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ON ENERGY AND SUSTAINABLE DEVELOPMENT**

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**ENERGY SECTOR REFORMS, REGULATORY CHALLENGES  
AND SUSTAINABLE DEVELOPMENT IN EUROPE AND LATIN  
AMERICA**

**BACKGROUND AND DISCUSSION PAPER**

**July 2000**

The purpose of this paper is to (i) delimit a general framework of subjects and (ii) to invite contributions and statements from the participants in the Third Dialogue Europe – Latin America on Energy and Sustainable Development. The opinions expressed in this document are the sole responsibility of the author and do not necessarily represent the official position of ECLAC or the European Commission. Further information on the Third Parliamentary Dialogue Europe – Latin America on Energy and Sustainable Development can be found at [www.energy-strategies.org](http://www.energy-strategies.org).

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## Introduction and Summary

This “background and discussion paper” is prepared within the framework of the joint project of the Economic Commission for Latin America and the Caribbean of the United Nations (ECLAC) and the SYNERGY Programme of the European Commission “Promotion of Energy Efficiency in Latin America”.

Its purpose is to delimit a general framework of themes and to invite contributions and statements from the participants in the *Third Parliamentary Dialogue Europe – Latin America on Energy and Sustainable Development*, to be held in Brussels between the 20<sup>th</sup> and 22<sup>nd</sup> September 2000.

The intention is to (a) provide a general focus for contributions and discussions and (b) to familiarise the participants with the main issues at stake in the Dialogue: “*Energy sectors reforms, regulatory challenges and sustainable development in Europe and Latin America*”.

Taking into consideration the different issues that define the agendas in both Europe and Latin America, as well as the different backgrounds of energy market liberalisation and integration, definitions of sustainability and aspirations of both regions, we found it useful to provide some background to these issues, for readers from Europe and from Latin America. Such an approach bears the risk that readers will encounter new information alongside familiar issues. We have therefore separated the more general background information from Europe from that concerning Latin America. This allows the reader to concentrate on the information he finds new and interesting.

This approach refers in particular to Section 1: *Liberalisation of energy markets in Europe and Latin America*, Section 2: *Environmental protection, energy efficiency and renewable energies* and Section 3: *Energy market integration and competition*. These sections basically present the history, main phases and characteristics of energy sector reforms in both regions, with a specific focus on sustainable economic, social and environmental development. While Sections 1, 2, 3.1 and 3.2 present facts, Section 3.3: *Are we shaping truly competitive markets?* opens the discussion on issues related to the paradigms of competitive energy markets.

Section 4: *Foreign investment, public service and social equity*, discusses the important role of foreign investments in the Latin American energy sector and provides some starting points for the discussion of the role of European enterprises in Latin America and the need for effective regulation.

Section 5: *Regulatory challenges*, presents the central subject of the Dialogue. Being aware of the different stages of discussion in Europe and Latin America, we have confined ourselves to briefly presenting the issues which are dominating the agenda now in Europe and which are likely to dominate the agenda in the very near future in Latin America. Reference is made to research conducted by ECLAC in the framework of the joint project with SYNERGY. Section 5 does not pretend to provide a complete overview on present ‘regulatory challenges’; since this will be subject of the discussions between regulators from Europe and Latin America in the framework of this Third Dialogue.

Section 6: *EU – Latin American Energy Co-operation*, highlights the philosophy, the main lines of action and the achievements of the Community programmes ALURE and SYNERGY, which have established a sound basis for economic and policy oriented co-

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operation between both regions. The Rio Energy Forum of 1999 has added a programmatic dimension to this co-operation.

Finally, Section 7: *For a new energy policy dialogue between Europe and Latin America*, proposes a framework for a new dimension of co-operation: A dialogue, which not only involves politicians and policy makers, but also other stakeholders, like the industry, NGOs and other representatives of the civil society. It is argued, that a renewed political dialogue is urgently needed, in order to foster economic and social development in Latin America, to protect the environment, to transfer the benefits of European investments to the Latin American society and to ultimately protect these investments against the potential consequences of policy shifts in the host countries. In order to achieve these objectives, ECLAC proposes to establish a *European – Latin American Forum on Sustainable Development of the Energy Sector*.

This paper does not offer conclusions. We believe that the drawing of conclusions should be the main task of the Third Parliamentary Dialogue in September.

## 1. Liberalisation of energy markets in Europe and Latin America

### 1.1 Energy market integration by liberalisation in Europe

The European Union developed out of the European Coal and Steel Community (enacted 23 July 1952), the European Atomic Energy Community (Euratom, enacted 1 January 1958) and the European Economic Community (EC Treaty, in its original version the 'Treaty of Rome', enacted 1 January 1958). The 'Treaty of Rome' establishes a customs union of the Member States and defines "four economic freedoms" that should be attained within the Union: free movement of goods, people (labour), services and capital. The development of the customs union was paralleled by the establishment of regional and sectoral support systems, aiming at the achievement of economic and social cohesion among the Member States.

The Single European Act (enacted 1 July 1987) outlines the Common European market in which the "four economic freedoms" had to be accommodated by 1 January 1993. The 'Treaty of Maastricht' (enacted 1 November 1993) incorporated the Single European Act into the EC Treaty, but also included further steps of political integration (European Union).

Despite the fact that the European Union developed out of the European Coal and Steel Community and the European Atomic Energy Community, both dealing with energy, historically the European Community has been notoriously weak in respect of its grip on energy sector developments. The Member States' governments were - following the independence paradigm<sup>1</sup> - not prepared to cede any sovereignty in this respect to the Community's institutions.

Reflecting this legacy, the Single European Market in principle does not provide for any special treatment of energy with respect to the "four economic freedoms". This, however, also implies that the creation of a Single (competitive) Market in principle also extends to the energy industries, despite the fact that national governments have given extensive monopoly rights to utilities in network industries.

By 1988, the European Commission decided that it should actually extend its free market initiative towards the energy sector and considered it necessary to clarify the competition rules in the gas and electricity sector, through the development of specific Directives (secondary legislation). The Common European market and the trend towards deregulation and liberalisation in a number of European countries, in particular in the United Kingdom (England and Wales) and in Scandinavia (the 'Nordic Electricity Market'), gave rise to the new concept of '*energy market integration by liberalisation*'.

After a process of almost ten years, which was often characterised by controversial positions among Member States and energy enterprises, the process towards the creation of the Internal Energy Market culminated in the adoption of the Directives concerning common rules for the Internal Markets in Electricity and Natural Gas, the 'Electricity Directive' (December 1996) and the 'Gas Directive' (June 1998)<sup>2</sup>. Both directives reflect the principle of

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<sup>1</sup> The integration of energy markets has always been - and still is - an ambiguous phenomenon, as it is torn between two different ratios, namely the free trade paradigm and the independence paradigm. The pursuit of independence stems from the objective of 'security of supply', which is, however, often motivated by the endeavour to protect specific national energy sector activities and interests.

<sup>2</sup> This process unfolded following the publication of the EU Commission's report "The Internal Energy Market" in May 1988, in which the main obstacles to free trade in the energy sector were identified. This was the first actual step in a series of EU initiatives towards the achievement of an Internal Energy Market (IEM), the most important of which were: the 'Price Transparency Directive' (July 1990), aimed to improve transparency in gas and electricity prices to large industrial consumers; the

competitive market opening, while, at the same time, incorporating the - sometimes diverging - positions of Member States and industry brought forward during the reform debate.<sup>3</sup>

The Internal Electricity Market Directive (96/92/EC) defines the minimum requirements for a competitive opening of the national markets, concentrating on the following aspects: (i) free competition in electricity generation, admitting two alternative procedures for new generation capacity (the authorisation and tendering procedures, respectively); (ii) gradual opening of the supply market to final consumers, according to the principle of reciprocity; (iii) accounting separation for vertically integrated companies; (iv) transparency of grid access charges to transmission and distribution networks; and (v) criteria for the application of public service obligations.

There are two options for the opening of the supply markets to final consumers: Third Party Access (TPA), either as negotiated or regulated TPA, or the Single Buyer (SB) model, which means the appointment of a single buyer and seller of electricity by the national Government<sup>4</sup>. Other options for the Member States include the imposition of public service obligations (Art 3(2), Art 3(3)), as well as the creation of protected parallel markets for national fuels (i.e. coal), co-generation and renewable energy (Art 8(3), Art 8(4)).

Irrespective of which model to organise competition is chosen, the 'Electricity Directive' also defines minimum degrees of opening of national markets in order to ensure comparable degrees of competition. Most Member States have committed themselves to open up their electricity markets more than these minimum requirements. It is very likely that the opening will stay ahead of schedule also in the future.

Similar to the 'Electricity Directive', the Directive on the Internal Natural Gas Market establishes the minimum requirements for the competitive opening of the natural gas markets, including the aspects of (i) non-discrimination among natural gas companies; (ii) access to the transport systems ('negotiated' or 'regulated'); (iii) gradual opening of the markets by definition of eligible consumers; (iv) accounting separation for vertically integrated companies; and (v) derogations for specific conditions, as the existence of 'take-or-pay' contracts, or the existence of a main supplier in the case of emerging markets.

Basically, the 'Gas Directive' takes over the principles of the 'Electricity Directive', while taking account of the specific features of the gas market. The fundamental difference is that Member States will have to make a choice between a system of 'negotiated access' and 'regulated access', while the 'single buyer' concept is not referred to.

While the Electricity Directive was already implemented in most of the Member States, the 'Gas Directive' should be implemented by August 2000. Taking in consideration that the European natural gas market is dominated by a reduced number of large actors, it is supposed that the effective opening of the gas market will develop at a slower pace than that of the electricity sector.

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'Electricity Transit Directive' (December 1990) and the 'Gas Transit Directive' (May 1992), which provided a framework of arrangements which should induce more international trade in gas and electricity between the entities responsible for the gas and electricity grids and the guidelines for the development of 'Trans-European Networks (TENs)' and for granting support to TENs, which were introduced in Decisions of the Council and the European Parliament in 1996 and 1997.

<sup>3</sup> The development and preparation of the Directives can be described as a dialectical process in which the proposals were modified time and again, in order to secure a maximum of consensus and effectivity. Instead of a legal solution, based on the application of competition law, a political solution was chosen, seeking to construct a common denominator, acceptable to all parties involved, and reconciling conflicting interests as far as possible.

<sup>4</sup> During the reform discussion, the initially proposed Single Buyer model was deemed to be obstructive to competition and therefore amended in a way, that it actually incorporates 'virtual' TPA in the form of exemptions for eligible customers and independent generators.

Problems related to the implementation of the Electricity Directive mainly refer to issues related to actual market opening (access to networks and transparent tariffs), the effective separation of transmission and distribution services of vertically integrated enterprises, public service obligations (including consumer protection and protection of the environment), transitional regimes with regard to the so-called 'stranded costs' due to obligations imposed on electricity companies in the past (including long-term supply contracts) and the promotion of renewable energy in the internal electricity market. Issues related to cross-border trade, like: tariffication of cross-border transactions, the management of available transmission capacity and the harmonisation of environmental and other standards, have been addressed by the Commission as priorities (see Section 5).

Central issues related to the implementation of the 'Gas Directive' among others are: (i) the access to the transport systems, (ii) 'unbundling' of vertically integrated companies and (iii) the problem of long-term 'take-or-pay' contracts.

## 1.2 Energy sector reforms in Latin America

The decade of the nineties in Latin America was characterised by a process of fundamental economic reforms, which included restructuring, liberalisation and privatisation of the energy sector. The reform process was initiated by the privatisation of electric utilities in Chile in the late eighties, and followed by the liberalisation and restructuring of petroleum, electricity and natural gas industries in countries like Argentina, Bolivia, Brazil, Colombia, Ecuador and Peru.

While privatisation of the electricity sector in Chile did not achieve the creation of a truly competitive market, Argentina carried out a fundamental restructuring process, which involved the unbundling of electric and natural gas industries, competition in electricity generation and – to a lesser extent - in petroleum and natural gas production, as well as wholesale competition (including a contract and a spot market) for electricity and natural gas<sup>5</sup>. In parallel to restructuring and privatisation, ownership restrictions were put in place to prevent discrimination and market dominance<sup>6</sup>. Competitive opening and restructuring of electricity markets has also been realised in Bolivia, Colombia and Peru and is under consideration in Ecuador<sup>7</sup>.

Brazil and Mexico, the two largest economies of Latin America, are cautiously opening up their energy sectors and are re-defining the role of the State. Reforms in Brazil e.g. are implemented in a gradual way, taking into consideration the federal structure of the nation. Mexico - like the countries of Central America - has maintained a vertically integrated electricity sector, allowing independent power producers (IPPs) to conclude contracts with the national utility. In Venezuela, bills for new electricity and gas laws are under discussion. The bill for a new electricity law foresees in vertical desintegration of the sector, competition in the wholesale market and a system of concessions.

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<sup>5</sup> Approx. 40% of electricity is traded in the spot market, compared to only a few percent of natural gas (Bouille, 1999; IEA, 1999).

<sup>6</sup> Electricity sector reform in Chile was characterised by privatising and separating the sector without creating an appropriate regulatory framework to effectively control privatised enterprises and imposing ownership restrictions in order to avoid the concentration of economic power.

<sup>7</sup> While energy sector reforms in Peru are following the model of Chile and Argentina, other countries like Costa Rica, Mexico, Colombia and Ecuador are following a different model, characterised by the existence of natural monopoly structures or legal protection, in particular in transmission and distribution of electricity (Altomonte, 1997).

Reforms in the petroleum sector have introduced major incentives for private investment - both in upstream and downstream - and have eliminated barriers for market entrance. While privatisation of petroleum enterprises was part of the reforms in Argentina, Bolivia and Peru, other countries, like Brazil, Colombia, Ecuador and Venezuela have maintained state ownership, allowing private companies to enter the market under certain schemes<sup>8</sup>.

Alongside the well-known positive effects of energy sector privatisation and liberalisation (competition, more efficiency in generation, transmission/transport and distribution, increased productivity, relieve of pressure on public finances etc), energy sector reforms have also introduced major changes in the energy matrices of Latin American countries. Natural gas, abundantly available in a number of countries, is playing a key role in this transformation process. Competitive prices and high-efficient, low-investment combined cycle power generation technology (resulting in short pay back periods) have triggered a 'dash-for-gas', comparable to the so-called phenomenon following the liberalisation of energy markets in the United Kingdom.

The penetration of natural gas, often attributed as the 'fuel of the future', will have far-reaching consequences on investment decisions, both on the supply and the demand-side. While it is difficult to imagine, that investment intensive supply options as hydroelectricity, coal or nuclear energy will be able to compete with low-cost natural gas combined-cycle power plants, the 'dash-for-gas' also reduces the economic feasibility of decentral energy options like cogeneration and renewable energies. On the other hand, natural gas seems to be a major driving force for the integration of energy markets in the region (see Section 3.2).

The restructuring and privatisation of energy industries in Latin America has made a major contribution to the unprecedented increase of foreign direct investment in the region. Attracting (foreign) private capital has been a major driver of energy sector restructuring in Latin America, in some contrast to Europe, where common market and competition aspects have played the predominant role.

## **2. Environmental protection, energy efficiency and renewable energies**

### **2.1 European Union**

Since the beginning of the seventies, the majority of European governments have been intervening, more or less actively, in the energy sector to stimulate the efficient use of energy and to substitute non-renewable energy sources. Numerous programmes, with important budget endowments, have been implemented with the objective to reduce the amount of energy required by the national economies.

In principle, three periods can be distinguished since the beginning of the seventies, each one characterised by different perceptions of the world energy situation and externalities, as well as by the way governments reacted to these challenges:

In the first period *from 1973 to 1981*, state intervention had as first objective to secure the national energy supply, motivated by external events like the two oil crises of 1973/74 and 1979/80 and the report of the Club of Rome: "The limits to growth". At this time, many

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<sup>8</sup> Like e.g. the 'shared profit' contracts for 'marginal fields' in Venezuela or the concessions for exploration, development and production of petroleum and natural gas in Brazil.



countries got involved in programmes for energy conservation and diversification of their energy sources.

In the next period *from 1981 to 1988*, a gradual revision of the perception of energy scarcity and the political role of OPEC took place. The discovery and development of non-OPEC oil and natural gas resources, in combination with the results achieved by energy efficiency and diversification programmes in industrialised countries, resulted in a situation of over-supply of petroleum worldwide. A new liberal paradigm of the economy criticized state intervention for maintaining anti-competitive and inefficient situations in the energy sector and the Chernobyl disaster put an end to, or at least affected, the development of the nuclear option.

As *from 1988*, we observe a new situation in the European energy sector, characterised by two key developments: the political and economical integration of the European Community, in particular the tendencies towards the creation of an Internal Energy Market and the report of the United Nations Commission on Environment and Development (the so-called "Brundlandt Report", 1987) which put in debate the problem of climate change.

European countries have reacted in different ways to these challenges, reflecting different circumstances like the degree of their external energy dependency, their stages of economic development, the phase of European integration and the degree of liberalisation of their energy markets.

In the framework of Phase I of the Project "Promotion of Energy Efficiency in Latin America", ECLAC and SYNERGY, with the cooperation of a group of European consultants, have prepared an analysis of energy efficiency and institutional frameworks in the European Union and its Member States (Lutz *et al.*, 2000).

The study concentrated mainly on the role of legal and regulatory frameworks in the energy efficiency policies of the European Union and the Member States, addressing the following subjects: (i) the priority assigned to energy efficiency in energy policies, (ii) state intervention in favour of energy efficiency, (iii) energy efficiency policies, (iv) constitutional and legal foundations, (v) institutional frameworks, (vi) instruments and programmes for the promotion of energy efficiency, (vii) energy efficiency markets and (viii) conclusions for Europe and Latin America.

While the study has revealed quite some differences with regard to policies, instruments and programmes in the various Member States, some common factors prevail:

First of all, energy efficiency policies are integrated in energy policies, both on the Community as on the national levels. Governments (and the European Commission) have prepared white papers on energy policy, energy efficiency, renewable energies etc, they have formulated targets and they have implemented instruments and programmes to promote energy efficiency.

Legal and regulatory frameworks have been implemented on the national level, in some cases as explicit energy conservation laws (e.g. Spain, Italy), in other cases as a set of different laws and regulations (e.g. Austria, Germany, the Netherlands, United Kingdom). Many national regulations, mainly concerning the building sector, have been influenced by legal acts of the European Union<sup>9</sup>.

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<sup>9</sup> A typical example is the Community legislation concerning thermal insulation of buildings, minimum efficiencies of space heating and hot water systems, which has been introduced since the late

In addition to legal requirements, a wide range of non-legal instruments exists, in particular: economic instruments like financial or fiscal incentives; instruments related to information, technical assistance and training; research, development and demonstration and – increasingly – voluntary agreements between governments and energy consumers respectively manufacturers of energy consuming equipment. In addition, the stimulation of energy service companies (ESCOs), both public and private, is gaining importance.

The Internal Energy Market initiative of the European Commission in 1988, together with the emerging problem of climate change, mark the beginning of a new era of energy policy in Europe, in which both issues, the IEM and the problem of climate change, are dominating the agenda. The discussion on how to reconcile the objectives and the consequences of more competition (including lower energy prices and enhanced economic growth) and the Kyoto commitments to reduce the emissions of greenhouse gases has emerged as one of the central issues in the process of the implementation of the internal energy market, all the more so, because of the fact that pre-Kyoto objectives to stabilise CO<sub>2</sub>-emissions in the European Union were not achieved.

The traditionally strong interaction between national and Community policies in the area of energy efficiency and environmental sustainability, has been intensified by the simultaneous objectives of energy market integration, while achieving the Kyoto commitments for the reduction of greenhouse gas emissions. Cases in point are the directives on energy efficiency labelling and standards for household appliances, which illustrate the interrelation between the objectives of free circulation of goods and services (the Internal Market) and sustainable development.

Energy and sustainable development is, in addition to the Internal Energy Market and the Management of the external energy dependency (security of supply), one of the pillars of the energy policy of the European Union. The White Paper of the Commission “An Energy Policy for the European Union” (COM(95)682 final) elaborates on these principles and refers to three key areas to achieve sustainable development in the energy field: (i) environmental protection, (ii) energy efficiency and (iii) renewable energy. The need to intensify Community policies with regard to energy efficiency and renewable energy has been addressed by two recent Communications from the Commission: the White Paper “Energy for the Future: Renewable Sources of Energy” (COM(97)599 final, November 1997) and “Energy Efficiency in the European Community – Towards a Strategy for the Rational Use of Energy” (COM(1998)246 final, April 1998). Both documents recognize the need for a more active role of the EU and the Member States to promote sustainable energy, by intensifying the use of proven instruments and by introducing new instruments, including a better co-ordination among the EU and Member States, and the development and implementation of Community action plans in both areas.

Taking into consideration the Kyoto commitment of the EU to reduce the emissions of greenhouse gasses for the Union by 8% by 2005, and the difficulties experienced so far to accomplish these objectives<sup>10</sup>, the Communications gave rise to (i) the preparation of a

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seventies and which had a strong influence on policies and regulations in this field in the Member States.

<sup>10</sup> As the Communication of the Commission ‘Energy Efficiency in the European Community – Towards a Strategy for the Rational Use of Energy’ has revealed, an intensification of proven instruments as well as new instruments to promote energy efficiency will be necessary, in order to reach the targets for greenhouse gas emission reduction agreed in Kyoto. Among the measures proposed are (i) a better coordination between Community and national programmes, (ii) coordination with other policy areas, like regional and municipal planification, transport, fiscal policies etc and (iii)

Community Action Plan for Energy Efficiency and (ii) discussion with regard to a possible directive establishing common rules for the treatment of renewable energy, following the adoption of the Commission Working Document: Electricity from renewable energy sources in the internal electricity market, SEC(1999)470 final, April 1999. The working document examines the current support schemes for renewable energy in the Member States and indicates in what way this issue should be dealt with in the light of the internal electricity market. The promotion of renewable energy in the competitive internal electricity market is also the main issue in the Commission's "First Report on Harmonisation Requirements in the Internal Market for Energy" (COM(1998)167 final, March 1998).

## 2.2 Latin America

While the promotion of energy efficiency and renewable energy has – despite all difficulties – achieved a rather prominent place in the energy discussion and in energy policy in Europe, nothing is less true for Latin America. Notwithstanding the existence of energy efficiency programmes like *PROCEL* in Brazil, the programmes of *CONAE* and *FIDE* in Mexico and *PAE (Proyecto para Ahorro de Energía)* in Peru – to mention the most prominent examples – energy efficiency programmes in Latin America are not integrated into 'mainstream energy policies', are often marginalised and sometimes even serve as an alibi for the lack of real Government action in this field.

During Phase I of the Project 'Promotion of Energy Efficiency in Latin America' of ECLAC and SYNERGY, the situation in various countries in Latin America has been analyzed and proposals for specific legal and institutional frameworks were made.<sup>11</sup>

The conclusions of these analyses are similar: although most of the countries have developed some activities to promote energy efficiency and – to a lesser extent – renewable energies, the effect of these programmes has been rather limited. This is also true for those programmes, which have been supported by international donors, including the European Union. The failure to achieve tangible results can be found in four main reasons:

- i. The lack of political will to include energy efficiency and renewable energies into 'mainstream energy policies', which is basically due to ideological preferences<sup>12</sup>;
- ii. As a consequence: the lack of adequate legal and regulatory frameworks;
- iii. The lack of adequate institutional frameworks; and
- iv. The lack of adequate funding and financing mechanisms.

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priority actions in the areas of energy efficient buildings, energy efficient household appliances and other end-use equipment, wider use of negotiated and long-term agreements, increased dissemination of information, third-party financing and other financing schemes, energy efficiency in the electricity and gas sector and combined heat and power, energy management and technology procurement. The Commission aims, with these measures, to achieve the realisation of the 'economic energy saving potential' in Europe, which is estimated to be 18% by the year 2010, as compared to 1995.

<sup>11</sup> Specific studies have been carried out for Argentina, Colombia, Costa Rica, Chile, Peru and Venezuela – see the reference list for more information.

<sup>12</sup> According to the neoliberal doctrine, there is no need to pursue active policies to promote energy efficiency and renewable energy, taking into consideration the assumption of an optimum allocation of resources as a result of market mechanisms (which actually do not take into consideration externalities).

According to this argumentation, political will is actually the pre-condition for any successful legal, regulatory or programme related initiative to promote energy efficiency or renewable energy. However, the often heard complaint about ‘lack of political will’ is certainly not enough to cope with this wide-spread problem. It may be necessary to ask the question: why is this political will lacking? With other words: why are the public, and consequently policy makers not really concerned about energy efficiency and the promotion of renewables?

While the issues of security of supply, competitiveness and environmental protection (in particular the protection of the global environment against the greenhouse effect), are major reasons for European citizens and policy makers to consider energy efficiency and renewable energy as – at least complementary – options to achieve these targets; the attention of policy makers in Latin America – also with regard to energy - seems to be more focussed on economic and social development, and therefore favour energy market liberalisation as a means to achieve low energy prices and access to (low-priced) commercial energy by consumers<sup>13</sup>.

‘Sustainable energy services’ in Latin America do not refer solely to environmental sustainability. Sustainable economic and social development and the protection of the cultural and social patrimony are equally important. ‘Productive transformation with equity’ requires not only efficient and competitive energy sectors in Latin America, but also more added value of energy services, integration of energy markets, development of human resources, the incorporation of modern technologies and the extension of energy services beyond areas of commercial interest (OLADE, ECLAC, GTZ, 1997).

The project “Promotion of Energy Efficiency in Latin America” addresses the need to establish legal and institutional frameworks for the promotion of energy efficiency and renewable energy. As a result of Phase I of the project, bills for energy efficiency laws have been presented in Parliament in Argentina, Colombia and Peru.

While energy efficiency laws will be playing a central role in creating the conditions for the promotion of energy efficiency in Latin America, many additional steps have to be taken to achieve a real penetration of efficiency in the market. These additional steps refer to activities like consensus building (between government, energy enterprises and consumers), enforcement of laws and regulations, implementation of specific programmes and effective control mechanisms. While the transfer of European experience in these fields can have an important added value, the existence (or development) of adequate institutional frameworks seems to be a crucial factor.

In the opinion of the author, institutional weaknesses are among the main reasons why many endeavours to promote energy efficiency don’t actually reach the consumer or don’t induce the consumer to change his behaviour. Without entering into detail, institutional weaknesses in Latin America in particular refer to: lack of specialised agencies, lack of

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<sup>13</sup> The relative low level of interest of Latin American policy makers in environmental issues reflects the difficulties to forge coalitions of actors (and potential voters) in favour of the subject. It should also be emphasised – on the other hand – that the prominent place which environmental issues assume on the political agenda in Europe, is mainly due to the fact that policy makers wish to neutralise the pressure from environmentalists in order to not endanger market liberalisation. Other important differences between Europe and Latin America include the different definitions of welfare, which are directly related to the existence of a middle-class, which has access to the political process and which in general favours environmental issues.

support by Governments, a reduced role of intermediary organisations and difficulties to build consensus among public and private actors.

In most Latin American countries, specialised agencies (energy centres etc) do not exist, or, where they exist, they are often understaffed or underfunded. Agencies often have difficulties to reach their target groups and lack support by policy makers and market players. The dwindling interest of the Peruvian authorities and former state-owned enterprises in the former ‘model agency’ *CENERGIA* are an illustrative example.

However, the problem is not only related to the lack of specialised agencies and their lacking or insufficient support by Governments. The general lack of involvement of intermediary organisations, i.e. organisations who can act as an ‘intermediator’ between government institutions (and agencies) and consumers is also part of the problem. Examples for intermediary organisations – whose existence and active involvement are crucial for the success of many energy efficiency programmes in Europe – include e.g.: NGOs, consumers’ associations; professional organisations of architects, housebuilders and craftsmen; housing co-operatives; chambers of commerce; associations of small and medium enterprises; energy supply companies; provinces, municipalities etc. The ability of Governments to involve these intermediary organisations is imperative<sup>14</sup>.

The lack of involvement of intermediary organisations in Latin America seems to be related to two fundamental problems: (i) the absence of a tradition of co-operation and consensus between public and private actors and (ii) the problem that intermediary organisations, including associations of consumers, industry etc. often lack an explicit mandate, which would allow them to effectively act on behalf of the individuals and companies which they represent. The lack of such a mandate is also an important handicap with regard to the ability of these organisations to enter into binding agreements with the Government on behalf of their members, e.g. in the form of ‘voluntary agreements’.

The problems concerning the *implementation* of energy efficiency and sustainable energy policies in Latin America may require a new culture of partnership and co-operation between public and private actors: reconciling diverging interests by consensus building.

Credible policies to promote energy efficiency and renewable energy require the allocation of sufficient funds. It is obvious that most energy efficiency institutions and programmes in Latin America are severely underfunded and lack adequate financial instruments to promote energy efficiency activities<sup>15</sup>.

### **3. Energy market integration and competition**

#### **3.1 European Union**

As mentioned above, the progressive integration of the European Union - both the association of new Member States as the internal process of political and economic

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<sup>14</sup> One could also argue that the intermediary organisations will inevitably arise as a consequence of economic development, democratisation of society and the ability of actors to make themselves heard outside of the traditional corporatist structures.

<sup>15</sup> Institutional questions with regard to consensus building and the issue of funding and financing of energy efficiency institutions and programmes are the subject of studies carried out in the framework of Phase 2 of the Project “Promotion of Energy Efficiency in Latin America” of ECLAC and SYNERGY.

integration, have reinforced the application of more demanding standards throughout the European Union. Quite to the contrary to what is frequently held, market integration can work in favour of energy efficiency and renewable energy, provided that an enabling market context and adequate 'rules of the game' are put into place.

Historic evidence in the European Union has shown, that the original imbalance in environmental criteria applied in the 'North' and in the 'South' of Europe, has been solved by a trade-off, which involved the acceptance of strict environmental rules by the South in exchange for financial support by the European Union. Economic integration and compensation mechanisms have provided the necessary cohesion to overcome environmental (and potentially trade-distorting) disproportions.

The process of economic integration, in particular with regard to the creation of the Internal Market, has brought about increasing interaction between Member States and Community policies and legislation. In the energy field, numerous EU directives had to be converted to national legislation, covering fields like energy efficiency or, more recently, the Directives regarding the Internal Market for Electricity and Natural Gas. It is evident, that the principle of free movement of goods and services, as stipulated in the Single European Act, has been a major driving force behind subjects like energy efficiency standards for household appliances or the free trade in electrons and methane molecules.

On the other hand, doubts exist whether energy market integration by liberalisation will produce sufficient incentives to fulfil Kyoto targets and other environmental objectives. As a matter of fact, the European Commission and the Parliament have recognised the potential risk of failure to achieve these targets and are preparing and/or implementing specific action plans to more effectively promote energy efficiency and renewable energy (see Section 2.1). The role of the Internal Market seems ambiguous: on the one hand, downward pressure on energy prices is expected to reduce consumer interest in efficient end use of energy and seems to price renewables out of the market, on the other hand competition in generation is likely to provide new opportunities for independent power producers, including renewables based and cogeneration plants.

Nevertheless, there is a broad consensus that energy efficiency and renewables need some 'special treatment', at least in the short and medium term. It is important to point out that policy instruments like eco-taxes, the creation of parallel markets for renewables, integral resource planning, etc. are compatible with the internal market, as long as fair competition between players from different countries is safeguarded. The need for state intervention, recognised in the recent initiatives of the Commission in the fields of energy efficiency and renewable energy, indicate that the efficiency gains due to competition and economies of scale alone may not be sufficient to achieve these ambitious objectives.

In this context, the need for harmonisation of the 'rules of the game', in particular with regard to the market entrance of renewables, is essential. State intervention in favour of renewables can be compatible with the paradigms of a competitive market, provided that instruments are chosen which allow environmentally favourable forms of energy to compete with each other and ultimately – after an adequate transitory period – with the traditional forms of power generation<sup>16</sup>.

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<sup>16</sup> See Section 5.

### 3.2 Latin America

Energy market integration in Latin America has been discussed for more than three decades, as the creation in the sixties and seventies of the regional organisations *ARPEL* (*Asistencia Recíproca Petrolera Empresarial Latinoamericana*), *CIER* (*Comisión de Integración Eléctrica Regional*) and *OLADE* (*Organización Latinoamericana de Energía*) demonstrates. The most concrete steps towards the integration of energy markets have been taken so far in the Mercosur, the major free trade zone in South America, which includes Argentina, Brazil, Paraguay, Uruguay and – as associated states – Bolivia and Chile.

The history of energy integration in the MERCOSUR is particularly characterised by bi-national hydroelectric projects (Salto Grande, Itaipú, and Yacyretá) and – more recently - electric interconnections between Argentina–Uruguay, Argentina–Brazil, Argentina–Paraguay and Brazil–Paraguay. Besides new bi-national hydroelectric projects, a growing role of interconnections by transmission lines is anticipated for the near future.

Concerning natural gas, Argentina not only has extensive resources, distributed in several locations in different regions of the country, but also a mature supply system, with a participation of 46% of natural gas in the internal primary energy supply of the country. Besides the existing gas pipelines between Bolivia and Argentina (that supply Bolivian natural gas to the Argentinian market) and Argentina and Chile (Gas Andes), there are several gas pipelines projects to export Argentinian natural gas to their neighbouring countries that include two gas pipelines between Argentina and the north of Chile (Gas Atacama, Norandino), as well as gas pipelines between Argentina and Uruguay and from Argentina to a thermal power station located at the city of Uruguiana in Brazil, near the Argentinian border<sup>17</sup>. A new pipeline between Bolivia and Brasil will provide the southern and southeastern regions of Brazil with natural gas.

Energy sector reforms in the MERCOSUR countries have shown different characteristics with regard to their depth, programming, opening of national markets and regulatory and institutional frameworks. While Argentina has implemented very profound and complete reforms, the process in the other countries is carried out in a more gradual way (Brazil), or in a more conservative way (Paraguay, Uruguay). Therefore, there are important asymmetries in both the electricity and natural gas regulatory frameworks of the MERCOSUR Member States that are likely to constitute important barriers to a future integration of these markets at regional level. Among the regulatory barriers are, for example: (i) different competition arrangements in the generation, transmission/transport and distribution stages, (ii) differences in the role of the State as market actor, (iii) different market mechanisms, (iv) the problem of compatibility of bi-national agreements and of the export authorisations system with the criteria of a regional single market, as well as (v) discrepancies in the regulation and in the bases of calculation of tariffs of electricity and natural gas transport/transmission (EC, 1999b).

Besides the problems of harmonisation of technical and environmental standards, the 'regulatory borders' constitute the central barrier, which impedes a greater integration of the energy markets of the region.

The 'Memorandum of Understanding on Electric Power Exchanges and Integration in the MERCOSUR', signed in São Paulo, Brazil and approved by the MERCOSUR Common

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<sup>17</sup> The energy integration in the MERCOSUR shows a tendency toward elements of 'gas-electricity' integration, which involves projects of natural gas export for electricity generation in bordering areas, as well as export of electricity generated by natural gas.

Market Council in July, 1998 (Decision 10/98), should be considered as a decisive step towards an effective integration of the electricity markets. The document is based on the commitment of the Member Countries “to grant authorisations, licenses and concessions for the construction, operation and exploitation of interconnections that link the electric systems”, and to define “general rules that guarantee the free trade in electricity, based on the principles of reciprocity, competition and transparency of the market, in compliance with current legislation in each Member Country and the treaties currently in force between them”. The Memorandum of Understanding defines principles of minimum symmetries, establishing competitive conditions in the electricity generation market, with prices that reflect efficient economic costs; freedom to purchase energy among market agents of the Member Countries; non discriminatory treatment of producers and consumers; the possibility, inside each Member State, to base the supply of the demand on economic load dispatch; open access to the surplus capacity of transport and distribution facilities, as well as the acknowledgement of security and quality standards of the electric supply of each Member Country.

A 'Memorandum of Understanding on Gas Exchanges and Integration in the MERCOSUR' is under discussion.

### **3.3 Are we shaping truly competitive markets?**

Competitive markets suggest a level playing field for all forms of energy. This is indeed one of the fundamental premises of the common energy market and has been repeatedly quoted by the European Commission as one of the central objectives of its common market initiative<sup>18</sup>. Ideally, a level playing field would mean undiscriminated access to the market for all producers (generators), independent of the source of supply and fuel base, in the case of electricity.

The question is whether the common energy market provides a level playing field for all actors or only for a selected team of top players. While the market and bargaining power of large players clearly provides them an advantage over small and medium size producers and suppliers, there are also more specific considerations, which suggest that we may be dealing with an imperfect marketplace, which is subject to restrictions, interferences of the legislator and unequal starting positions of market actors. Cases in point are: the existence of state aids, lack of consistent environmental legislation and competitive disadvantages for smaller players<sup>19</sup>.

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<sup>18</sup> Competitiveness is one of the main pillars of European policy, aiming at reinforcing the competitive position of European companies in a global market and – at the same time – offering consumers the benefits of competitive choice at low prices.

<sup>19</sup> An important issue is related to the existence of state aids to different forms of energy, including coal, nuclear and renewables. Support schemes to renewables, state aid to coal (as part of social policies) and R&D funding and state guarantees for nuclear industries are elements of this discussion. Distortions to competition may also arise from a lack of effective regulation and consistent environmental legislation, taking into consideration the existence of externalities. The cases of lignite-based electricity and of accounting standards for storage of nuclear waste and decommissioning of nuclear power plants are cases in point. On the other hand, many of the smaller utilities, who have been known for high quality energy services to the consumers (who had to pay for these services without choice) and for their excellence in realising environmentally friendly energy systems and integrated solutions, are actually fighting for their survival. It seems that investments in cogeneration, waste-to-energy plants and demand-side management do not pay in times of cheap energy from large producers.



An important phenomenon in the European energy sector is the process of mergers and vertical reintegration, which is taking place throughout Europe. Some experts<sup>20</sup> expect that very few groups will ultimately dominate the European electricity market. The question, which arises is whether the Commission and national governments will have the adequate regulatory means at their disposal to prevent the formation of transnational oligopolies in Europe, which may ultimately jeopardise the basic idea of a competitive energy market.

Vertical and horizontal (re-)integration and concentration of property is also an important point of discussion in Latin America (see the following Sections).

#### **4. Foreign investment, public service and social equity**

During the past decade, Latin America has seen an unprecedented inflow of foreign capital due to foreign direct investment, estimated by ECLAC at a net amount of 267 billion US\$ between 1990 and 1998. While the privatisation of state-owned enterprises was the principal mechanism of foreign direct investment during the first half of the nineties, investments related to new projects and to the restructuring and modernisation of privatized enterprises have more recently gained importance.<sup>21</sup> In 1997, Latin America and the Caribbean have attracted about 40% of foreign investment in developing countries, which underlines the important role, which Latin America has acquired in the context of the so-called emerging markets.

The energy sector has proved to be one of the most dynamic sectors in the move towards privatisation of services world-wide, corresponding to a transfer of assets of approximately 37 billion US\$ in the period 1990 - 1996. This corresponds to 24% of all transfers of assets due to privatisations world-wide in this period, i.e. that almost one fourth of all privatisations world-wide took place in the energy sector. It is very difficult to get a regional statistic about this process but it is estimated that the privatisation of energy enterprises in Latin America has contributed with around 40% to this trend.

Strategic alliances, shareholdings, investments in new energy infrastructure are typical modalities of associations between foreign and domestic energy enterprises. European enterprises, like British Gas, EdF, EdP, Endesa of Spain, Gas de España, Iberdrola, Repsol, Tractebel - to name just a few - have established a strong presence in the expanding energy markets in countries like Argentina, Brasil, Chile, Colombia, Ecuador and Peru, which already have opened up - or are in the process to opening up - their energy markets<sup>22</sup>.

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<sup>20</sup> Personal communication H. Lehmann, Wuppertal Institute for Climate Environment Energy, October 1999

<sup>21</sup> This tendency mainly refers to those Latin American countries, which have initiated privatisations at an early stage, like Chile, Argentina and Peru. In other countries, like Brazil and Colombia, privatisation of state-owned enterprises accounts for increasing foreign direct investment.

<sup>22</sup> In Argentina e.g., strategic alliances between Latin American and European enterprises create annual business of 5,8 billion US\$. Among the most striking examples of European investments in the Latin American energy sector are the acquisition of the majority in Endesa Chile via a 29% shareholding of Endesa Spain in Enersis (1,179 billion US\$) and the acquisition of 85% of YPF of Argentina by Repsol for approx. 13 billion US\$. While Endesa Chile and Spain control an important part of the electricity market in countries like Brazil, Colombia, Peru and Argentina; Repsol controls via YPF 55% of the oil reserves, 60% of the refining capacity, 47% of natural gas production and 60% of the retail market for petrol. For more information on European direct investment in Latin America (see Sanchez Albavera, 1999 and CEPAL, 1999).

According to ECLAC, total investments in the petroleum, gas and electricity sectors in Latin America are likely to total 30 billion US\$ in the period 1999 – 2003.

The very substantial direct foreign investment in the Latin American service sectors has contributed to the transformation from a formerly state dominated, and frequently economically unviable energy sector to profit oriented and economically sound energy enterprises.

Nevertheless, as the recent energy crises in Chile and Argentina - and the way in which energy enterprises reacted to consumer dissatisfaction in general - have shown; the profitability of energy enterprises does not necessarily mean the same progress in service. It is evident that the change of ownership and rules of the game have resulted in a different perception of the objectives of energy companies: ‘shareholder value’ has replaced the concept of ‘public service’ as their *raison d’être*.<sup>23</sup>

It seems that also European energy companies operating in Latin America are following this shift of paradigm. Companies, which (still) defend the concept of public service in their homebase, seem to be less dedicated to apply this philosophy in their new markets. It appears that corporate philosophy and culture tends to evolve in a way that it adapts to the policy and regulatory environment in place.

Public service is a meaningful concept in situations, where an affordable energy supply to rural areas and to large numbers of low-income households is not evident at all. The long-standing tradition of public service and the sensibility towards environmental concerns of consumers and (sensitive) policy makers of European energy enterprises should be translated into similar benefits for consumers in their new Latin American markets. It is obvious – on the other hand – that such kind of commitment may not be expected from the European actors without a corresponding regulatory framework and the possibility of competitive choice in place.

## 5. Regulatory challenges

Liberalised markets need regulators, whose central task is to make sure that market actors can operate in a level playing field, have non-discriminatory access to the market and that abuse of market power is prevented. Regulatory bodies should be free from Government and political interference as well as capture by market actors has to be avoided. In this context, transparency is certainly a central aspect.

In *Europe*, the ‘tension field’ created by the simultaneous objectives of market liberalisation (low energy prices), Kyoto commitments, the de-facto nuclear moratorium in most European countries and increasing public pressure for ‘clean energy’ has given rise to an increasing concern of how to promote the integration of energy efficiency and renewable energy in the energy system. Obviously, the way energy markets are regulated is a key factor in this context<sup>24</sup>.

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<sup>23</sup> One could argue that Governments have the important task to induce energy companies to also safeguard the interests of ‘stakeholders’, i.e. consumers, the society at large and the environment by effective regulation. Ideally, in such a situation, the interests of the shareholders would coincide with the interests of the stakeholders, provided that a competitive market with informed consumers exists.

<sup>24</sup> This section discusses some of the present ‘regulatory challenges’ in Europe. It should be kept in mind that the present ‘challenges’ are part of a process, which has been initiated at the end of the eighties by the necessity to adequate national regulatory frameworks to the requirements of the Internal Energy Market.

The European Commission's answer to this challenge has so far been an increased legislative activity in these fields, on the one hand, and attempts to define and ultimately make use of the scope for legal action defined by the the electricity and gas directives respectively.

Key initiatives have been the White Paper "Energy for the Future: Renewable Sources of Energy" (1997) and the Communication "Energy Efficiency in the European Community - Towards a Strategy for the Rational Use of Energy" (1998), mentioned in Section 2.1.

The issue how to promote renewable energies in the competitive internal electricity market, has been addressed by the Commission's "First Report on Harmonisation Requirements in the Internal Market for Energy" (1998). The report identifies "a clear need for common rules in this area", taking into consideration the increasing role of renewables in the EU in the coming years (following the Kyoto commitments) and the potential market distortions which might arise from the existence of different renewable support schemes in the Member States. In the report the Commission advocates the application of support schemes, which are as compatible as possible with the internal (competitive) market, calling for the "proactive creation of a single market (for renewables)" through an explicit legal Community framework.

Following an examination of the different schemes proposed or introduced by the Member States, the Commission adopted a working document on 13 April 1999, which examines the current support schemes in the Member States. It also indicates in what way this issue should be dealt with in the light of the internal electricity market<sup>25</sup>. The working document concludes that quota or competition-based support schemes, like systems based on tenders or green certificates, may be more compatible with the Internal Market than systems based on fixed feed-in tariffs for renewable energy<sup>26</sup>. Taking into consideration the "regulatory uncertainty" due to the absence of unambiguous EU Treaty rules with regard to the environmental and internal market dimensions of renewables, the Commission advocates the "proactive creation of a single market (for renewables)" through an explicit legal Community framework.

After controversial discussions among the various stakeholders, the Commission's proposal for a "Directive on the Promotion of Electricity from Renewable Energy Sources in the Internal Electricity Market" was approved by the European Parliament in March 2000. In some contrast to the original proposals of the Commission however, the Directive does not foresee in "the introduction of a harmonised Community wide support scheme setting the

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<sup>25</sup> Commission Working Document: Electricity from renewable energy sources and the internal electricity market, SEC(1999)470 final, 13 April 1999.

<sup>26</sup> Reference is made e.g. to the Non-fossil Fuel Obligation (NFFO) in the United Kingdom, systems of Green Certificates considered by several Member States and the German Electricity Feed-in Law. The NFFO provides a politically dictated "desired level" of renewable energy supply, according to a defined source mix, which is realised via public tenders. The electricity generated is sold at market prices, financing the difference between sale and purchase price through a non-discriminatory levy on all domestic energy consumption. In the system of Green Certificates, the Member State decides the level of renewable energy that it desires to be produced and simply requires all consumers (including distributors for captive consumers) to purchase the corresponding percentage of their energy requirements from renewable sources by obliging them to purchase "green certificates" issued by renewable producers. The secondary market for green certificates will set the level of price of renewables. The German feed-in law provides guaranteed prices for renewable generated electricity, coupled with a purchase obligation of the system operator. Similar schemes based on fixed feed-in tariffs are applied in Spain and, at present, Denmark.

price for renewable generated electricity (RES-E) through community-wide competition between RES-E generators”. In particular, quota-based systems, including green certificate systems and tendering procedures, and fixed price schemes will continue to co-exist, at least for the time being<sup>27</sup>. As the Commission states: “*The question is, however, how these schemes should be adapted to the new framework conditions of the internal electricity market.*”

Regulatory action is also required in order to eliminate obstacles to cross-border trade of electricity and to ensure a level playing field in the European electricity market, as the European Commission stated in its ‘Second Report on Harmonisation Requirements in the Internal Market for Energy’ (1998). Available interconnector capacity, cross-border transmission pricing and environmental, accounting and taxation standards have been identified as main issues<sup>28</sup>.

In *Latin America*, regulation of the post-reform energy sectors is a priority. Regulatory agencies for the electricity, petroleum and gas sectors have been established in various countries, although regulatory capacity did not keep up with the reform process in some cases. Taking into consideration the new paradigm of financial (instead of: economic) efficiency of privatised energy enterprises, gains in efficiency have in many cases not been passed on to the consumer through lower prices or extension of services and in an improvement of their quality (Altomonte, 1997).

At present, various countries of the region face regulatory conflicts, which ask for solutions. Some of these conflicts have been analysed by ECLAC and in particular refer to:

- The integration of the energy industry and concentration of property<sup>29</sup>;
- Lack of regulation of transmission fees in a situation of concentration of the industry (e.g. Chile);
- Barriers to market entrance for generators due to the concentration of water rights. An example is Chile, where water rights have been granted almost exclusively to privatised energy companies (Dourojeanni, 1999);

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<sup>27</sup> The Commission proposes an evaluation of the experiences gained with the application of the different support schemes no later than 5 years after the entry into force of the Directive.

<sup>28</sup> In many cases, the available interconnector capacity between Member States is considered as insufficient for the expected increase in power trade after liberalisation in Europe. Harmonisation of allocation rules of network capacity (in particular with regard to potential conflicts between short-term exchanges and long-term capacity reservations) and the construction of new interconnection capacity are of particular concern. Regarding cross-border trade, practical problems arise from the co-existence of two systems of access to the network: negotiated third party access (opted for by Germany and Greece) and regulated TPA (chosen by all other Member States). Major efforts are made to harmonise both systems to the degree necessary to secure effective access to transmission networks. Harmonisation of legal standards of electricity production mainly refer to environmental standards (including specific EU legislation in this field), accounting standards for storage of nuclear waste and decommissioning of nuclear power plants, as well as direct and indirect taxation of electricity and electricity companies.

<sup>29</sup> This phenomenon is aggravated by the process of regionalisation and globalisation of energy industries. An interesting example are the developments in Peru, where the legal prohibition of vertical integration and horizontal concentration of the electricity industry has been superseded by the mergers between Enersis Chile, Endesa Chile and Endesa Spain, who are shareholders of generation and distribution companies in Peru (Campodónico, 2000). Concentration of ownership – involving European companies – is also taking place in other Latin American countries.

- Disputes between the regulator and electricity concessionaries with regard to the setting of distribution tariffs (Peru) (Campodónico, 2000);
- Distribution of profits between generators, distributors and clients;
- Lack of effective competition for ‘free clients’ due to market dominance of and lack of transparency of transmission fees<sup>30</sup>;
- Control of electric load dispatch by predominant market players;
- Lack of legal provisions for compensation of clients in the case of non-compliance by electricity suppliers, e.g. in the case of supply crises, like in 1999 in Chile.

Although the need for redefining the role of the state and regulatory reform in the liberalised energy markets receives more and more attention, there is still an urgent need to integrate criteria of socially and environmentally sustainable development in existing and evolving regulatory frameworks in Latin America.

## **6. EU – Latin American Energy Co-operation<sup>31</sup>**

The focus and the methodology of European - Latin American energy co-operation have substantially changed during the nineties. While, a few years ago, the co-operation still focussed on rather classical instruments, like energy audits, pilot projects and sectoral studies, there has been a clear shift towards a more structural approach, aiming - on the one hand - at establishing partnerships with institutions and regional organisations (e.g. OLADE, MERCOSUR, Andean Community), as well as between energy sector organisations and actors from Europe and Latin America, and - on the other hand - to promote institutional development in the region, which should enable the countries to implement sustainable energy efficiency policies and programmes, based on own resources. EU - Latin American energy co-operation is increasingly perceived as a catalyst, instead of using international co-operation to ‘fill the gap’ caused by lack of national commitment and initiatives.

The ALURE Programme, initiated by the European Commission in 1995, demonstrates this shift of focus. The overall objective of ALURE (acronym for: ‘Latin America - optimum utilisation of energy resources’) is to “strengthen the economic presence of the European Union in a vibrant growth sector and to adapt Latin American energy sector institutions and enterprises to provide more competitive services”. In pursuit of this goal, ALURE focuses on three specific objectives: (i) to improve the services of Latin American utilities, preferably in the growth sub-sectors of electricity and natural gas and to promote business relations with European firms linked to the sector such as utilities, financial operators and industrial firms, in particular small businesses; (ii) to contribute, where necessary, to the adaptation of legal and institutional frameworks and (iii) to promote sustainable development with relevant schemes. ALURE is operational since 1996 and has been funding so far 21 projects, involving energy actors from thirteen EU Member States and from fifteen Latin American countries.

Different, and in some way complementary to ALURE, the SYNERGY Programme of DG XVII is focussing on cooperation with third countries in the field of energy policies

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<sup>30</sup> Several national organisations of large consumers have formed an association on regional level in order to exchange information and improve their bargaining power vis-à-vis the energy sector.

<sup>31</sup> See also European Parliament, 1999.

and strategies. In Latin America<sup>32</sup>, this objective of the programme is strengthened by strategic cooperation with key institutions in the energy field in Latin America, like: OLADE, CEPAL, the MERCOSUR Secretariat, national ministries etc. SYNERGY has co-organised respectively supported major events in the region, e.g. the conference ‘Latin-America European Union: Partners in Energy’ in Caracas, Venezuela (June 1996), and the workshop ‘Reforms and Strategic Alliances for Efficient Use of Energy in Latin America’ (Santiago de Chile, May 1996)<sup>33</sup>. Current activities funded by SYNERGY include strategic studies on subjects like: the potential market for energy service companies in Latin America, a programme for efficient use of electricity in Venezuela and a dialogue between the EU and MERCOSUR countries on the integration of energy markets. In 1997, SYNERGY, in co-operation with the European Energy Foundation, has sponsored a visit of European parliamentarians and industry representatives to the MERCOSUR.

The Rio Energy Forum, which has been jointly organised by the European Commission and OLADE at the occasion of the Euro – Latin American Summit of Heads of State in June 1999, has emphasised the need of a multiple focus of European - Latin American energy cooperation, based on *three areas of equal importance*:

- Sustainable economic development, investment challenges and business opportunities in the energy sector;
- Sustainable environmental protection through effective resource management of petroleum, natural gas and electricity;
- Sustainable social development through provision of affordable energy services and sharing the benefits associated with energy investments.

Among the key recommendations of the Forum are transparent regulations of energy markets to secure (i) competitive and market-responsive operation of public and private companies, (ii) market-oriented integration, (iii) ecological policies advocating the long and medium-term objectives and strategies for resource management and environmental protection and (iv) the supply of reasonably priced energy to the urban and rural poor (Rio Energy Forum, 1999).

In general, there is a twofold need for stable regulatory frameworks for energy efficiency and renewable energies in Latin America: firstly the overall and basic need to create the socio-economic conditions under which sustainable development in the energy sector can take place and, secondly, the necessity to create a stable framework to attract foreign investment, not only for the expansion of energy supply, but also in the field of demand-side management and energy services.

## **7. For a new energy policy dialogue between Europe and Latin America**

Latin America has been in a central focus of political attention in Europe during the sixties and seventies. This attention, which has emerged around the notion of ‘international solidarity’, has in some way faded away.

After the so-called ‘lost decade’ of the eighties, important shifts took place both in the perception of the role of the state as in the paradigms of development co-operation, in

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<sup>32</sup> The SYNERGY Programme is focussing on various geographic areas: Eastern Europe and the Former Soviet Union, Mediterranean countries, Asia, Latin America and Africa.

<sup>33</sup> The workshop laid the basis for the project “Promotion of Energy Efficiency in Latin America” of ECLAC and SYNERGY (see CEPAL, 1996).

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particular with regard to the role of international development institutions. The re-definition of the role of the state, the opening up of markets and the privatisation of service industries and infrastructure integrated Latin America into the world economy and attracted the interest of the financial world and investors.

Notwithstanding the Euro – Latin American Summit of Heads of State of June 1999 in Rio de Janeiro, a political vision of Europe with regard to Latin America remains unclear. Taking into consideration the important European investments in Latin America (see Section 4), this situation is somewhat worrying. Investors and politicians should not ignore the risk that European investments may be endangered by political instability, the appearance of populist political movements and social unrest. It is therefore in the very interest of European actors in Latin America not only to be able to operate in stable regulatory frameworks, but also to contribute to the transfer of the benefits of foreign investments to the population of the countries in which they operate.

In the case of energy, the main focus of European ‘foreign energy policy’ seems to be the so-called “Greater Europe”, in particular the NIS and the Mediterranean Region. The Final Shared Analysis Symposium “Community Energy Policy for the 21<sup>st</sup> Century”, held in Brussels on the 30<sup>th</sup> of November and 1<sup>st</sup> of December 1999, confirmed this orientation. (European Commission, 1999a). Security of supply for Europe, based on a diversification of supply sources, appears to be the main concern of European policy makers.

This vision however may prove to be short-sighted. Growth of energy consumption and of greenhouse gas emissions are taking place outside the “Greater Europe”, in particular in Asia and Latin America. This growth of energy consumption is closely related to economic and social development, preservation or deterioration of the environment and political stability. The question to be answered is whether a narrow “euro-centric” view will contribute to effectively face these challenges. Diverting the attention from the emerging markets in Asia and Latin America may also result in the loss of important export markets and investment opportunities for European companies.

The Parliamentarian Dialogue Europe – Latin America on Energy and Sustainable Development intends to provide a platform for a new energy policy dialogue between Europe and Latin America. This dialogue, which so far has mainly involved parliamentarians, representatives of the European Commission and National Governments and experts should be extended to industry, NGOs and other stakeholders.

For such purpose, ECLAC proposes to establish a “*European Latin American Forum on Sustainable Development of the Energy Sector*”, based on the following objectives:

- To foster a constructive dialogue that draws upon the experiences of Latin America and Europe as a basis for the design and implementation of sustainable energy policies. This dialogue will strengthen co-operation and increase investment and trade flows;
- To promote a joint strategic perspective which is compatible with the sustainable development of the energy sector in Latin America and with international commitments in favour of sustainable development;
- To identify and foster the introduction of best practices conducive to energy sustainability as European firms continue to establish an increasingly important presence in Latin America.

Important elements of this dialogue would be:

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- To establish a common agenda, incorporating the best policies and practices to foster sustainable development in both regions;
- To foster the regional integration of energy markets as an important element of economic and social development, fostering political stability and the consolidation of democratic political structures in Latin America;
- To strengthen the transfer and the incorporation of efficient and sustainable technologies in the region and to foster an active participation of Latin America in technological development;
- To identify common positions in the fields of the protection of the global climate and with regard to the stability of petroleum markets, which are an important pre-requisite for sustainable economic and social development in Latin America, security of supply for Europe and climate protection;
- To contribute to the establishment of a stable regulatory framework and of commonly accepted rules of conduct of market players in the Latin American energy sector, which will ultimately protect European investments in Latin America.



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(please consult [www.eclac.cl](http://www.eclac.cl) and [www.energy-strategies.org](http://www.energy-strategies.org) for further information)

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