

USE OF INNOVATIVE FINANCIAL TOOLS AT THE NATIONAL LEVEL

Summary

Since its creation, in 1974, the Institute for the Diversification and Saving of Energy (IDAE) has specialised in the deployment of a variety of measures aimed at the promotion of RUE and RES policies within the Spanish territory. These include incentives for the installation and operation of RES and RUE facilities, direct investment by means of innovative formulae, among which third party financing is one of the most effective, the organisation of large-scale dissemination events and campaigns to key actors and the offer of technical consultancy services to the public and private sector.

Good morning:

It is a pleasure for me to be member of this round table that discusses innovative financial instruments for the implementation of energy policies, and to have the opportunity to explain you, in a few minutes, the main activities of the Institute that I represent. I hope that our experience can constitute an example to you and of course I am open to clarify some points that you may judge of special interest.

General introduction - the role of IDAE -

The Institute for the Diversification and Saving of Energy (IDAE) is a public business entity currently attached to the Ministry of Economy, through the Secretary of State for Energy, Industrial Development and SMEs.

Its basic function is to promote a more rational use of energy in Spain, and to support the development of renewable energy sources as a means to reduce the environmental impact of energy and to improve the security of supply.

For the achievement of such objectives, the Institute deploys a variety of mechanisms, which basically include the design and implementation of dissemination campaigns to key actors, the offer of technical consultancy services to both the public and the private sectors and the development of investment projects and products in innovative areas.

Looking in more detail at the activities carried out by the Institute, the following can be highlighted:

- Provision of **technical consultancy** to the public and private sectors and to final users.
- **Dissemination activities** to key agents: seminars, large-scale events, workshops, press releases, articles, publications, brochures, training, etc.
- Support to the adoption of **co-operation agreements** with energy-intensive sectors and associations for the reduction of their consumption levels.
- **Development of innovative products** that, for some reason, do not have a good market share, despite their economic feasibility. This also includes the transfer of technology.
- **Financial and technical support of projects** that will have a noticeable impact on energy consumption levels and on the diversification of energy sources. There are a variety of *formulae* that help to develop such co-operation. These constitute the focus of this presentation, but at this stage can be summarised as third party financing, shareholdings in joint-stock companies, groups of economic interest and temporary business unions
- Finally, it is worth mentioning that IDAE carries out an intense **international activity**, being part of the main *fora* for discussion and dissemination, such as EnR, Medener, the International Energy Agency and the OPET Network. It participates in the management of European Programmes in the field of energy and captures information on international technologies that can be applied to the Spanish context

National policies that support the development of RES and RUE

One of the most outstanding activities that is being carried out by IDAE is related to the design and implementation of the **Plan for the Promotion of Renewable Energy Sources** in Spain, approved the 30th of December 1999, which states that, by 2012, at least 12% of the Spanish energy consumption will have to be supplied by renewable sources of energy.

This is an ambitious objective, coherent with the plans of the European Commission, which requires a strong commitment from the Institute and the other parties involved. Although this is not the objective of the present paper, some key figures can be highlighted:

- The thermal but, in particular, the electric applications of **biomass** will play a key role (63% of the objectives of the Plan). With the data that is available

now, it is clear that this percentage will be hard to achieve and will require the reinforcement of existing policies.

- **Wind** energy is the second most important source of energy in the Plan. As it is sufficiently known, Spain plays a leading role in this field, not only because of the power installed, but because Spanish manufacturers are between the most innovative world-wide.
- **Solar thermal** and **solar photovoltaic** technologies should achieve, particularly in the first case, a state of maturity. Specific mechanisms for the reinforcement of these two areas are being managed by IDAE.
- Finally, **hydro** will decrease its participation in real terms due to the fact that the potential of this technology, referred to large-scale works, has already been exploited. There is a margin, though, for mini-hydro applications.

As a complement to the support of renewable energy sources, the Institute has recently been commissioned by the Ministry of Economy to prepare the **Strategy on Energy Efficiency in Spain**, which is being drafted and which will be fully developed next year. The Strategy will cover the period 2003-2012 and will focus on the rational use of energy in the main consumer sectors.

Financial instruments for the execution of RES and RUE policies

For the execution of the policies in which IDAE has competencies, notably the Plan for the Promotion of RES and, in the future, the Strategy on Energy Efficiency in Spain, the Institute counts on several mechanisms that have proved efficient: different modalities of project financing, collaboration agreements signed with the private sector or with key institutional agents and the award of subsidies for some types of projects.

Additionally, the Institute carries out direct investments in projects considered as strategic, and whose main objective is to create a market for new technologies.

a) Third party financing

Third party financing is the most common instrument applied by IDAE for the financing of projects on renewable energy sources and the rational use of energy.

In a few words, third party financing consists of a formula by which IDAE, once it has identified a company in which the introduction of more efficient or renewable energy technologies could entail important economic advantages, finances, installs and monitors the selected equipment. The investments carried out by IDAE are

recovered by the savings produced or the generated electricity in a proportional manner. Around 85% of the cash flow is used to pay back the investment and the rest goes directly to the industrialist.

IDAE has used this instrument with profusion, as it is advantageous in many respects:

- Companies are provided with both technical solutions and financing for their energy problems; the project risk is transferred from the user to IDAE.
- By the end of the amortization period, the company has modernised its technology and increased its competitiveness without losing any liquidity or borrowing capacity, while receiving a profit from the outset.
- This formula seeks to create an incentive for the set up of a private energy services market, which would increase the funds available for energy technologies.
- The energy efficiency and renewable energy policies would become, to a certain degree, independent of Government budget decisions.

b) Direct investments

IDAE also carries out direct investments in areas considered as strategic. In general, these are promising market sectors which, in the future, could be exploited by private companies.

Depending on the modality selected, the implication of IDAE can be total or partial. There are different types of interventions: temporary business unions, economic interest groups, shareholdings in joint-stock companies and account in participation contracts.

Temporary business unions do not have independent legal character and are set up for projects in which IDAE is the main investor. Due to legal requirements, the beneficiary of the equipment has to co-finance a part of the project, but their contribution tends to be small. In addition, utilities and other implicated entities can also participate in the project.

For a temporary business union to be established, it is necessary that the energy bill resulting from the project be effectively reduced. The industrialist becomes owner of the installations once the contractual period is over. Many of these projects have focused on cogeneration.

Economic interest groups constitute an alternative to temporary business unions in cases in which, due to the high volume of financial resources required, the co-funding of a financial institution is required. In this case, IDAE, apart from its technical and financial participation, is in charge of searching an appropriate alternative for funding.

Shareholdings in joint-stock companies constitute the third option of participation and is being applied mainly in the field of renewable energy sources. In these cases, the company is created with the sole purpose of exploiting the infrastructure and IDAE's participation cannot exceed 49% of the costs.

Finally, IDAE can decide to participate, at small scale, in projects managed by other companies (**account in participation contracts**), if it is believed that they are strategic in financial or technological terms.

Adding up all the modalities, IDAE invested, in 2001, more than 33 Million Euros. Two thirds of the budget is devoted to projects on renewable energy sources, and the remaining one third in energy efficiency technologies. This split reflects the fact that IDAE, once that it has achieved the take-off of one technology, retrieves from its market to let in the private initiative.

c) Support programmes

Additionally, IDAE supports the construction and installation of renewable energy systems that help comply with the targets established in the Plan for the Promotion of Renewable Energy Sources in the segments where more difficulties are being encountered.

- Since the year 2000, there exists a financial line for the co-funding of **solar thermal** installations up to 210,35 Euros per squared metre of useful surface installed. The beneficiaries can discount the amount funded from the installer's bill. During the present year, more than 10 million Euro have been devoted to this line.
- Similarly, during 2001 and 2002 a line for the promotion of **solar photovoltaic** systems has been opened. The SPV systems should have a power of between 100 Wp and 100 kWp and the bonuses awarded depend on the characteristics of the installation. The budget for this purpose is similar to that of the solar thermal line.

d) Other mechanisms

Finally, it is worth noting that IDAE applies other instruments that contribute towards the compliance of energy policy objectives. One of them, which has been briefly explained in the introduction, consists of the signature of **voluntary agreements** with the most important economic sectors, with especial emphasis on those which are energy-intensive. At present, around 56% of the industry have signed some sort of agreement with IDAE and the results are considered, in general, as satisfactory.

A **Consultative Commission on Energy Saving and Diversification** has been set up, and is integrated by one member of each Autonomous Community (region), a representative of IDAE and another from the Ministry of Economy. The Commission meets at least once a year and establishes working groups that discuss key matters, including the preparation of the National Plans. In addition, a selection of experts from different areas (researchers, project developers, etc.) are consulted prior to the preparation of subsidies, plans, etc.

IDAE keeps a fluid dialogue with the other levels of the public administration, and tries to reinforce the demonstrative role of the public sector through the adoption of exemplary actions. Thus, in 2001, IDAE has signed a **General Protocol for the Framework Convention of Collaboration** among Autonomous Communities (Regions), which establishes a framework for action. This framework can be further developed through the signature of specific projects.

To finish with, it can be highlighted that IDAE is promoting the creation of a **National Association of Energy Agencies**, which will agglutinate all the agencies at the municipal, supra-municipal and regional level that currently exist in Spain. The objectives of this association will be to reinforce the importance of RUE and RES policies in the Spanish society through common actions and to support the exchange of experience between them.

Conclusions

So the objective of this presentation has been to summarise the wide range of activities that IDAE has been implementing for the past 20 years, and which can constitute an example for other entities that operate in the same market.

I would like to conclude my intervention reiterating the willingness of IDAE to support the growth of initiatives such as Managenergy, which foster the



communication and links between energy agencies, specially those at the local level, which have less financial means to operate. I believe that there is a need for a more co-ordinated activity at the European level in this field, and that the set up of associations and working groups can strongly contribute towards the objective of a more sustainable world.

Thank you very much for your attention.

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