



Renewables: A key role in securing a sustainable energy supply

Carmen Becerril

General Manager for Corporate Development of ACCIONA

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Renewables, a key role in securing a sustainable energy supply

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1. Energy context





1. Energy context

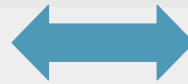
Renewables: towards a more sustainable energy model

GROWING ENERGY DEMAND

+ 60% 2002-2030

ENERGY DEPENDENCE

85% of oil import dependence in OECD countries in 2030



EMERGING COUNTRIES

China, India
Global right to development



LACK OF COMMERCIAL ENERGY

2,000 M people still rely on traditional biomass

RENEWABLES



OIL PRICES

- Great volatility
- Political instability
- Structural crisis



ENVIRONMENTAL CONCERNS

- Kyoto Protocol and beyond
- Sustainable management of natural resources





1. Energy context

Undesirable consequences for the environment

Date	Concentration of CO ₂ (ppm)	Average temperature change in the world (°C)	Rise in sea level (cm)
1990	354	-	-
2000	367	0.2	2
2050 (*)	463 - 623	0.8 – 2.6	5 - 32
2100 (*)	478 – 1,099	1.4 – 5.8	9 - 88

(*) The first figure in the scenario is on line with policies of maximum energy efficiency while the second is at the opposite end of the spectrum.

Source: Intergovernmental Panel for Climate Change (IPCC). Ppm: parts per million in volume.

Energy- related activities are the source of 84,4% of GHG emissions in Annex I countries (2003 UNFCCC data)

Climate change and major alteration to the Earth's ecosystem





1. Energy context

Renewables: strong and weak points

STRONG

- Natural energy resources
- Globally available
- Environmental balance
- Emission-free
- Local development
- Social support
- Modularity
- Technologically innovative
- Suitable for different contexts
- Decentralization

WEAK

- High costs, but progressive reduction (scale economies, R&D)
- Intermittence of several technologies (wind, sun)
- Environmental impact
- Different legal frameworks
- Need of political support
- Still small size



1. Energy context

Towards a new energy model

Indigenous
Sources

Emissions free

Security of
supply

Competitiveness

Political
commitment

Support new
developments

Legislative and
regulatory stability
(sanctity of contract)

Appropriate
Reward

Private commitment:
investment and development



2. ACCIONA: pioneers in development and sustainability





2. ACCIONA, pioneers in development and sustainability

THE ACCIONA GROUP

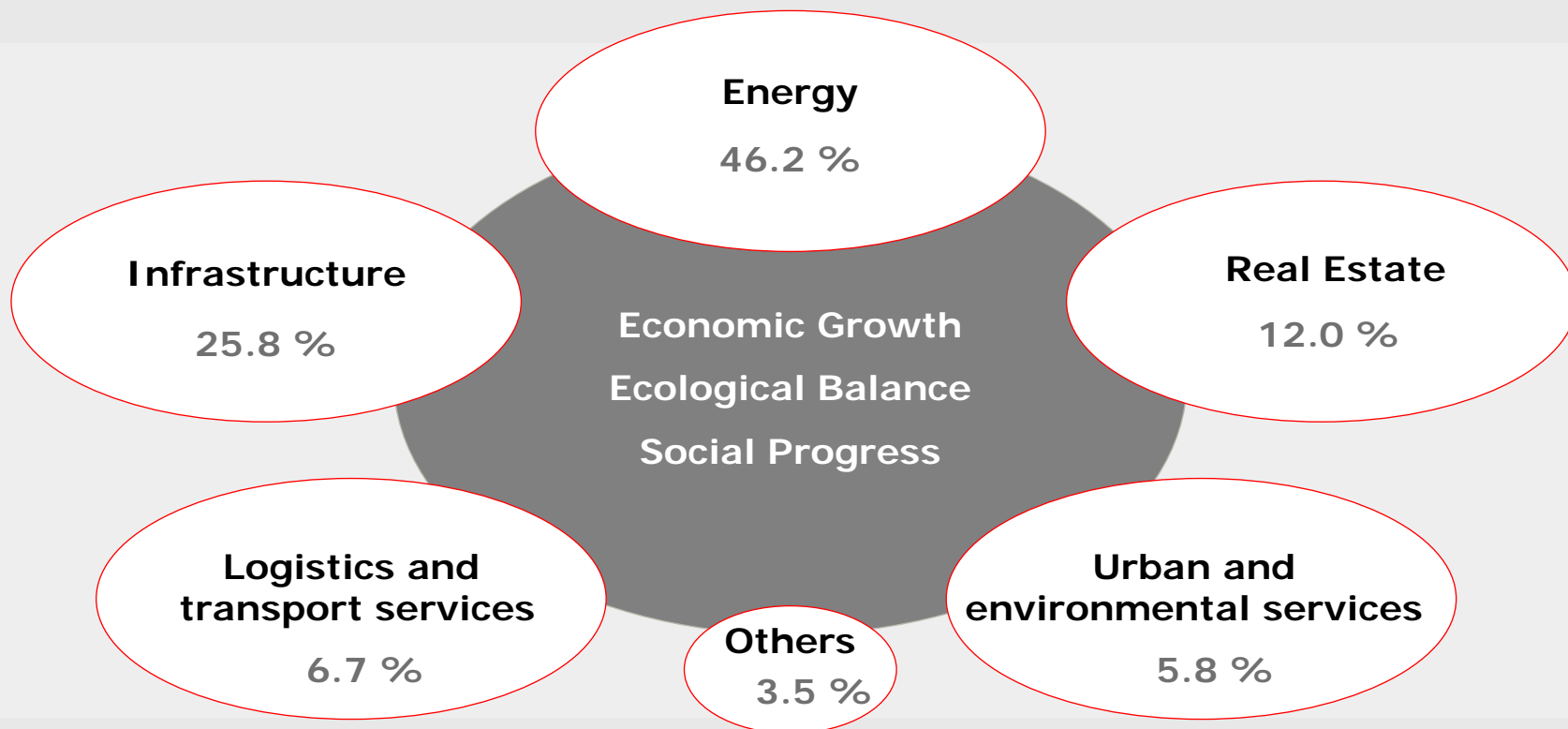
- A **leading** corporation in the development, promotion and management of **infrastructures and services oriented towards sustainable development and social welfare**
- A team of more than **30,000 people** in over 30 countries in 5 continents
- **Solid economic position:** (figures 1Q 2006):
 - Turnover: 1,303 M€ (+32.4%)
 - EBITDA: 225 M€ (+42.7%)
 - EBIT: 148 M€ (+42.3%)
 - Net profit: 102 M€ (+36.8%)





2. ACCIONA, pioneers in development and sustainability

Development and sustainability, key corporate strategies



Contribution of the group's businesses to its EBITDA – 1Q 2006





***3. ACCIONA Energía:
leader in renewable energies***





3. ACCIONA Energía, leader in renewable energies

Major projects in renewables (31.03.2006)



Wind: 3,674 MW installed -6% of the world total- (2,492 MW owned, 1,912 attr.)

Biomass: 33 MW -30% of the primary biomass in Spain-

Solar: 14,8 MW PV (40% of the Spanish market) and 19 MW thermal installed

Small hydro: 59 MW -3.6% in Spain-

Biofuels: 35,000 tonnes per year biodiesel plant (1.2 Mtonnes in project)

Horizontal integration of activities


ACCIONA also has 139 MW in **cogeneration**





3. ACCIONA Energía, leader in renewable energies

Position in wind power / Worldwide implementation (31.03.06)

 Countries with operational facilities



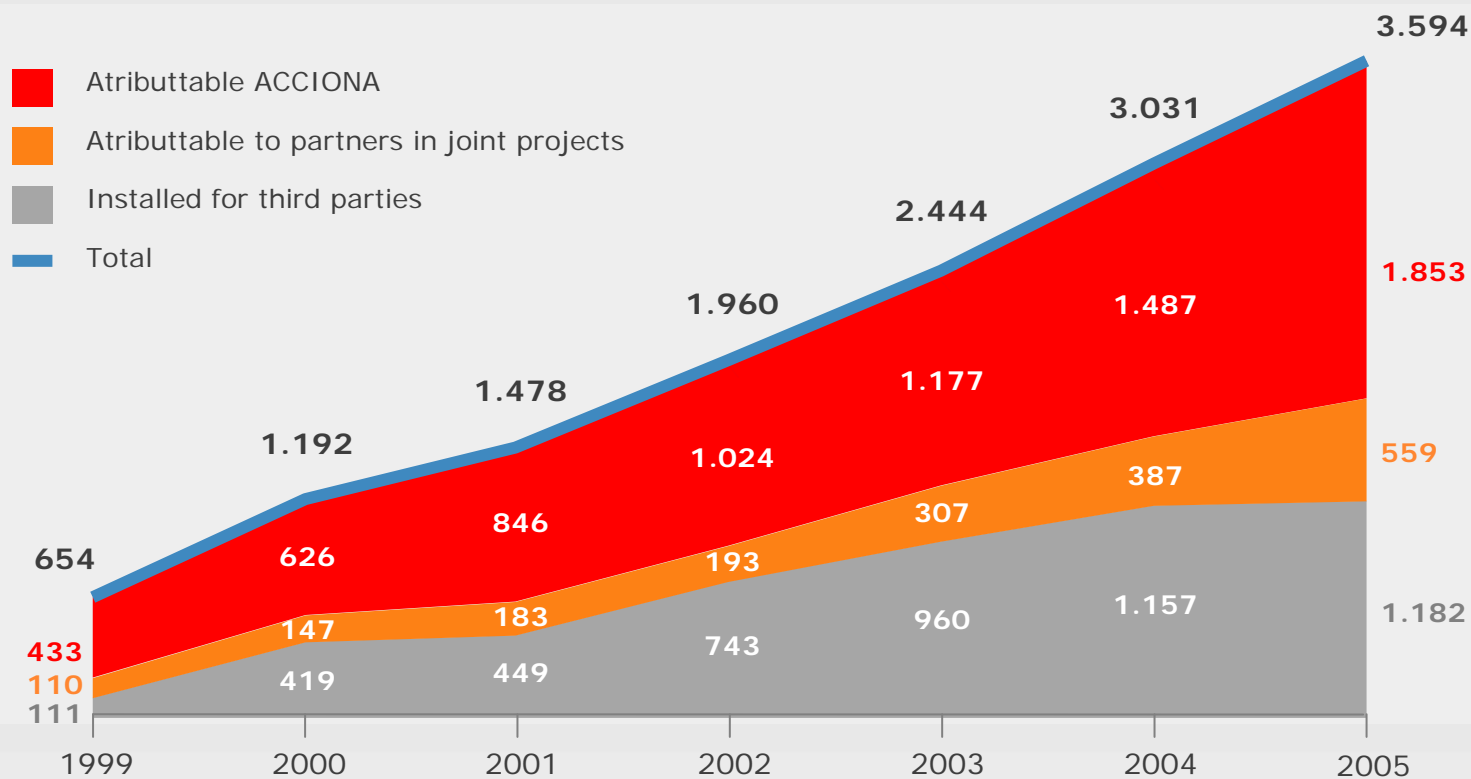
Total MW attributable: 1,912

Total MW installed: 3,674



3. ACCIONA Energía, leader in renewable energies

Position in wind power / Growth (31.XII.2005)



(*) Incorporates proforma figures for CESA in 2005 to the consolidated figures of the Energy Division of ACCIONA





3. ACCIONA Energía, leader in renewable energies



El Perdón windpark (20.3 MW), the first one put into service by the Group





3. ACCIONA Energía, leader in renewable energies



Windpark in the Izco range of hills (Navarre, Spain)





3. ACCIONA Energía, leader in renewable energies



AW-1500 wind turbines in the Moncayuelo windpark (48 MW)





3. ACCIONA Energía, leader in renewable energies



First 1500 kW wind turbine produced by ACCIONA Windpower in Navarre (Spain)





3. ACCIONA Energía, leader in renewable energies



Dam of the Irabia small hydro plant in Navarre (Spain)





3. ACCIONA Energía, leader in renewable energies



25 MW biomass plant at Sangüesa (Navarre, Spain)





3. ACCIONA Energía, leader in renewable energies



'Solar garden' at Sesma (Navarre, Spain)





3. ACCIONA Energía, leader in renewable energies



Processing facilities in the biodiesel plant at Caparroso





3. Projects in the US, Canada and Mexico





3. Projects in the US, Canada and Mexico

Our position in the US

Operational projects

- **Blue Canyon windpark:** 74.25 MW, Oklahoma
- **Velva windpark:** 11.88 MW, North Dakota

Projects under construction

- **Thermal electric solar power plant:** 64 MW, Nevada

Projects under development

- **Wind power:** + 1,500 MW in New York, North Dakota, South Dakota, Pensilvania, California, Oklahoma...
- **Thermal electric solar:** + 800 MW in South Western States



3. Projects in the US, Canada and Mexico



Blue Canyon windpark (74.25 MW) in Oklahoma (USA)





3. Projects in the US, Canada and Mexico



Virtual image of the Nevada Solar One solar thermal electric power plant (USA)





3. Projects in the US, Canada and Mexico

Our position in Canada

Operational projects

- **Magrath windpark:** 30 MW, Alberta

Projects under construction

- **Chin Chute windpark:** 30 MW, Alberta
- **Ripley windpark:** 76 MW, Ontario (since October)

Projects under development

- **Wind power:** + 1,000 MW in different provinces: Alberta, Ontario, New Brunswick, New Scotland, Manitoba...





3. Projects in the US, Canada and Mexico



Magrath windpark in Canada (30 MW)





3. Projects in the US, Canada and Mexico

Our position in Mexico

- We are developing projects in wind power and thermal electric solar technologies aimed to supply electricity to qualified customers





4. Conclusions

Conclusions

- **The present energy model is unsustainable** for environmental and strategic reasons. It will be **much more so** given the rise in demand
- **Renewable energies** are in a position to provide a change to the world's energy model, which will create more business opportunities
- **Industry and Governments should cooperate**, starting now, to set up a gradual, non-traumatic transition towards the new energy model
- **There are already pioneering business initiatives** that have sustainability at their core, and that are working to demonstrate the technical and economic viability of the new model





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