The experience of Spanish renewable energy developers

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Abstract. The paper is focused on the framework conditions that have made possible the birth and development of the renewable sector in Spain. Dozens of new companies have emerged in the wake of a stable legal framework that has politically guaranteed environmental premiums for electricity produced from renewable energy sources (RES-E). The renewable energy *feed-in tariff* (REFIT) framework in force has delivered good results in some technologies –mainly in small hydro and wind energy– although has not given enough profitability to foster biomass, biogas and solar. Nevertheless, APPA regards the Spanish support scheme as a good example of how to combine market forces and incentives for *clean* energies at an affordable cost and without complex mechanisms or bureaucracy. Therefore, investors and independent developers are reluctant to be involved in the experiments already done in some other countries with alternative schemes. In order to reach the 12% goal enshrined in *the Electricity Act 54/1997* and in the *National RES Development Plan 2000-2010,* recently updated*,* the small hydro and wind premiums will have to be kept at their current levels though increasing the compensations for biomass and solar electricity. Administrative and grid barriers should also be removed to foster RES development. Moreover, the achievement of the 12% goal will be impossible unless current energy consumption trends are no curbed.

A stable legal framework

The *Spanish Renewable Energy Association-APPA* was founded in 1987 with only a few small hydro developers. Sixteen years later the same organisation brings together more than 200 corporate members, mainly independent producers from small hydro, wind, biomass and solar, whose total capacity is over 2,000 MW only in Spain. This evolution illustrates the progress of renewable energy in the country.

This development would not have taken place unless the promotion of renewable energy sources of electricity (RES-E) had not been a national policy in Spain for more than two decades. Since 1980 and under different Governments and different political majorities, there has been continuity in the legal framework aimed at fostering RES-E.

The three Acts that have ruled the energy and/or electricity sectors in Spain since 1980 –the *Energy Conservation Act 82/1980*, *the National Electricity System Act 40/1994* and the *Electricity Act 54/1997* (currently in force)– have given support to the development of RES-E. Whereas the main goal of such a policy in 1980 was to reduce energy dependence, both the 1994 and the 1997 Acts put more emphasis on the environmental benefits of RES. Regardless of their grounds, these different Acts have set a stable legal framework for more than 20 years.

Electricity Act 54/1997

The *Electricity Act 54/1997* gave up the old notion of electricity supply as a public service and opened the door to a new electricity legal framework aimed at making the guarantee of supply to all consumers compatible with the principles of objectivity and transparency within a liberalised market. This Act brought into force in Spain the provisions of the *European Directive 96/92/EC*.

Such an Act enshrined two different electricity production systems: the *Ordinary System* and the *Special System*. Whereas in the former the regulatory basis are the free generation market and the electricity pool where demand and supply bids for electricity are matched and prices are set in consequence, in the latter all generation plants below 50 MW belonging to three clearly separated areas –cogeneration, RES-E and waste– are given a special treatment justified by their contribution to "the environmental protection, energy efficiency improvement and the reduction in consumption".

According to article 30 of this Act RES-E producers are entitled to incorporate all their output power into the grid system and to receive as remuneration the general generation hourly pool price plus a premium or incentive fixed by the Central Government for all Spain. The total amount paid to RES-E generators must be between 80% and 90% of the average electricity price estimated each year by the Government. That average is calculated by dividing the total electricity supply revenues estimated from the whole electricity supply billing (excluding VAT and other taxes) by the total estimated power supplied [2].

Regarding hydro this rule only applies to small plants (10 MW or below). The Act allows solar plants to surpass such a range. The authorisation of any of these special plants is left in the hands of the Regional Autonomous Governments (Article 28), according to the federal political system in place in Spain since 1978.

As far as RES-E are concerned the *Electricity Act* contains a very important clause in its 16th Transitory Provision, since it not only enshrines the European target of 12% of gross domestic energy consumption by 2010 as a legal national goal but also links the existence and amount of RES premiums to the fulfilment of such a goal. This Provision states that "In order for RES to satisfy at least 12% of Spain's total energy

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[2] The Spanish Central Government estimated that electricity revenues for the year 2003 will total 14,952 M€ with a total supplied power of 211,024 GWh what makes an average electricity price of 7.085 €c/kWh.

demand by the year 2010, a plan shall be drawn up to promote renewable energies and *whose objectives shall be taken into account in the setting of premiums*". This Provision linking the premiums with the achievement of ambitious goals has been a key element in order to strengthen the confidence of developers and financial investors in the long-term stability of the Spanish RES policy. Thus, premiums have been regarded by everybody as politically and legally guaranteed.

Royal Decree 2818/1998

The *Special System* was developed in depth by the *Royal Decree 2818/1998*, which entered into force on January 1st 1999. This legal disposition begins stating in its preamble that "the established incentive for RES facilities has no time limit placed on it because their environmental benefits must be internalised and RES special characteristics –higher costs– prevent them from competing in a free market".

Regarding the economic arrangements this *Royal Decree 2818* fixed the amounts of RES-E premiums or incentives for the year 1999. As foreseen in the 18th article of said Decree the premiums have been adjusted annually since then by the central Government "in line with the variation in the average electricity sale price[3] that shall be applied to sum total of the market price plus the premium". Table 1 shows the evolution of premiums since 1999.

Table 1: Evolution of RES-E premiums by technology (in €c/kWh)

	1999	2000	2001	2002
Wind	3.16	2.87	2.87	2.89
Smallhydro	3.27	2.98	2.98	3
Ener. crops	3.04	2.76	2.76	2.78
Other biom.	2.82	2.55	2.55	2.57
S.PV <5 kW	36	36	36	36
S.PV >5 kW	18	18	18	18
Solar Th.E.	-	-	12	12
Geo/Wa/Tid	3.27	2.98	2,98	3

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Although the premiums are paid directly by the distributors who are fed with the electricity from the renewable generator, they are entitled to pass such amounts to the *National Energy Commission (CNE)* –the electricity independent authority–, which they always do. Premiums are legally regarded as a "diversification and security of supply cost of the electricity system" like, for instance, nuclear fuel costs. Premiums are therefore paid at the end by all consumers as any other general cost of the system.

In order to offer RES-E producers a way to know fully in advance their revenues per kWh regardless of hourly market price changes, the same *Royal Decree 2818* has given producers the right to opt for a *fixed price* instead of the "market price + premium" basic option. That *fixed price* is also adjusted annually by the Government according to the variation in the average electricity sale price. Table 2 shows the evolution of such fixed prices since 1999.

Table 2: Evolution of RES-E fixed prices by technologies (in €c/kWh)

	1999	2000	2001	2002
Wind	6.62	6.26	6.26	6.28
Smallhydro	6.73	6.36	6.36	6.38
Ener. crops	6.50	6.15	6.15	6.17
Other Biom.	6.28	5.94	5.94	5.96
S. PV <5 kW	39.6	39.6	39.6	39.6
S. PV >5 kW	21.6	21.6	21.6	21.6
Geo/Wav/T	6.73	6.36	6.36	6.38

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Most RES-E producers have chosen the basic "market + premium" option due to the fact that pool prices have been usually higher than estimated and thus allowing generators final total revenues above the fixed price. Legally, producers are only entitled to change from one option to the other once a year.[4]

Tariff revision & update for 2003

According to article 32 of the *Royal Decree 2818/1998*, "every four years the premiums set in this

[3] The average electricity sale price is defined as the forecasted income from billing for electricity supply divided by the forecasted electricity supplied. See above footnote 1 for 2003 estimate.

[4] Although all RES-E generators have chosen the feed-in tariffs, according to the Spanish legislation they could follow two other alternative schemes: a) to sign physical bilateral contracts with any distributor, supplier or qualified consumer; or b) to make offers directly to the electricity market. In both cases they would be also entitled to receive the same premiums as in the feed in scheme. The latter option b) has been legally fostered by the Royal Decree 841/2002, 2 August, through the setting of higher remuneration (0.90 €c/kWh instead of the standard 0.48 €c/kWh) as a guarantee of power for those RES-E plants that follow such a market track. However, the new measures have failed to deliver any real change in the behaviour of RES-E generators since following the new market option would lead them: on the one hand, to lose the standard payment for ancillary services (0.12 €c/kWh) and for reactive energy (0,24 €c/kWh) and on the other hand, to run the risk of incurring in additional costs linked to deviations. All in all, a bad choice for RES-E generators.

Royal Decree shall be revised by taking into account the evolution of the price of electric power on the market, the participation of these facilities in the coverage of demand and their impact on the technical management of the system". Hence, as the end of the first four-year's period was reached on 31st December 2002 the Spanish Government carried out the first revision of such premiums and fixed prices following such criteria.

However, the Government only revised in fact the wind energy and energy crops tariff and carried it out in a discretionary way. The *Royal Decree 1436/2002, December 27th*, states that "according to the 16th Transitory Provision within the *Electricity Act 54/1997* and with the aim to contribute to the achievement of the targets within the *Spanish Renewable Energy Plan 2000-2010,* the Cabinet adapts the remuneration of some RES-E facilities, and of some RES-E facilities taking into account the situation of the corresponding sector". Under such a wording energy crops' premium was increased by 19.2% whereas the wind premium dropped an 8%. Energy crops fixed price for 2003 was increased an 11% whereas the wind fixed price fell 1%, being actually the only fixed price that has been reduced for this year.

The premiums and fixed prices for smallhydro and some kind of biomass –manure, sludge, agricultural and forestry waste, biofuels and biogas– were updated as every year according to article 28 of *Royal Decree 2818/1998* "in line with the variation of the average electricity sale price". As the Government estimated that such an average price would increase 1.65% in 2003, the fixed prices for these technologies have been increased in a very similar percentage for the year 2003. Their premiums have seen a very slight reduction (–1,95 % for smallhydro and –2,5 % for that sort of biomass). As there were no mention to solar energies (PV and thermoelectric) their premiums and fixed prices have been kept without any change. Table 3 shows below the fixed prices and premiums for RES-E technologies in 2003.

Table 3: RES-E tariffs by technologies for year 2003 (in €c/kWh)

	Fixed Price	Premium
Wind	6.21	2.66
Smallhydro	6.49	2.94
Energy crops	6.85	3.32
Other Biom.	6.05	2.51
S. PV <5 kW	39.6	36
S.PV >5 kW	21.6	18
Solar Therm.	-	12
Geo/Wav/Tid	6.49	2.94

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The reduction in the premiums for wind energy, smallhydro and some kinds of biomass will not obviously help to achieve the ambitious RES-E targets recently updated (see next chapter). Since most RES-E generators have been following so far the "premium + market" tariff scheme, the reduction of the premiums will obviously reduce their revenues, especially in the case of wind energy.

The *Royal Decree 1436/2002* does not mention explicitly any reason for decreasing the wind energy premium by an 8% apart from the reference to "the situation of the corresponding sector". This generic phrase could allude to the explanation given to APPA in November and December during several meetings held with high officials from the Ministry of Economy. They claimed then that "wind costs had fallen sharply to the point that the average investment cost was around 780 €/kW". APPA rejected from the beginning such a conclusion by presenting to the Government a Report entitled *Economics of Wind Energy in Spain – Current Status* which concluded that winds farms in Spain have an average investment cost of 955 €/kW. Taking this figure for an average site (25 MW, 2.400 equivalent full-load hours (EFLH) per year and 20 years of life span) the resulting Internal Rate of Return (IRR) does not reach 9%.

APPA defended therefore before the Government the need to keep the wind energy premium at least at its 2002 level. However, the Government dismissed our figures without consistent grounds and eventually took a political decision even against the indicative Report from the *National Energy Commission* –the Spanish Energy Regulatory Authority– which clearly concluded that "it would not be convenient any reduction in the premiums in order to ensure the fulfilment of the *Spanish Renewable Energies Plan 2000-2010* and the commitments from the Kyoto Protocol".

Nevertheless, following a demand from APPA the Government announced at the same time of the approval of the 2003 premiums its formal commitment to draw up a clear and detailed methodology for the future revision of the premiums and fixed prices with two goals: to make the RES-E revenues more predictable in the medium and long term and to guarantee the economic viability of all renewable sources and especially of those which have had less development so far. APPA hopes that this new methodology, currently being drafted by the Ministry of Economy, will be able to give more stability to the Spanish RES-E support system. The same stability that the Government have just given to utilities within the tariff framework for conventional electricity approved for the next eight years.

The existence of both the "market price + premium" scheme and the annual adjustment of premiums and fixed prices according to the variations in the average electricity sale price stress the market oriented approach of the Spanish support system. This way all reductions in costs brought about by conventional producers in the electricity market are passed onto RES-E producers' revenues.

Thus, APPA regards the Spanish support system as a good example of how to combine market forces and incentives for *clean* energies without complex mechanisms or bureaucracy. Moreover, this framework has been able to deliver quite good results at an affordable cost. RES-E generators within the *Special Regime* received in 2001 premiums under this scheme that totalled 335 M€, which represented only 2.4% of the total electricity supply revenues. The Spanish support system has been able to deliver goods results in some technologies but obviously it has not been capable of overcoming alone all kinds of barriers.

RES framework: goals and achievements

As foreseen in the 16th Transitory Provision of the *Electricity Act*, the Central Government adopted in 1999 a *National RES Development Plan 2000-2010*, which included a detailed set of measures to reach the target of 12% of gross domestic energy consumption by 2010 and of 29,4% of gross domestic electricity generation by the same year, in line with the EU goals set for Spain in the Directive 2001/77/EC.

The *National RES Development Plan 2000-2010* has been updated in 2002 through the *Electricity and Natural Gas Plan. Transmission Grid Development 2002-2011,* passed by the Spanish Cabinet on September 13th 2002 and adopted by the Parliament on October 2nd. Actually, the new Plan updates the absolute renewable goals adopted in 1999 in the *RES Development Plan*, although keeping this latter document as the main reference within the Spanish renewable policy.

Electricity Plan 2002-2011

According to this new Plan, the gross inland energy consumption is expected to grow in the next ten years at an average annual rate of 3.09% to reach 174,986 ktoe by 2011[5]. This figure is 17% higher than the one foreseen in the *RES Development Plan* for the 2010 *business as usual* scenario (149,000 ktoe) and almost 30% higher that the amount foreseen in the *efficiency* scenario (135,000 ktoe) –actually considered as the real target within the RES Development Plan–. So it is obvious that the new Plan goes beyond the energy demand scenarios made in 1999 and forgets completely to implement any savings policy[6].

As the new Plan keeps the same renewable energy share goal adopted in 1999 (12%), in line with the EU target, the absolute expected contribution from renewables is forced to jump in order to keep the pace with the expected rise in the energy demand[7]. Beyond the official statements alluding the key role that natural gas will have in the future energy scenario, it is remarkable that renewables will have the highest expected annual growth rate (10.36%) within the next decade, even higher than natural gas (9.01%). In spite of the increasing role of renewables, it's striking to notice that the foreign dependency of the Spanish energy sector will be even risen from its current level[8], what seems a serious threat to the national security of supply.

In regard to the national electricity demand**,** the new Plan foresees a central scenario that will require a gross total generation of around 316 TWh by 2011 (296 TWh in inland Spain and 20 TWh in the Balearic and Canary Islands)[9], more than 30% over the expected electricity generation for 2002[10]. To cover this expected rise in the electricity consumption, the new Plan estimates that new power will have to be put into operation in the next decade. Apart from some increase in nuclear power –new 676 MW coming from better turbines in existing plants–, big hydro –modernisation of existing plants– and a new power plants fuelled by imported coal –new 680 MW–, the main new power will come from combined cycled power stations fuelled by natural gas –14.800 new MW– and from the Special *Regime* (RES-E + Waste + Cogeneration) – around new 13.000 MW from renewables and 2.000 from waste and cogeneration–.[11]

The new Plan keeps the RES-E share target –29.4 %– already adopted in 1999 and indicated later in the European Directive 2001/77/EC[12]. Obviously, the achievement of this RES-E share by 2011 in the context of the higher expected electricity demand will be only feasible with more absolute RES-E generation than expected in the *RES Development Plan* in 1999. The 92.958 GWh from RES-E expected by 2011 within the new Plan –see tables below– are 21% higher than the considered in the 1999 Plan.

5 The gross inland energy consumption within the EU-15 is expected to grow at an annual average rate of only 1.1% in the next decade. The gross inland energy consumption in 2001 reached 127,783 ktoe.

6 Moreover, the primary energy intensity is expected to rise at an average annual rate of 0.1% whereas in the same period it is expected to fall in the EU-15 at an annual average rate of 1.7%. Actually, the Plan itself announces a future "Spanish Savings Plan" to be presented shortly.

7 The *RES Development Plan* considered in 1999 an absolute expected contribution from renewables of only 16,639 ktoe by 2010. The new goal is 20,956 ktoe.

8 77% in 2000 and 75% in 2001.

9 This means that the national electricity demand is expected to grow at an annual average rate of 3.75% (1.7% in the EU-15 for the same period).

10 The new prevision of electricity demand by 2011 is 14% higher that the one within the *business as usual* scenario in the *1999 RES Development Plan* and even 21.5% higher that the *efficient scenario* –taken then as the final target.

11 The Plan expects that up to 2,381 MW of the current plants fuelled by oil will be closed down by 2011. Cogeneration will reach 7,100 MW of installed power by 2011 and it will produce 38,000 GWh, enough to cover 17% of demand (5,520 MW and 11% in 2001).

12 Amazingly, there is not a single mention of the RES-E Directive throughout the whole new Plan**.**

Table 4: RES-E final targets (Electricity Plan 2002-2011)

	2001	Goals 2011
Gross Electricty Gener. (GWh)	236 TWh	317 TWh
RES-E (GWh)	53 TWh	93 TWh
RES-E (%)	22.4%	29,4%*

APPA * Same goal as European Directive RES-E 4

Table 5: RES-E targets by technologies (Elect. Plan 2002-2011)

	MW	GWh
Big hydro	16,571	31,129
Wind	13,000	28,600
Biomass	3,098	22,784
Smallhydro	2,380	7,377
Biogas	78	546
Solar PV	144	218
Solar Therm.	200	459
MSW	262	1,846
TOTAL	35,733	92,958

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The new RES-E goals (installed power and production) are the same as foreseen by 2010 in the *1999 RES Development Plan* for big hydro, solar thermoelectric, solar PV and biogas. The goals for small hydro have been risen a little bit (from 2,230 MW to 2,380 MW and from 6,912 GWh to 7,377 GWh). The big rise concerns biomass and wind power. The new biomass power and production targets are 63 % higher than the previous ones (1,897 MW and 13,949 GWh). Wind power new goal is 44.8% higher than the 1999 one (8,974 MW), although in production the expected rise is only of 32% from the old prevision by 2010 (21,538 GWh).

Regarding the wind energy goals it is important to make two remarks: first of all, the new Plan links the achievement of the wind goals to "the continuity of the favourable regulatory framework currently in place", what can be understood as a clear political message in favour of the continuity of the current feed-in tariff.

Secondly, the 13.000 wind MW targeted by 2011 are regarded as the maximum installable power in order to safeguard and guarantee the stability and security of supply within the Spanish electricity system. Actually, the Plan foresees that the maximum technically admissible simultaneous feed from wind energy is 10.000 MW for peak hours and 5.000 MW for valley hours. As the Plan estimates a coefficient of windfarms disposability and simultaneity of 75%, it concludes that the maximum installable power is 13.000 MW.

APPA considers this updated goal as a step in the right direction. However, we are convinced that the wind development will go on further following the Regional Governments' goals –30.025 MW by 2011– and the applications for access to the transmission grid presented to the TSO until March 2002 – 40.000 MW–. Hence, the grid operator should take the required measures in the future to cope with all the expected new wind power already in the pipeline.[13]

One of the two main flaws of the Plan is that it does not tackle the current high foreign dependency of the Spanish energy system. Besides, there is a complete lack of energy demand management policy[14]. The updated renewable goals are really ambitious in line with the RES-E Directive. However, they could be seen only as wishful thinking unless the Government takes additional measures.

Wind energy seems the only RES-E technology on the right track to reach its 2011goal. The stable legal framework, the right level of the wind premiums and the regional development plans put in place by many Autonomous Regional Communities have been able to foster a swift wind development with almost new 1,500 MW installed last year. However, the discretionary reduction in the wind energy premium carried out this year will not help to keep this impressive track.

As far as the small hydro sector is concerned, only 49 new MW were added to the installed power in Spain over the last eighteen months. As the Spanish Renewable Energy Agency (IDAE) stated in a recent report "the pace at which new small hydro plants are currently being installed is insufficient to achieve the future goals". And this statement was made before the Electricity Plan 2002-2011 increased even more the targeted power by 2011. This situation clearly points out that a good support system in terms of tariffs is not enough to overcome the administrative and environmental barriers that prevent small hydro from developing all its potential.

13 Actually, the report *Wind Force 12* published recently by EWEA and Greenpeace regards as a cautious assumption that wind energy penetration into the electricity grid can be managed without technical problems up to a level of 20%. So if we follow this criterion, wind energy could generate in Spain a peak level of around 59 TWh by 2011, what implies a peak power of about 30,000 MW and a total installable power of 40,000 MW, assuming like the Plan a coefficient of disposability and simultaneity of 75%.

14 Notice, for instance, that the electricity consumption per capita is expected to rise 41.4% in the next decade to reach 6,646 kWh. In the EU-15 this indicator is expected to rise only 13.8% to reach 7,698 kWh per capita. However, the Plan argues that the changes in the electricity mix will increase its energy efficiency since, for instance, the generation of 1 GWh is expected to require 192 toe by 2011 instead of the 202 toe required in 2000.

Table 6: Current RES-E status by technologies

	Goals 2011 (MW)	Current Situation (MW)
Wind	13,000	5,000
Smallhydro	2,380	1,631
Biomass	3,098	208
Biogas	78	65
Solar TE	200	0
Solar PV	144	16

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Although biomass is one of the cornerstones of the updated *RES Development Plan*, it is currently at a complete standstill due to the lack of profitability of plants. To reverse this situation it would need higher premiums and an integral policy capable of taking into account the environmental and social benefits linked to biomass plants. The increased goals adopted by the new Electricity Plan only stresses the urgency of the additional measures required. The increased premium for energy crops in order "to collaborate to the fulfilment of the foreseen targets within the *Spanish Renewable Energies Plan 2000-2010*" is obviously a step in the right direction. Nevertheless, we believe that the adopted increase by only 0.54 € c/kW recently carried out is not enough to ensure the minimum profitability required in such investments. Actually, APPA argues that in order to guarantee a suitable profitability an additional increase of 1,26 €c/kW in the premium is required. Hence, the ambitious target for biomass by 2011 seems unachievable, unfortunately.

Solar PV needs also urgent measures to reach its goal by 2011. Among them, the current premiums should be increased to get a payback period of 10 years and a guarantee for 20 years.

Other barriers for RES-E development

The achievement of the 2010 goals will be impossible if the current trends in energy and electricity consumption –50% increase in the last decade– are not curbed. All technologies, including wind, have to face huge problems regarding grid connection and administrative licences.

RES-E development has to cope with weak grid infrastructure in some parts of the country –a problem that is being solved partly by agreements to share the cost of grid strengthening between groups of wind developers– and difficult connection with the distributors' grid. Independent developers usually face substantial difficulties in reaching an agreement with the grid operators, commonly big utilities, which in many cases have been abusing their dominant position to try to avoid or delay access to their networks. The present legal regime regarding grid connection is completely outdated –it was passed in 1985– and unsuitable for RES-E plants. A new legal framework is in the pipeline in order to guarantee a more transparent, objective and non-discriminatory procedure regarding grid connection.

It seems also essential to streamline administrative procedures regarding authorisation, since at present bureaucracy makes often this process to be a lengthy nightmare. There should be also some kind of harmonisation among Autonomous Regional Communities since each of them follows currently its own singular procedure.

RES-E development has been only possible in those Spanish regions where a wide political and social consensus has been achieved between the Autonomous Government and the local councils. Last but no least, social and economic local agreements have helped to prevent conflicts with local organisations and residents. Information campaigns and careful environmental impact assessments have helped in many cases to overcome landscape concerns of local population and lack of energy awareness.

Conclusion: Spanish Developers Perspective

The current Spanish support system has demonstrated its efficiency in delivering good results in those RES-E technologies with the appropriate amount of premium. Financial institutions have confidence in the stability of this framework and its ability to combine market forces and incentives for *clean* energies without complex mechanisms or bureaucracy. The framework needs only to be improved to deliver better results and be complemented by new policies aimed at removing outstanding administrative and market barriers. For the time being, Spanish independent investors an developers are pleased with the *feed in* economic scheme and are therefore reluctant to be involved in the experiments already in place in some other countries with alternative schemes.

Following a demand from APPA the Government announced at the same time of the approval of the 2003 premiums its formal commitment to draw up a clearer and more detailed methodology for the future revision of the premiums and fixed prices with two goals: to make the RES-E revenues more predictable in the medium and long term and to guarantee the economic viability of all renewable sources and especially of those which have had less development so far. APPA hopes that this new methodology, currently being drafted by the Economy Ministry, will be able to give even more stability and predictability to the Spanish RES-E support system. The same stability that the Government has just given to utilities within the tariff framework for conventional electricity approved for the next eight years.