

EVALUATION OF EC SUPPORT
TO PARTNER COUNTRIES
IN THE AREA OF ENERGY

Executive Summary

April 2008

Evaluation for the European Commission

Executive Summary

A very heterogeneous evaluation scope

This evaluation assesses the relevance, efficiency, effectiveness, impact and sustainability of the European Commission's support to its partner countries in the energy sector. It covers interventions designed or implemented during the 1996-2007 period in all the external cooperation partner countries.

This scope of the evaluation is extremely broad and heterogeneous for three major reasons.

First, the European Commission's communications analysis¹ shows that the Commission's interventions in the energy sector have aimed to contribute to three very different goals:

- § Improving access to energy in developing countries as a means of reducing poverty;
- § Securing energy supplies to the EU;
- § Improving nuclear safety in the Former Soviet Union (FSU).

The first goal is increasingly perceived as an important dimension of the fight against poverty; the two others address vital stakes for European citizens. Ranking these different goals by order of importance has no real meaning. The order in which they are presented in the report has no specific significance and has deliberately been varied.

Second, at the end of the period under review, the main political stakes related to energy were totally different from those applicable at the start. In 1996 energy was cheap and the greenhouse effect was largely unknown to decision-makers. The importance of facilitating access to energy for

the poor was still widely overlooked. However there was less of a problem in this regard in the area of nuclear safety, where the policy objectives appeared to have been more stable over the period under review.

Third, the concept of "partner country" covers countries in which the energy-related challenges to be addressed are as diverse as Russia and Burkina Faso. This evaluation had neither the mandate nor the resources to carry out three separate evaluations on each of these three goals of the Commission's interventions, even though individual treatment was (and still is) arguably merited. The resources available only allowed a limited number of field missions, and consequently the choice of countries to be visited was absolutely crucial to a balanced overall perception of the Commission's policy and to the related conclusions.

A scope that required a prudent approach

.From a methodological point of view, applying the same evaluation activities to such different goals was a real challenge. The activities carried out in relation to the three goals in very specific national contexts have been analysed with the aim of drawing out overall conclusions and recommendations relevant to the evaluation mandate as a whole, notwithstanding the heterogeneity over time. The era of cheap energy now seems to be history and our better understanding of its environmental impact is now a matter of fact. Only conclusions and recommendations relevant to the most recent context have been taken into consideration.

The evaluation consisted of four phases:

1. Rebuilding of the intervention logic of the European policy to support the

¹ Presented in § 2.1 and Annex 2.

energy sector in third countries² and formulation of Evaluation Questions. This was a crucial first step in the process, as the overall objectives (goals) against which activities' effectiveness had to be evaluated had to be made as clear as possible. This analysis, which helped identify the three above-mentioned goals and the corresponding Evaluation Questions, was validated with the Evaluation Reference Group.

2. The second step was to draw up an inventory of the interventions to be considered within the scope of the evaluation. Over 1,200 interventions were identified from four different databases³. They were earmarked on the basis of the kind of activity carried out, the energy source and the region in which they were implemented⁴. This allowed (a) presentation of the resource distribution between different regions and objectives, and (b) selection of a sample of 34 interventions reflecting the main activities in the most important fields⁵. Draft project fiches were produced on the basis of a common grid⁶. Out of the 34 interventions, 24 were selected for field visits in seven countries.⁷
3. Field missions allowed completion of the analysis of the selected interventions. The aim of these missions was not to provide a balanced assessment of country programmes in the energy sector, but rather to focus on the specific interventions selected with a view to providing a balanced sample at global level.

4. The synthesis phase permitted a cross-

² Sources listed in Annex 2.

³ The list is given in annex 5.

⁴ Annex 5.

⁵ Annex 4, p. 6.

⁶ Annex 3.

⁷ Ethiopia, Indonesia, Ghana, Mali, Syria, Russia and Ukraine.

cutting analysis of the findings to facilitate drawing of conclusions and recommendations relevant to the whole evaluation scope.

What is at stake?

Energy is a vital political issue⁸ in Europe, for each of its Member States and for its partner countries. A nuclear accident is one of government's worst fears. Disruptions of supply or sharp price variations may have daunting economic, social and political consequences. Widespread access to energy is a key condition for social and economic development. When addressing such a vital topic, "policy dialogue" mostly takes the form of very tough negotiations.

The time frame plays a key role in the sector:

§ The short term is extremely short: in extreme cases just a few seconds. Delayed reactions or wrong decisions taken in an emergency may have daunting consequences for millions of citizens. Effective information circulation, effective co-ordination and clear decision-making chains are critical for timely and accurate reactions.

§ The long term is very long, yet constantly in evidence in daily life. In Europe most decisions on energy issues are now taken with an increasing concern for their long-term consequences. This raises two challenges:

- i) Interests and values change over time, but not for all stakeholders at the same time... The energy challenge divides the Member States and even more so the rest of the world, where competition for access to resources as well as for the right to pollute increases sharply. Talking with a single voice in an increasingly competitive world is a challenging objective for Europe.

⁸ See § 5.1.

ii) Technological and institutional evolution takes new directions and accelerates, with consequences that remain to be seen (bio-fuels and biodiversity, new role of nuclear power, tariff policies). Effective knowledge management is an increasingly critical asset needed for playing a leading role in these developments.

What was done between 1996 and 2006?

One has to bear in mind that, except for nuclear safety which was identified from the early 1990s as requiring emergency attention, energy only became an important topic for EC external policy around 2002-2003, if not later. Energy-related budgets were indeed decreasing in many institutions, including the EIB and the World Bank, up to the beginning of the decade from 2000. This may explain why the resources dedicated to the energy sector and the results obtained appear rather limited so far, except in nuclear safety where the Commission has played a leading role for more than a decade.

Overall, €1,8bn (€180m/year on average) was spent in the sector during the period.⁹ 53% of this total was dedicated to nuclear safety, and 20% to non-nuclear power generation and transport, much of which was financed by the EIB¹⁰. The remaining 27% (€50m/year) were shared between several other activities. The FSU benefited from 60% of the overall budget, most of which was dedicated to nuclear safety, leaving about €13,5m/year for other purposes in that region, such as support for policy dialogue. The ACP¹¹ region received €538m (29%) of the total, a large part dedicated to power generation. Asia, the Mediterranean region, and Latin America benefited respectively from 5%, 4% and 2% of the total.

⁹ See § 2.2 and annex 5

¹⁰ European Investment Bank

¹¹ Grouping Africa, Caribbean and Pacific countries

How well was it done?

INTERVENTIONS ARE OFTEN RELEVANT, BUT DO NOT RESULT FROM A SYSTEMATIC APPROACH¹² AIMED AT MAXIMIZING THEIR CONTRIBUTION TO EU GOALS.

The Commission has only recently taken into consideration access to energy for the poor. Energy is not yet considered a focal sector in EDF10, which limits the possibility of developing strategic approaches. Most interventions in that field are funded through demand-led instruments which do not allow optimisation of resource allocation. Large EIB-financed supply and transport infrastructures are highly relevant for improving access to energy¹³.

Resources dedicated to improving Europe's security of energy supply are far below what one might expect for such an important issue. Moreover, they have been distributed between investments which were not always relevant¹⁴.

Interventions in nuclear safety were launched in a context of emergency. They correctly addressed needs at the start of the programme; but now that the context has evolved, resource allocation in that field is less focused than it should be¹⁵.

Energy tariffs, market regulations and subsidisation of the power sector have impact on all dimensions of the energy sector. Sound policies at these levels are central to improving access to energy, energy efficiency, market liberalisation and integration and, therefore, on security of supply for Europe. Yet the Commission has so far paid only very limited attention to those issues¹⁶.

¹² Detailed in § 3.1.

¹³ P. 33-34

¹⁴ P. 28-29

¹⁵ P. 27

¹⁶ P. 32

EFFECTIVENESS AND SUSTAINABILITY: MIXED RESULTS OFTEN HARD TO ASSESS

The EIB and the Commission have provided effective support to rehabilitation or development of power generation and transport infrastructure. This has contributed to improving the reliability and outreach of energy supply. In contrast only a very limited number of interventions contributed effectively to facilitating access for the poor. The Commission has not measured the impact of its energy-related activities on living conditions and growth. Only limited efforts were made to draw out and share lessons in that regard¹⁷.

A large part of the limited resources dedicated to activities aimed at supporting security of EU energy supplies was spent on investments, the effects and impact of which have yet to be demonstrated¹⁸.

Bearing in mind the historical context in which the nuclear safety programme was launched and implemented, the effectiveness of many of its on-site assistance interventions was highly appreciated by the partners. The support to nuclear regulators and their TSOs¹⁹ also delivered important results. But the impact of these contributions on overall safety is hard to assess owing to the limited transparency of partners about overall risk assessment. The sustainability of many interventions aimed at enhancing the safety culture remains unknown²⁰.

Only a few Commission interventions have directly contributed to reducing carbon emissions. They were mainly pilot projects, with limited dissemination effect. No support was provided for tariff policy reforms, which are critical for stimulating energy efficiency²¹.

THE COMMISSION IS A LEADING PLAYER IN NUCLEAR SAFETY, BUT A MINOR ONE IN OTHER AREAS OF THE ENERGY SECTOR.

The European Commission was among the first international donors to invest in nuclear safety. Its experience of collaboration with international bodies and networks in that field allowed the Commission to access and accumulate information and know-how which invested it with credibility when co-operating with other donors²². The European Commission's position in the debate with the partners in this sector is however weakened by diverging views on nuclear power between EU Member States²³.

European energy market integration is still far from complete and Member States are in competition with each other for ensuring the security of their supplies of fossil fuel energy. Many of them do not rely on the European Commission to defend a common EU position. This affects co-ordination and dialogue in the energy sector as a whole²⁴.

In ACP countries, improved access to energy has not been central to successive EDFs, which has not encouraged EC Delegations to participate in sector dialogue. Demand-led interventions were mainly decided from Brussels without much co-ordination either with the partners or with other donors.²⁵

Progress is suggested in two major areas

The challenges to be addressed are as follows²⁶:

§ Energy is vital for Europe but also for its partners. Dialogue is therefore often difficult.

¹⁷ See 3.2.1 Evaluation question 2

¹⁸ 3.2.4 Evaluation question 5

¹⁹ Technical Support Organisations

²⁰ 3.2.2 Evaluation question 3

²¹ 3.2.3 Evaluation question 4

²² P 67

²³ P 69

²⁴ P 68

²⁵ P 65-66 and 70

§ Competition for fossil energy and conflicting views on nuclear power and market integration divide the Member States. The European Institutions have no mandate to represent the EU in that field.

§ The sector is complex and volatile.

§ Resources under the Commission's control to finance its external policy in the sector are extremely scarce.

The Commission is therefore facing two main challenges:

- Ø maximizing the relevance of its interventions for all parties (optimisation of resource allocation).
- Ø enhancing its credibility so as to take a progressively leading role in these fields.

Two major areas of progress are therefore recommended:

1. For all three intervention sectors (access to energy for poverty reduction, security of supply and nuclear safety) the Commission should adopt a more formal co-operation cycle with the aim of optimising resource allocation for all parties, taking account of their respective policies. This implies being very selective, focusing resources on the countries which are (i) the most important from the point of view of the EU's policies, interests and priorities, and (ii) ready to co-operate²⁷.
2. For each of the three intervention sectors, the Commission should develop up-to-date knowledge management systems, in order better to understand the specificities of the sector in each of its partner countries and to promote its leadership with the aim of progressively gaining the right to guide external policy of Europe in each field²⁸.

Energy is a critical subject for the EU and for its partners. Dialogue is difficult and resources are scarce.

Ä Apply a formal co-operation cycle aimed at optimising resource allocation for all parties.

Energy is a complex and volatile issue, liable to divergences between the EU Member States

Ä Build a knowledge-based leadership.

1. Implementing a more formal co-operation cycle to optimise resource allocation²⁹

There is often a missing link between the Commission's policy statements and its practical energy-related interventions. Values and interests regarding energy evolve and are not necessarily uniform among the parties involved. Sound co-operation implies expressing European priorities while recognising partners' own priorities and constraints; identifying specific areas where both sides have an interest in co-operating; and on that basis negotiating co-operation programmes. The evaluation team recommends following more systematically a 10-stage co-operation cycle which would favour a) optimisation of resource allocation and b) ownership of support by the partner. The evaluation's main conclusions and recommendations are framed along the stages of this cycle.

Stage 1 - Formulation of EC energy policy

Important improvements have been achieved in energy policy definition at central level, but the reasons why the EC wishes to co-operate in that field with a given country, and what results it expects from the co-operation, are often unclear.

²⁷ Overarching recommendations p.90

²⁸ P. 91

²⁹ The proposed cooperation cycle is presented in § 3.1, p.25

Ä R1³⁰: EC expectations from its co-operation with each partner country should be made more explicit.

The Commission should explain why, in each of the intervention countries, it has decided to support access to energy as a way of contributing to poverty reduction.

Continuity between general policy statements and bilateral negotiations relating to ensuring security of supply could be assured by attaching to the general policy statement a list of countries where dialogue is needed, stating why these countries have been selected.

Now that nuclear safety support represents a much smaller share of total investment of the partners in the sector, the question of why the EU supports the nuclear sector in each relevant partner country is crucial to resource allocation. Choices have to be made, and new challenges such as power market integration open new perspectives for cooperation, which may require clarification of Member States' positions on nuclear power.

Stage 2 - Mutual understanding

The Commission does not invest enough in analysing the partner's political priorities and the constraints impacting on its sectoral policy. The partner has an insufficiently clear view of European expectations.

Ä R2: For each country of intervention, the partner's and other donors' sectoral policy choices should be analysed, in order to understand their rationale. The Commission should also ensure that its own priorities are clearly understood.

In a limited set of countries, more systematic analysis would facilitate an understanding of the political motives driving energy pricing policies, and thereby help identify areas for co-operation in these fields, notably to facilitate access to energy.

Promoting independent and powerful Regulatory Authorities in charge of nuclear

³⁰ For easier reference, the recommendations are here given the number they have in the main text. They are presented in a slightly different order in the summary.

safety is a priority for Europe. A key question is to what extent this approach is supported locally, and much more needs to be invested in exploring such questions at political level. At a more technical level, the Commission should seek a systematic internationally-accepted update of nuclear risk assessment to help draw lessons from the past and focus its strategy.

Stage 3 - Delineation of a co-operation area

Identification of common objectives has sometimes relied on assumptions which were not based on sufficiently accurate analyses.

Ä R4: A co-operation area (set of policy objectives of common interest) should be defined with the partner and the other donors involved. The assumptions that bear on effectiveness should be carefully and regularly checked.

Supporting enhanced market transparency and better public governance in the sector relies on the assumption that there is sufficient political will to make progress in that direction. Such an assumption needs to be checked, especially when designing the institutional settings for activities (ensuring that partner institutions will be supportive).

Stage 4 - Prioritisation of co-operation objectives

Operational objectives are not prioritised. There is insufficient focus on regulatory framework and pricing policy aspects, which are prerequisites for enhanced access to energy for the poor, energy efficiency and market liberalisation. Demand-driven approaches to addressing poverty are not grounded sufficiently in explicit co-operation strategies.

Ä R6: Within the co-operation area, the operational objectives should be prioritised jointly with the partner. Priorities should reflect the constraints to be addressed.

Ä R9: In order to improve access to energy as a means to poverty reduction, a limited number of developing countries should be selected to test a SWAp for the energy sector. To this end re-focus demand-driven initiatives so that they generate

the capacities and means needed to support sectoral dialogue.

Development Bank participation in joint programming exercises would help coordinate policy support, institutional reforms and investments. Requests for financing energy projects in countries where there is no energy dialogue should be given low priority. Demand-driven projects should be instrumental to the sectoral cooperation programme and the selection criteria for these projects should be adapted accordingly.

Ä R7: Reform of tariff policy is often a necessary condition for effectiveness and sustainability of interventions; it should be at the top of the agenda of sectoral dialogue.

Unless the Commission clarifies its objectives and, for instance, agrees to adapt the cooperation area to facilitate a broader scope of nuclear cooperation, it is suggested that resource allocation be focused on activities most likely to contribute to the safety of EU citizens. Since the risks likely to impact on EU citizens primarily threaten partner countries, this broadly leaves room for finding objectives of common interest.

Ä R8: In support for nuclear safety, select interventions aimed at promoting safety culture and transfer of know-how, based on an updated risk assessment.

Stage 5 - Resource allocation

Technical capacities within the Commission remain insufficient. As regards grants there is a mismatch between limited financial resources and ambitious objectives and, furthermore, resources are too dispersed. As regards loans, co-ordination between the Commission, EIB and EBRD is strengthening, albeit unevenly.

Ä R11: More human and financial resources should be dedicated to the energy sector. The benefits of closer co-operation with EIB and EBRD should be further analysed.

The future transfer to the Delegations of management of the Energy Facility projects may accentuate a qualitative mismatch between the Delegations' mission and their

human resources in that sector. In countries where sectoral approaches will be undertaken in the energy sector, the Delegations should enhance the respective human capacities.

Stages 6 and 7 - Programming and Implementation

Despite recent improvements, the provision of public works and equipment in the framework of a programme designed for technical assistance has proved difficult. Limited human capacities and cumbersome procedures have affected the Commission's response capacity. The ability to adapt interventions to a swiftly changing environment has proved limited. The effectiveness and efficiency of regional programmes have often not been convincing. This has often been due to the weakness of the partner regional institution.

Ä R12: A volatile energy sector requires flexible design and implementation mechanisms based on a regular flow of information.

Ä R13: The choice of the regional approach should only be made where the corresponding regional institution exhibits an ability and willingness to cooperate and is also sufficiently recognised by its member states.

Stage 8 - Monitoring

Outputs are measured, outcomes are not.

Ä R14: Project and policy monitoring should be systematised and conducted with the partner.

Outcome and impact indicators should be systematically defined at the design stage of the intervention. The current ROM should be reoriented to provide more factual information on implementation outputs and outcomes and fewer judgments or assessments on such aspects as relevance or effectiveness, which should be left to the evaluation process. Overall effects at sectoral level should also be monitored.

Stages 9 and 10 - Evaluation and Lessons Learned

Very few evaluations have been carried out in the energy sector. There is also limited

institutional capacity in Brussels to learn from experience, except to some extent in the nuclear safety sector.

Ä R15: Regularly evaluate each co-operation activity, with attention to results and impacts.

Ä R17: In the design process, include in-depth analysis of the national and global contexts and of lessons learned from past experiences.

Far more needs to be done to evaluate the co-operation programme on energy in each country so as to provide the Commission with the basis for drawing the lessons from experience and reviewing its policy formulation in each country. Energy dialogue with Russia and Ukraine should be of high priority in country programme evaluations.

Ä R16: In nuclear safety, evaluating the effectiveness of the RA/TSO programme ³¹ deserves high priority.

Although this kind of activity seems highly relevant, the effectiveness and sustainability of RA/TSO programmes in building strong and independent regulatory authorities is not really known.

“Pilot” projects are aimed at enhancing knowledge. Adequate monitoring, evaluation and dissemination tools should be built to help assess their dissemination performance.

Ä R18: Refocus the demand-driven initiatives to incorporate a pilot dimension, in support of sectoral dialogues

Stages 8 to 10 of the co-operation cycle also address the objective of strengthening the Commission’s knowledge management, which is necessary for enhancing the its credibility and sectoral leadership. This is the second main message from this evaluation.

2. Strengthening knowledge management to raise the Commission’s leadership

The resources made available to support the EU’s external policy in the sector remain extremely limited. Furthermore, new challenges are arising (climate change, fossil fuels price rises, etc.) which require investment and innovative techniques.

The Commission has built up leadership in nuclear safety by using the knowledge accumulated by its Services and the European networks on which they rely. In contrast, it has not developed comparable leadership in improving security of energy supply for Europe, and its visibility is low in the area of promoting access to energy as a means to reducing poverty.

Ä R19: In order to lead the policy agenda for improving Europe’s security of energy supplies, the Commission needs to gain much more credibility among the EU Member States, in international fora and in the field. In that perspective the Commission should rely more systematically on the information and analytical capacities available in the EU, with the aim of building a network capable of (i) collecting general and country-specific data on the sector, (ii) accumulating data and analyses so as to develop genuine “cutting-edge” knowledge, (iii) mobilising flexible resources to focus analysis on the most relevant topics, (iv) developing a well-informed medium term policy for the main partner countries, and (v) being able to react quickly in unstable or crisis contexts.

In this regard, Europe has many capacities which are currently much more used by the Member States than by the Commission. These capacities could be mobilised through a network of European research institutions and consulting firms represented in the main partner countries, with expertise both locally and across Europe and with a permanent link to the European Institutions.

A network similar to the one proposed above and called the Réseau Européen de Sécurité Alimentaire (RESAL) already existed in the late 1990s and early 2000s. Such a

³¹ Support to Regulatory Authorities and Technical Support Organisations

system, could become a major asset for European Institutions, especially on themes as demanding in terms of information management as the security of energy supplies to Europe.

Ä R20 Support for poverty reduction: the Commission should join the group of leading donors which are investing in improved access to energy in the interests of poverty reduction. Such an approach will require reinforcement of staffing capacities in Brussels and the Delegations. Demand-driven activities should be seen as complementary to, instead of substitutes for, consistent strategies.

In this field there is less need for the Commission to take a lead than for it to join networks of donors contributing to development of know-how on the link between access to energy and poverty reduction. Contributing to sectoral policies in some pilot cases could provide opportunities for multi-donor co-ordination and exchanges of experience in that field. This dissemination should be more explicitly targeted on EC Delegations, which have extremely little awareness of what the EUEI is or of what the Commission's headquarters supports locally.

Ä R21 Nuclear safety: it is recommended that attention be given to reinforcing knowledge diffusion and the ability to address crises. Maintaining close links with the regulatory authorities of the FSU countries should be a major priority, so as to provide the means for overall and local risk assessments.

In this field, the Commission is already the main player in the European donor community. The challenge is now to maintain and reinforce this leading position. Indeed, it is likely that the progress of negotiations on electricity grid interconnections and the renewed interest in nuclear energy throughout the world will demand a broader approach to the dialogue on nuclear power production.

Keeping a close link with the regulatory authorities of the FSU countries appears to be one of the major priorities in the support for overall nuclear safety. Overall and local risk assessments would give access to the information necessary to prioritise co-operation objectives.

Information management could be broadened to non-technical information such as the political and economic elements influencing nuclear safety policies in the different countries.
