is not only establishing a support scheme**

- A good and transparent administrative procedure
- Clear and transparent grid connection systems
- A good cooperation between the electric system operator and the wind industry
- Avoid geographical and sectorial regulation dispersion
- Limit decision-making discretionary power

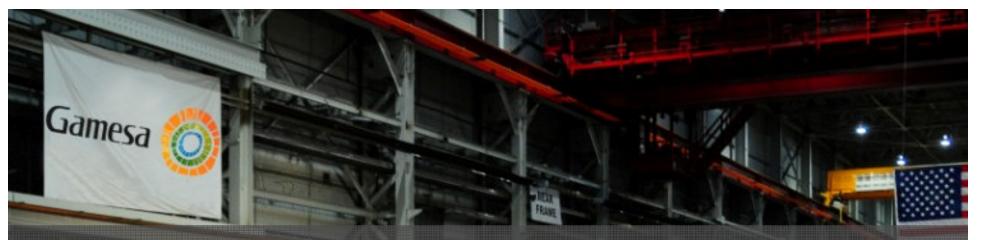






The wind industry must be ready because there is an increasing pressure to eliminate renewable energy incentives, particularly in an economic crisis environment





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"The nation that leads the clean energy economy will be the nation that leads the global economy"

Barack Obama State of the Union address, January 27, 2010

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