ENERGY CHARTER SECRETARIAT

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Related documents: CC 240, CC 250

DECISION OF THE ENERGY CHARTER CONFERENCE

<u>Subject:</u> Best-Practice Guidelines on Energy Market Restructuring, including privatisation

[The Energy Charter Conference at its 12th Meeting held on 26 June 2003] *welcomed* the final draft of the Best-Practice Guidelines on Energy Market Restructuring, including Privatisation, circulated in document CC 240. The Conference *approved* a welcoming note to the Guidelines.

[The text of the Welcoming note together with Guidelines is attached at Annex.]

Welcoming Note On Best-Practice Guidelines on Restructuring (including privatisation) in the Energy Sector (CC 240)

as approved by the Energy Charter Conference at its 12th Meeting held on 26 June 2003

The Energy Charter Conference, while not seeking to introduce uniform practices throughout the Energy Charter Treaty constituency, and acknowledging that no party to the Energy Charter Treaty is under legal obligation to apply any of the principles of the Best Practices Guidelines on Restructuring (Including Privatization), is continuously looking for ways and means to address the necessity to create and maintain a competitive business environment in the energy sector that promotes efficiency and reduces cost, and contributes to the public good.

The Energy Charter Conference therefore:

- Welcomes and takes note of the Best Practices Guidelines on Restructuring (Including Privatization) in the Energy Sector;
- Recommends the application of the Best Practices Guidelines on Restructuring (Including Privatization) in an innovative manner and with a degree of flexibility that takes into consideration the particular circumstances;
- Recommends the periodic review and update of the Best Practices Guidelines on Restructuring (including Privatization) in pursuit of responsiveness to novelty and change;
- Recommends that the application of the Best Practices Guidelines be monitored in the framework of the Country Reports on Investment Climate and Market Structure.

Best Practices Guidelines on Restructuring

(Including Privatization)

in the Energy Sector

FINAL DRAFT



Energy Charter Secretariat Brussels

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Best Practices Guidelines on Restructuring (Including Privatization) in the Energy Sector

Introduction

The Best Practice Guidelines (BPG) project is part of the effort directed towards the general aim of exchanging experience and stimulating discussion on possible approaches to restructuring (including privatization) in the energy sector. The current focus of the BPG is upon economies in transition that are or may be contemplating privatization, or have to deal with post-privatization restructuring problems. The added value of the project is expected to originate from an approach that accentuates lessons learned in practice from the perspective of various countries, with emphasis on countries in transition, as well as exploring the economic theory of competitive benefits underlying restructuring, inclusive of privatization.

The wider framework for this activity originates in the paper on Energy Investments jointly prepared and presented by the Energy Charter Secretariat and the International Energy Agency to the G8 Energy Ministerial in Moscow in April 1998, which endorsed its recommendations. The First Conference meeting in April 1998 invited the Secretariat to continue working along the lines and objectives developed in the paper on Energy Investments. The present project on Best Practice Guidelines is considered to be one step towards further implementing the G8 recommendations in this respect. The BPG are structured with the understanding that, while the Energy Charter Treaty contains a political commitment to develop open and competitive markets, no Contracting Party is under any obligation to privatize entities in the energy sector.

Purpose

These Best Practices Guidelines on Market Restructuring (Including Privatization) in the Energy Sector offer voluntary principles designed to maximize the benefits and reduce the costs of transition from a non-market to a competitive market environment in the energy industries (especially at the preprivatization, privatization, and post-privatization stages), to assure the efficiency of energy markets, to provide functioning compact mechanisms for formulating and implementing energy sector policy objectives in a market environment, as well as to suggest ways to proficiently manage energy sector restructuring (including privatization) programs.

Definitions

For the purposes of these Best Practices Guidelines:

- *"Benchmarking"* means the process of identifying, learning, and adapting outstanding practices and processes from any entity anywhere in the world, to help the energy sector improve performance.
- "Best practices" means ways and means that have been shown to produce superior results, selected by a systemic process of guidelines, and generally judged to be contributing to the

public good²; there are no universal "best practices", but an adaptation thereof to fit the particular case;

- *"Network industries"* means electricity, natural gas and district heating transmission and/or distribution systems exhibiting natural monopoly character;
- *"Transit"* means the transport of energy from country A across country B intended for country C.
- *"Privatization"* means the transfer of assets from government (public sector) ownership to private ownership;
- *"Regulator"* means a public authority with the functions and powers to administer energy sector public acts (laws, inclusive of licensing systems, if any), issue, maintain, administer and enforce codes and technical standards pertinent to its area of mandate as defined in law;
- o *"Restructuring"* means facilitating the transition to fully competitive market;
- *"Stakeholders"* means any entity or combination of entities that have a reasonable interest in restructuring, where such interest is heard;
- *"Unbundling"* means the separation of price and service as a way to identify costs associated with each of the production (generation), transmission and distribution of energy.
- *"Undue market power"* means horizontal and/or vertical monopoly and/or any other unfair or improper exercise of influence to increase or decrease the availability or price of a service or a product in a manner inconsistent with competitive markets³.

Basic Principles

The basic principles of the BPG include:

- Rule of law in a functioning, stable, and predictable legislative and institutional framework and political environment that inspires confidence;
- Transparency and public access to information;
- Arm's length distance between stakeholders in the restructuring and privatization process;
- Protection of the interests of all stakeholders by a system of checks and balances;
- o Removing barriers to competition.

The Basic Principles should be implemented with a degree of flexibility that accounts for the particular circumstances under which the processes of restructuring and/or privatization develop. For ease of reference, the recommendations for the implementation of the Basic Principles have been structured in the BPG according to the following themes:

- A. Processes needed to create competitive markets in energy;
- B. Creating and maintaining competition in the energy sector;
- C. Regulation;
- D. Preparation of entities for privatization and/or competition;
- E. Process of privatization;
- F. Controlling and benchmarking restructuring (including privatization) programs.

² Cf., for example, APQC's definitions for benchmarking and best practices at http://www.apqc.org.

³ Cf., for example, the definition of undue market power in Oregon Senate Bill 1149 (1999).

Method

The thematic organization of the Best Practices Guidelines is for convenience only. It is recommended that, in considering possible BPG applications, a holistic and analytical approach should be applied, by considering a variety of reasonable scenarios and feasible criteria of designing and controlling the results of the implementation of energy sector restructuring (including privatization) programs.

Best Practices Guidelines Themes

A. Processes needed to create competitive markets in energy

- Privatization programs should clearly state the objectives and the priorities. Privatization of the energy industries has two major objectives, enhancing efficiency and/or achieving budgetary goals. Priorities for restructuring and privatization may include introducing more competition, raising capital, attracting strategic (foreign) investment. Sector-related strategic objective(s) of this kind should be coordinated with other macro-economic objectives, such as, *inter alia*, reducing pressures on public finances, removing constraints to economic growth, and facilitating sustainable growth.
- Successful privatization requires the development of a functioning, stable, predictable legislative and institutional framework, as well as a political environment that inspires confidence. Restructuring requires the unfaltering commitment to such environment, for the establishment of the desired new legal, regulatory and institutional framework, and the creation of new industry structure.
- The energy sector strategic choices that are designed to reach the objective(s) should be considered for each sub-sector (oil, gas, coal, electricity, and so on). A set of clear and unambiguous solutions should be provided to achieve functional separation, efficient regulation, transparency, autonomy and accountability of governance, private participation, and increasing competition in all sectors of the energy industry. In network industries, ways to achieve market opening and unbundling of functions in integrated gas and power companies, particularly transmission and distribution, should be found. Provide the methods and the criteria for evaluating implemented restructuring (including privatization) programs vis-à-vis available optional solutions.
- All possible positive and negative effects of restructuring (including privatization) programs must be considered, for example the effect of market opening on public service conditions, environment, and security and continuity of supply. Define measures to address concerns at different stages of liberalizing the energy markets.
- Stakeholders in privatization and restructuring programs, as well as the public, should be provided with information to assure the transparency of the privatization program. Privatization and restructuring programs should provide a clear chain of authorization and means for verification of results.
- Ensure phased and participatory approach to restructuring (including privatization) programs, allowing for processes to be flexible and consensus-building though consultations at various levels with stakeholders, such as, e.g. political and consumer interest groups, civic groups, industry and industry associations, labor, and others, where concerns are heard.
- Restructuring and privatization programs should establish adequate mechanisms to guarantee external performance of non-commercial objectives.
- Restructuring and privatization programs should establish processes that can secure a smooth transition to market prices for energy products and services.

- Restructuring and privatization programs should allow for prices to be differentiated between different locations (regions) and classes of customers in line with the different costs of supplying them.
- Restructuring and privatization programs should account for any history of non-payment and/or services that have a record of presenting pricing issues. Programs should be designed to maintain payments discipline throughout the sector. The introduction of bankruptcy procedures and the support of the right to disconnect non-paying entities is a way to mitigate future debt-collection problems. Where appropriate, human needs should be addressed by building a safety net, on which individual customers can rely in times of temporary adverse circumstances to avoid disruption of service.
- Individual metering of consumption is indispensable to ensure fairness of bill allocation and avoid passing of responsibility between separate accounting arms of a corporate customer. Accurate metering and billing is essential for the ability of customers to control their energy consumption patterns and lifestyle, and verify billing for unauthorized charges (cramming). Metering is thus a tool that helps both increase energy efficiency and provide the basis for consumer rights protection.
- Restructuring and privatization programs should eliminate state subsidies as far as possible. Where it is not possible or feasible, programs should define the criteria and amounts of subsidy and, if possible, the process of phasing out.
- Energy taxes, duties, fees, and charges should have an explicit legal basis. Tax laws and regulations should be easily accessible and understandable, and clear criteria and procedures should guide the administrative discretion in their application. Aggregate marginal tax rates should provide sufficient incentive to investment, development, and production of energy.

- Inadequate market design may cause a distortion of competition and a shortage of infrastructure, since in a liberalized market with design flaws investors may not receive adequate signals about how much, where and when to invest, and consumers may not have sufficient incentives to switch. In the power sector, for example, this could lead to shortages of generation and/or transmission capacity that preclude gaining any efficiency.
- In emergent markets there is often a need for a gradual introduction of competition in the light of the need for securing investments in upgrading and expansion of the systems, as well as for achieving a better environmental quality. The market organization should be designed with due regard to these constraints without losing sight of the ultimate objective of creating competition in the energy sectors.
- Undue market power, such as monopolistic and/or concentrated markets in the energy sector should be identified together with the sources of the market power, such as, for example, laws granting exclusivity, and concessions.
- Appropriate degrees of vertical and horizontal integration to maximize competitive opportunity have to be determined. For network industries, such as pipelines, electricity grids and district heating systems, devise measures to address their specific features as natural monopolies. It is necessary that all market players get fair access to transmission, distribution and auxiliary facilities, and that transmission and distribution systems, where operated by vertically integrated companies, are functionally separated from other interests, particularly generation/production and supply.
- Where integrated companies are required to unbundle activities, it is essential that they preserve confidentiality of commercially sensitive information between the "unbundled" activities by prohibiting exchange of information that may lead to gaining unfair competitive

advantage⁴. Furthermore, it is essential that unbundled services operate on the basis of standard and published third party access tariffs. Measures should be designed to ensure that unbundled units provide non-discriminatory system and facilities access and terms of use between the incumbent and new entrants, and that terms of access (including tariffs) are transparent.

- Unbundling may take various forms, e.g. accounting separation of the activities of integrated companies, legal unbundling of the activities of an integrated company into a holding structure, or ownership unbundling (in the power sector, by divesting generation and distribution from an integrated structure). Enhancing competition and improving efficiency is generally more easily achieved by ownership unbundling rather than by legal or accounting unbundling. The form of unbundling chosen should take into account the particular circumstances, such as the size of the system and its interconnections with other (sub)systems.
- To the extent possible, price controls must be removed. Where appropriate, "same fuel" competition (e.g. gas-to-gas) should be encouraged, by phasing out the practice of linking the price of a fuel to that of another (e.g. natural gas prices linked to oil prices), and thus allowing prices to be truly based on the supply and demand situation for distinct energy products. While competitive pricing based on supply/demand does not guarantee lower prices, it is the only way to make sure that efficiency gains are made, and that prices provide adequate signals to energy sector stakeholders, thus ensuring true fuel-to-fuel competition.
- Effective competition has to be monitored, both in cases where significantly higher or lower prices are expected to emerge, by designing and deploying a system of verification of competitive pricing. Ensure that lower prices of energy, especially for electricity and gas, do not entail negative implications for energy efficiency and the introduction of environmentally friendly technologies and renewable sources of energy.
- Trade is essential to competition. Barriers to inter-regional and cross-border trade have to be phased out, interconnection capacity should be allocated and managed according to clear and transparent rules, and restructuring (including privatization) programs should take into account the need to increase interconnection capacity and remove infrastructure bottlenecks, where they exist. In trade, base tariff systems on transparency, simplicity, cost-reflectivenss, and non-discrimination, and consider the introduction of standard trade mechanisms.
- In the inter-regional and international setting of trade, some geographic areas are net exporters of energy, resulting in physical flows and possibly transits. Where applicable, tariff rules for electricity should be based on physical flows, not on the distance between contracting parties. The same approach would be applicable for gas when actual transportation cost does not reflect the notional contracted path, e.g. in gas swaps. Furthermore, transit countries (if any) should be compensated for the increase in transit flows caused by trade. Where applicable, tax rules should be designed to account for and differentiate between contracted and physical flows, where this difference leads to variations in payments to transmission system operators, so that fair and undistorted trade is encouraged.
- For network industries, capacity should be allocated through market-based mechanisms.
- For network industries, a clear and simple system of definitions and criteria for estimating available capacity at national and sub-national (clusters of networks) levels, as well as unambiguous technical operating standards must be provided.

⁴ The problem of separating the accounts of divisions and affiliates of vertically integrated companies, and maintaining the confidentiality of sensitive information, is sometimes tackled by the mechanism of erecting so-called "Chinese walls" within the firm. *Cf.*, for example, Communication from the Commission of the European Communities to the Council and the European Parliament dated March 13, 2001 [COM(2001) 125 final].

- For network industries, the functional independence of the transmission system operator should be regarded as the fundamental condition for effective access and a non-discriminatory (level) playing field.
- Where national energy policy objectives have specific importance, the instruments for their achievement should work at arm's length rather than by direct or "remote" control.
- The functions, assets and activities vested in unbundled companies have to be accounted separately, and auditing should be up to standards that assure timely, truthful and trustworthy information. Throughout accounting and auditing, ensure transparency of financial results.
- An arm's length relationship between government entities and officers and managerial and executive bodies in the energy sector must be in place. Ensure that managers and executives in the energy sector are both free from inappropriate government interference and fully responsible for their decisions on daily commercial operations and business planning.
- Legal obstacles to competition should be reviewed and identified on a regular basis. A gradual movement towards a regulatory framework and powers that promote a competitive market should be ensured.

C. Regulation

- Regulatory and competition overseeing practices to guarantee market access, to supervise remaining monopolistic activities, in particular networks and network externalities, should be established. In designing and establishing such practices, regulators should have competence to intervene *ex-ante* in the market (including, for example, the setting of tariffs), while competition authorities typically should deal with competition problems *ex-post*. Measures should be put in place to facilitate a harmonization of effort between the sectoral regulator and the competition authority, in order to avoid a duplication of overseeing practices.
- Various options for securing the independence of the regulator, such as terms of appointment and sources of funding, and identify the advantages and disadvantages of particular approaches, should be considered. Whenever possible, choose options that create a system of checks and balances and enhance the regulator's financial independence, such as, for example, fixed term appointment and funding through license fees.
- The regulator and competition authority must have full access to accounts of companies with monopolistic functions (if any), and other companies under regulatory/competition supervision. The regulatory/competition framework should include disclosure rules, ensuring an easy and prompt access to all relevant cost data and specify sanctions for profit-shifting. Take steps to reduce the risk of regulatory capture which may lead the regulator to set prices and quality of services that knowingly imply the exercise of monopoly power, and assure a system of checks and balances is in place between the regulator and the competition authority. Make sure a clear demarcation of their respective competences is in place.
- The basis for price and tariff determination must be unambiguously defined, clearly prescribed, reviewed from time to time, and transparent at all times to the public. Ensure that the powers to set or supervise tariffs and prices are exercised independently, and that enterprises may make representations to the regulator under clear procedural rules for appeals against the regulator's rulings.
- The basis for tariff mechanism regulation should take into account the need for cost recovery and avoid cross-subsidies between consumer groups. However, a cost-plus tariff mechanism may be prone to condoning inefficiencies in cost structures and levels. A price-cap type of regulation of tariffs is generally preferable⁵.

⁵ On tariffs, consider EBRD's conclusions in its *Transition Report 2001*.

- Sufficient competence to supervise mergers, acquisitions and concentrative joint ventures should be established.
- Sector-specific regulations must be fully in place and sufficient personnel competent to apply these regulations should be available. If necessary, amend existing regulatory instruments to ensure that they are adequate and suitable to facilitate and maintain new market entry and competition, as well as to control (privatized/de-monopolized) companies. Ensure that such powers are exercised free of political interference and if necessary, establish an independent Regulatory Body. Make provision for representations by the regulated enterprises and appeals to the Courts against regulatory decisions.
- Ways and means to ensure that all companies respect environmental and consumer protection and universal supply obligations must be designed. Overall, the rules should provide for the protection of vulnerable customers, and secure social and economic cohesion, environmental protection, and security of supply. Differentiate the obligations on public service, environment, and supply security according to energy industry sub-sector, e.g. at generation level, request respecting minimum environmental standards and other environmental objectives, and possibly primary fuel mix requirements to address security of supply; at grid level, consider meeting minimum public service requirements; at supply level, develop a minimum set of requirements to be met by operators, inclusive of, for example, equivalent tariffs to equivalent customers, protection of vulnerable customers, transparency of contracts, etc.
- The need should be assessed for setting up a body to manage and review the execution of obligations under contracts concluded between the state and the new owner, as well as powers to enforce such contracts, if they exist.
- Some degree of contractual flexibility should be provided, avoiding obligatory pooling or other measures that may lead to oligopolistic practices.
- The effects of competition on employment and the ways to deal with the likely decrease of the size of the workforce, which may be due to, *inter alia*, technological change, reduction in non-core personnel, and outsourcing of some functions, should be accounted for. Consider programs that help deal with these effects in a socially consensual manner, e.g. through skill profile changes, voluntary early retirement schemes, re-training and redeployment, working time reductions, etc. Develop strategies that enhance adaptability and employability, rather than workforce conservation.

D. Preparation of entities for privatization and/or competition

- The core tasks/functions to be attributed to entities intended for privatization should be identified and separated.
- The split of assets between entities to be privatized or between those and a residual state entity needs to be defined in detail.
- Measures to allocate the accumulated debts of the entities in question (where relevant) should be considered as an essential part of the creation of appropriate balance sheets.
- The needed measures must be taken to clarify liability (if any) for past environmental damage.
- Where appropriate, mainly in the coal sector, extensive social obligations should be transferred to institutions external to the restructured entity.
- Forward thinking in a real-world framework is indispensable: be prepared to answer questions related to the expected conditions of particular markets after privatization/liberalization, especially in network sectors. For example, in an emerging market environment a proper mix of contract-based markets and balancing pools is likely to satisfy the investors' need for certainty and at the same time to secure some competition on

the market after its liberalization. An entirely pool-based market may risk creating unmanageable uncertainty for the investors.

E. Process of privatization

- Clearly identify which authorities should be involved in restructuring and privatization, how their mandates are established (and whether they are subject to review by parliament or by the courts).
- A clear set of responsibilities for managing restructuring and privatization must be established.
- Optimal timing of the process, taking into account internal and external factors, should be ensured.
- A clear, well-planned consultation process with identified experts must be established.
- Mechanisms must be established for building consensus on the aims of the restructuring/privatization process with principal parties affected (i.e. stakeholders, e.g. targeted companies, consumers, trade unions).
- Strategies necessary with respect to dealing with pre-privatization long-term supply contracts or long-term purchasing commitments should be evaluated.
- The selected approach to privatization, its application to the relevant sector, and if based on a model from another country its transferability and relationship to various aims, must be clearly evaluated. Identify specific factors in the national energy situation which may call for a distinctive approach to privatization.
- The existing know-how and managerial competence and the need for involvement of the investors to ensure the competence needed to manage the privatized company must be evaluated.
- Proper company law and rules of corporate governance with a view to ensuring proper protection for all investors and particularly those with minority shareholdings, must be introduced. Government must indicate the matters on and circumstances in which it might exercise its vote as a residual shareholder.
- Controls must be established over remaining state entities in the sub-sector to ensure they do not discriminate against private sector companies in favor of their own subsidiaries.
- Adequate transparency in the privatization process must be ensured. Evaluation criteria for bids for companies should be clearly set out in advance.
- Clear management and decision procedures for bidding processes must be established.
- Ways and means to ensure that all procedures involved in the selected method of privatization are implemented on a transparent basis must be provided.

F. Controlling and benchmarking restructuring programs (including privatization)

• The broader social, environmental and non-discriminatory goals associated with the restructuring (privatization) program should be defined, along with the narrower set of economic and market objectives, and the possible nature and magnitude of the problem, especially the likelihood of detrimental event(s) and the consequences must be determined.

Determine any linkages between an underlying market failure and the broader problems⁶. Design a simple and graphic system of assigning values and tracking actual performance compared to goals, for example a "stoplight" system preferably in conjunction with benchmarking.

- The possible impact of each restructuring (including privatization) option and its associated regulatory instruments, compliance and enforcement regimes should be considered. For each option, assess costs and benefits for the community as a whole, for different groups in the community, and for stakeholders. In identifying impact groups, differentiate between government (central, regional, local), business (big, medium, small, importers and exporters) and consumers (by degree of being informed, urban/rural location, age, cultural, gender, family and income characteristics). Set trigger levels for "alarm" where negative impact may be expected, and formulate ways and means to address such negative impact (if any).
- A systemic approach must be conceived to estimating and tracking the cost of restructuring 0 and privatization to each impact group. For example, for the government restructuring/privatization enforcement agencies, assess numbers and levels of staffing, salary costs, and the cost of other items (such as advertising and public awareness, accommodation, travel). For each item, indicate the source of revenue against which it would be charged (e.g. budget appropriation or fees) and, if possible, indicate net cost to government. For businesses, a possible approach would be to assess paper costs (cost of reporting and complying), costs of meeting standards incorporated in the regulations, license fees, costs caused by likely change in production, transportation, and marketing procedures, shifts to alternative sources of supply, and lost net revenues due to delays in the introduction of goods to the marketplace or restrictions on product availability. For consumers estimate, for example, probable higher prices of goods and services, reduced quality and choice, and the costs related to delays in the introduction of goods to the marketplace or restrictions on product availability. Design similar procedures to assess benefits, and provide cost/benefit assessment for the community as a whole. If a quantitative estimate is not possible, provide a qualitative assessment of costs and benefits.
- Benefits must be assessed and target levels set at particular points of time ("benefits trajectory"). For example, benefits (not all of which may be quantifiable), may be derived from economies of scale, reduction in compliance and reporting costs and administration cost, reduction of prices and costs due to greater competition, improvements in product and service quality, availability of wider range of products and services, improved environmental conditions, and improvements in information available to all groups.
- Performance should be checked along the cost and benefits target trajectories, and design corrective action to achieve desired cost/benefits targets, if needed.
- A permanent vehicle must be provided for consultation and reconciliation between government, business, consumers, unions, environmental groups and other stakeholders who may be affected by the restructuring and/or privatization process. Design a clear set of criteria against which the merits of grievances and proposed solutions would be assessed, and a procedure to remove circumstances that have been found to cause a warranted complaint about an aggravation to a group.
- In implementation, sunset clauses, ways to conduct regular reviews and benchmarking, and regular reporting to the public must be provided.

⁶ *Cf.*, for example, the Guidelines for Commonwealth (Australia) Regulation Impact Statements, 1997 (as revised, also referenced in other items in Theme F).

Attachment (Comments)

Comments

to the

Best Practices Guidelines on Restructuring

(Including Privatization) in the

Energy Sector

FINAL DRAFT



Energy Charter Secretariat Brussels



Guideline	Comment
Privatization programs should clearly state the objectives and the priorities. Privatization of the energy industries has two major objectives, enhancing efficiency and/or achieving budgetary goals. Priorities for restructuring and privatization may include introducing more competition, raising capital, attracting strategic (foreign) investment. Sector-related strategic objective(s) of this kind should be coordinated with other macro-economic objectives, such as, <i>inter alia</i> , reducing pressures on public finances, removing constraints to economic growth, and facilitating sustainable growth.	By defining the goals of the program early on, and the political, economic and social goals of each transaction, the goals can be incorporated into the planning and monitoring of the execution of each stage of the privatization process, so that the program can move forward with direction and focus. Clarity in defining the aims helps avoid unreasonable expectations and formulate priorities.
Successful privatization requires the development of a functioning, stable, predictable legislative and institutional framework, as well as a political environment that inspires confidence. Restructuring requires the unfaltering commitment to such environment, for the establishment of the desired new legal, regulatory and institutional framework, and the creation of new industry structure.	Neither privatization, nor sophisticated strategies, nor large investments will help restructure enterprises, if the external environment does not force or at least make attractive the implementation of strategies for improved efficiency and utilization of investments. The ethos underlying these changes is that the presence of the correct signals from the market, arising from the elimination of subsidies; the opening of markets to domestic and international competition; the setting of prices through the market mechanism, and a real threat of bankruptcy will all serve to impose greater financial discipline and encourage organizational changes towards the efficient operation of enterprises.
The energy sector strategic choices that are designed to reach the objective(s) should be considered for each sub-sector (oil, gas, coal, electricity, and so on). A set of clear and unambiguous solutions should be provided to achieve functional separation, efficient regulation, transparency, autonomy and accountability of governance, private participation, and increasing competition in all sectors of the energy industry. In network industries, ways to achieve market opening and unbundling of functions in integrated gas and power companies, particularly transmission and distribution, should be found. Provide the methods and the criteria for evaluating implemented restructuring (including privatization) programs vis-à-vis available optional solutions.	It is not sufficient to collect and assess knowledge and experience in energy sector restructuring and privatization programs to establish a successful plan of action. A clear vision of the objectives, proper structuring and control of the program is equally important. In various sub-sectors of the energy industry, specific considerations exist that must be accounted for. Overall, no single-size- fits-all solution is available: programs should be tailored to adequately address the particular circumstances and the timing for action that is best to achieve the specific purposes and objectives.



Guideline	Comment
All possible positive and negative effects of restructuring (including privatization) programs must be considered, for example the effect of market opening on public service conditions, environment, and security and continuity of supply. Define measures to address concerns at different stages of liberalizing the energy markets.	Just like any other regulatory action, energy sector restructuring and privatization programs entail not only benefits, but also costs. Costs are usually not evenly distributed across various groups; furthermore, different types of costs exist that may be specific to a group. Costs may occur as a one-time event, be unevenly distributed or constant over time. Restructuring and privatization programs should avoid a single- minded focus on benefits and take a holistic stand in their approach.
Stakeholders in privatization and restructuring programs, as well as the public, should be provided with information to assure the transparency of the privatization program. Privatization and restructuring programs should provide a clear chain of authorization and means for verification of results.	The uneven distribution of both costs and benefits of restructuring and privatization programs requires transparency and ways to provide accurate and up-to-date information to stakeholders, to help avoid concerns that particular groups would not have their fair share in the benefits or would carry a greater share of costs. The public should clearly see how programs work and what the results are.
Ensure phased and participatory approach to restructuring (including privatization) programs, allowing for processes to be flexible and consensus- building though consultations at various levels with stakeholders, such as, e.g. political and consumer interest groups, civic groups, industry and industry associations, labor, and others, where concerns are heard.	Restructuring and privatization programs that do not enjoy continuous support and participation of key stakeholders at all levels and throughout the process, are likely to have an increased risk of involving unanticipated cost, or even risk failure.
Restructuring and privatization programs should establish adequate mechanisms to guarantee external performance of non- commercial objectives.	A clear example of how this has been carried out is evident in <i>ECS Restructuring Report on</i> <i>Kyrgyzstan (Nov 2000,) p. 5.</i> A number of kindergartens, a hotel and a recreation center were non-core functions of Kyrgyzenergo that were transferred to the control of local authorities under the Resolution of the State Property Fund N 72 passed by the government on May 23 1997. Institutes engaged in non-core functions of research and prospecting have also been separated from Kyrgyzenergo under this Resolution to form separate organizations largely controlled by the State Property Fund via majority shareholding
Restructuring and privatization programs should establish processes that can secure a smooth transition to market prices for energy products and services.	Price is the cornerstone of the market allocation system. It balances supply and demand and is the means of allocating resources to maximize total welfare. The market system fails in these tasks if prices do not have effect. In a country with substantial non-payments, prices lose their effect and price formation is significantly distorted. Thus most of the benefits of the decentralized market system are not realized. Please refer to the <i>ECS Recommendations on Reducing Non-Payment Problems (17 November 2000).</i>



Guideline	Comment
Restructuring and privatization programs should allow for prices to be differentiated between different locations (regions) and classes of customers in line with the different costs of supplying them.	Non-differentiated prices make it difficult to internalize cost to all entities and at all levels, thus creating opportunities for cross-subsidization and market failure, leading to inefficiencies.
Restructuring and privatization programs should account for any history of non- payment and/or services that have a record of presenting pricing issues. Programs should be designed to maintain payments discipline throughout the sector. The introduction of bankruptcy procedures and the support of the right to disconnect non-paying entities is a way to mitigate future debt- collection problems. Where appropriate, human needs should be addressed by building a safety net, on which individual customers can rely in times of temporary adverse circumstances to avoid disruption of service.	Non-payment leads to accumulation of debt at various levels in the energy supply chain, and often results in de-capitalization of key sub- sectors that are unable to maintain sufficient cash flow to address the need to maintain their capital assets in the long run. Non-payment also affects the ability of operators to maintain proper levels of other inputs, such as labor, fuel, and material. Ultimately, non-payment leads to breakdowns (e.g. brown-outs and black-outs in the power sector), as cash-stripped operators find it physically impossible to maintain adequate levels of inputs required to continue providing goods and services. The clear and imminent threat of bankruptcy is one of the best ways to address non-payment, especially when supplemented by a safety net available to customers in temporary distress.
Individual metering of consumption is indispensable to ensure fairness of bill allocation and avoid passing of responsibility between separate accounting arms of a corporate customer. Accurate metering and billing is essential for the ability of customers to control their energy consumption patterns and lifestyle, and verify billing for unauthorized charges (cramming). Metering is thus a tool that helps both increase energy efficiency and provide the basis for consumer rights protection.	A good example of a recent approach to metering policy is evident in Armenia from September 1998. Please refer to <i>ECS Report on Restructuring</i> <i>for Armenia (June 2000)</i> pp. 7-8. The supplier has to have the right to disconnect customers for non- payment and make penalty charges for re- connection both to recover the costs (including interest) and as a deterrent. Please refer to the <i>ECS Recommendations on Reducing Non-Payment</i> <i>Problems (17 November 2000).</i>
Restructuring and privatization programs should eliminate state subsidies as far as possible. Where it is not possible or feasible, programs should define the criteria and amounts of subsidy and, if possible, the process of phasing out.	Latvia has taken such an approach. Existing subsidies for small power producers (hydro, wind, solar electric plants and co-generation) represents attempts by Latvia to secure alternative means of electricity production. The source for these subsidies is a levy on the price, resulting in increases in the price of electricity produced by these methods between 50- 90 percent. The government has established a schedule for these subsidies to be terminated by 2008, except for the subsidies to co-generation plants which will continue. It is planned, however, to set conditions for the operation of co-generation plants according to which these subsidies would be paid. Proposed amendments to the Energy Law envisage the reduction of the subsidized hydro power plants capacity to 1 MW. It is planned not to subsidize wind and solar electricity, because they need reserve capacity as back-up for weather changes.



Guideline	Comment
Energy taxes, duties, fees, and charges should have an explicit legal basis. Tax laws and regulations should be easily accessible and understandable, and clear criteria and procedures should guide the administrative discretion in their application. Aggregate marginal tax rates should provide sufficient incentive to investment, development, and production of energy.	In many countries the energy sector contributes a significant, sometimes prevalent, part of the value added in the economy. The government is hence often tempted to treat the energy sector in a manner that is special or different from other sectors of the economy, creating in the process possibilities for distorting resource allocation and ambiguity for investors. "Taxing to death", on the other hand, is a sure way to create disincentives for investing in the energy sector, an approach that eventually leads to structural imbalances and significant inefficiencies, and prohibits growth.



Inadequate market design may cause a distortion of competition and a shortage of infrastructure, since in a liberalized market with design flaws investors may not receive adequate signals about how much, where and when to invest, and consumers may not have sufficient incentives to switch. In the power sector, for example, this could lead to shortages of generation and/or transmission capacity that preclude gaining any efficiency.	For example, in the California power crisis of 2000, the California State regulator's order to three incumbent utilities obliging electricity procurement only from newly established power exchange, after these utilities had sold all their generation facilities, resulted in the weakening of buyers' market positions, and then induced cartelistic behaviors by generators. The effects caused severe fluctuations of wholesale electricity prices on the power exchange. Consequently, investments in power infrastructure were discouraged, and the three utilities' financial situations were damaged seriously. In recent policy discussions on electricity liberalization in ECT members' governments such as EU and Japan, these lessons learned from California were carefully analyzed, then were reflected in their approaches to market design.
In emergent markets there is often a need for a gradual introduction of competition in the light of the need for securing investments in upgrading and expansion of the as for achieving a better environmental quality. The market organization should be designed with due regard to these constraints without losing sight of the ultimate objective of creating competition in the energy sectors.	There is no <i>a priori</i> advantage inherent to an accelerated rate of restructuring, liberalization and/or privatization, as compared to a slower pace of reform. Consider ways to identify and stay on a least cost/maximum benefit path that leads to the objective, with due respect to practical constraints.
Undue market power, such as monopolistic and/or concentrated markets in the energy sector should be identified together with the sources of the market power, such as, for example, laws granting exclusivity, and concessions.	When monopolies extract all monopoly rents in their own markets, they have no incentive to integrate vertically. However, if regulation precludes abuses of market power, monopolies will attempt to exert their market power in unregulated industries through affiliated companies upstream or downstream. This significantly raises entry barriers in the unregulated markets, leaving the door open to market power abuses.



Appropriate degrees of vertical and horizontal integration to maximize competitive opportunity have to be determined. For network industries, such as pipelines, electricity grids and district heating systems, devise measures to address their specific features as natural monopolies. It is necessary that all market players get fair access to transmission, distribution and auxiliary facilities, and that transmission and distribution systems, where operated by vertically integrated companies, are functionally separated from other interests, particularly generation/production and supply.	Consider the factors that affect well-to-wheels cost of energy derived from different sources. For example, technology in the power sector was earlier such that the least cost option required systems of large power plants combined with extensive high voltage transmission grids. However, the overall energy input-output efficiency of this system has been stagnating since the mid-1960's, at about 32%. The grid model of the power system accommodated the fact that least-cost fossil fuel plants had a unit capacity of some 1,000 MW, which could only achieve reasonable load factors in large grid systems. In the meantime, advances in technology have made it possible to provide power at similar or lower cost at 50 MW CHP plants or via distributed power generation at even lower single unit capacity. Similar changes occur in pipelines, where super- high pressure gas lines are now possible, and in other energy sub-sectors. Privatization and restructuring programs should look into the long- term trends of energy sector structures from various points of view, e.g. technology, integration, business practices, and be flexible to account for anticipated technology and structural change in the future, to assure maximum competitive opportunity.
Where integrated companies are required to unbundle activities, it is essential that they preserve confidentiality of commercially sensitive information between the "unbundled" activities by prohibiting exchange of information that may lead to gaining unfair competitive advantage ⁷ . Furthermore, it is essential that unbundled services operate on the basis of standard and published third party access tariffs. Measures should be designed to ensure that unbundled units provide non- discriminatory system and facilities access and terms of use between the incumbent and new entrants, and that terms of access (including tariffs) are transparent.	Accounting principles are not only vital for control and cost efficiency within an organization, they also provide a crucial basis of information upon which external assessment of the organization can take place, for example by regulatory bodies, lenders or potential developers.

⁷ The problem of separating the accounts of divisions and affiliates of vertically integrated companies, and maintaining the confidentiality of sensitive information, is sometimes tackled by the mechanism of erecting so-called "Chinese walls" within the firm. *Cf.*, for example, Communication from the Commission of the European Communities to the Council and the European Parliament dated March 13, 2001 [COM(2001) 125 final].



Unbundling may take various forms, e.g. accounting separation of the activities of integrated companies, legal unbundling of the activities of an integrated company into a holding structure, or ownership unbundling (in the power sector, by divesting generation and distribution from an integrated structure). Enhancing competition and improving efficiency is generally more easily achieved by ownership unbundling. The form of unbundling chosen should take into account the particular circumstances, such as the size of the system and its interconnections with other (sub)systems.	Ownership unbundling unequivocally establishes a separation between the grid activities and other activities of gas or electricity firms; short of collusion (which is almost universally illegal), the independence of the various activities would be secured and competition enhanced. Similarly, legal unbundling has advantages over accounting separation. In the latter case, the maintenance of "Chinese walls" requires sophisticated company management and data handling systems and a matching degree of integrity, which in many instances, especially in emerging markets, may not be up to the mark. Also, it places a heavy burden on the regulator to identify and prove the existence of discrimination and uncompetitive behavior.
To the extent possible, price controls must be removed. Where appropriate, "same fuel" competition (e.g. gas-to- gas) should be encouraged, by phasing out the practice of linking the price of a fuel to that of another (e.g. natural gas prices linked to oil prices), and thus allowing prices to be truly based on the supply and demand situation for distinct energy products. While competitive pricing based on supply/demand does not guarantee lower prices, it is the only way to make sure that efficiency gains are made, and that prices provide adequate signals to energy sector stakeholders, thus ensuring true fuel-to- fuel competition.	There are various degrees of "same fuel" and "interfuel" competition in the energy sector. In a sense, the energy market is not a single entity, but a series of overlapping markets. Studies of fuel price cross-elasticities confirm that the greatest overlap and competition between various sources of energy and energy products is in heat applications, and, to a lesser degree, in power generation. In other uses, it may be next to impossible or very costly to substitute one fuel for another, regardless of changes in relative prices (i.e., there is no interfuel competition). For example, transportation, especially road, marine and air, is dominated by petroleum, and there are at this moment very limited possibilities for other energy products to compete, regardless of price levels (no interfuel competition), but indeed very good "same fuel" competition. However, the area of overlap, where different fuels compete "head-to-head", is growing ever wider, and advances in technology accelerate this process. Keeping in place pricing of some energy products based on formulas related to the prices of other products affects both interfuel and same fuel competition, and results in disincentives for the introduction of advanced technology and lower efficiency.
Effective competition has to be monitored, both in cases where significantly higher or lower prices are expected to emerge, by designing and deploying a system of verification of competitive pricing. Ensure that lower prices of energy, especially for electricity and gas, do not entail negative implications for energy efficiency and the introduction of environmentally friendly technologies and renewable sources of energy.	The possibility of adverse effects of greater competition on energy efficiency and "green energy" is an example of restructuring and privatization "collateral" cost that should be anticipated, and for which tools should be designed to limit its effects (usually most vivid in the short- to medium run). An example of such possible negative effects of greater competition is the eventual increased use of fossil fuels that could become available at lower prices: one of the effects would be greater pollution in the short to medium run, and another possible effect would be a price shock in the long run, due to the overuse of a finite resource.



Trade is essential to competition. Barriers to inter-regional and cross-border trade have to be phased out, interconnection capacity should be allocated and managed according to clear and transparent rules, and restructuring (including privatization) programs should take into account the need to increase interconnection capacity and remove infrastructure bottlenecks, where they exist. In trade, base tariff systems on transparency, simplicity, cost- reflectivenss, and non-discrimination, and consider the introduction of standard trade mechanisms.	No amount of investment incentives would be of any help, if the route to markets is non-existent or jammed. And, just like highways, trade routes need traffic rules, which may be customary or mandated. Where possible and appropriate, sets of recommended trade practices should be developed, including, <i>inter alia</i> , sample forms of contracts, guidelines on trade terms, procedures for the implementation of contracts, etc.
In the inter-regional and international setting of trade, some geographic areas are net exporters of energy, resulting in physical flows and possibly transits. Where applicable, tariff rules for electricity should be based on physical flows, not on the distance between contracting parties. The same approach would be applicable for gas when actual transportation cost does not reflect the notional contracted path, e.g. in gas swaps. Furthermore, transit countries (if any) should be compensated for the increase in transit flows caused by trade. Where applicable, tax rules should be designed to account for and differentiate between contracted and physical flows, where this difference leads to variations in payments to transmission system operators, so that fair and undistorted trade is encouraged.	The approach to base tariffs on contracted flows, rather than on actual, leads to overcharging on some routes and undercharging on other routes, thus distorting costs and the tax base. In both instances, significant inefficiencies may be caused.
For network industries, capacity should be allocated through market-based mechanisms.	Allocation of capacity through market-based mechanisms requires sophisticated systems of dispatch and control, technically and economically sound rules for identification of spare capacity and transparency regarding placement of orders, contracting and execution and enforcement of contracts. Such systems are often impossible without real-time SCADA-based infrastructure. Whenever relevant, the application of integrated databases, management and accounting systems should be encouraged, along with "gateways" between sub-systems operated independently in network environment.
For network industries, a clear and simple system of definitions and criteria for estimating available capacity at national and sub-national (clusters of networks) levels, as well as unambiguous technical operating standards must be provided.	Failure to provide a clear definition and a straightforward method of calculating available capacity creates the possibility of discrimination and abuse of (quasi-monopoly) power.
For network industries, the functional independence of the transmission system operator should be regarded as the fundamental condition for effective access and a non-discriminatory (level) playing field.	A system operator that is dependent on another entity is liable to manipulations and interference that could affect its decisions in favor of particular users or clients, to the detriment of competition.



Where national energy policy objectives have specific importance, the instruments for their achievement should work at arm's length rather than by direct or "remote" control.	The argument of national objectives may be used to veil less dignified attempts to gain unfair advantage for a particular group or groups of special interests. Working at arm's length is a way to avoid such situations.
The functions, assets and activities vested in unbundled companies have to be accounted separately, and auditing should be up to standards that assure timely, truthful and trustworthy information. Throughout accounting and auditing, ensure transparency of financial results.	Even suspicions of inappropriate accounting practices and transfer of liabilities (often with the purpose of "beefing up" balance sheets and financial results) are, as a rule, sufficient to drive investors away for a long time. Goodwill and trust are fundamental prerequisites for doing business in any sector, but even more so in the energy sector, due to its capital-intensive nature and the long breakeven periods. Inappropriate accounting is also prone to creating stranded assets. In both instances, restructuring and privatization programs may lag behind or even fail, due to investor's interest evaporating.
An arm's length relationship between government entities and officers and managerial and executive bodies in the energy sector must be in place. Ensure that managers and executives in the energy sector are both free from inappropriate government interference and fully responsible for their decisions on daily commercial operations and business planning.	Failure to provide "Chinese walls" between the government offices and officers, and the management and executive bodies of the energy sector may lead to inappropriate interference in favor of special interests, abuse of funds, and even corruption. It also provides avenues for dissipation of responsibility and accountability.
Legal obstacles to competition should be reviewed and identified on a regular basis. A gradual movement towards a regulatory framework and powers that promote a competitive market should be ensured.	Even in the most open environment, laws and regulations have to be continuously reviewed and updated to reflect the ever evolving circumstances, ways, and means of the energy sector.



Regulatory and competition overseeing practices to guarantee market access, to supervise remaining monopolistic activities, in particular networks and network externalities, should be established. In designing and establishing such practices, regulators should have competence to intervene <i>ex-</i> <i>ante</i> in the market (including, for example, the setting of tariffs), while competition authorities typically should deal with competition problems <i>ex-</i> <i>post</i> Measures should be put in place to facilitate a harmonization of effort between the sectoral regulator and the competition authority, in order to avoid a duplication of overseeing practices.	Even in sectors which can be fully opened to competition, e.g. the oil sector (other than transmission pipelines), some regulation on concessions, safety and health, the environment, etc., is likely to be needed. As private companies increasingly dominate the sector, the regulatory arrangements need increasing definition in terms of regulatory principles, regulatory independence, procedures and scope for appeals.
Various options for securing the independence of the regulator, such as terms of appointment and sources of funding, and identify the advantages and disadvantages of particular approaches, should be considered. Whenever possible, choose options that create a system of checks and balances and enhance the regulator's financial independence, such as, for example, fixed term appointment and funding through license fees.	Development of the regulator system and market arrangements are critical for investors' confidence and the pace of restructuring (privatization). Decisions of essential importance include, <i>inter alia</i> , the assurance of the regulator's independence (financial, too), the sectors of competence, the form of regulatory (e.g. for tariff setting) and market rules, the principles of functioning of contractual and/or pooling arrangements, etc. Regulation implementation details often make the difference between success and failure in introducing competition and effective regulation ⁸ .
The regulator and competition authority must have full access to accounts of companies with monopolistic functions (if any), and other companies under regulatory/competition supervision. The regulatory/competition framework should include disclosure rules, ensuring an easy and prompt access to all relevant cost data and specify sanctions for profit-shifting. Take steps to reduce the risk of regulatory capture which may lead the regulator to set prices and quality of services that knowingly imply the exercise of monopoly power, and assure a system of checks and balances is in place between the regulator and the competition authority. Make sure a clear demarcation of their respective competences is in place.	Both the principles of full disclosure/ease of access to the accounts of monopolistic companies to regulators and competition authorities, and of maintenance of a system of checks and balances between the regulator and the competition authority have now a positive track of record.

⁸ Cf. EBRD, op. cit.



The basis for price and tariff determination must be unambiguously defined, clearly prescribed, reviewed from time to time, and transparent at all times to the public. Ensure that the powers to set or supervise tariffs and prices are exercised independently, and that enterprises may make representations to the regulator under clear procedural rules for appeals against the regulator's rulings.	A central concern is the flexibility and adaptability of the price control mechanism. On the one hand, it should provide incentives to private operators to increase productivity and internal efficiency. On the other hand, it should protect the interests of consumers by allowing them to benefit from these gains.
The basis for tariff mechanism regulation should take into account the need for cost recovery and avoid cross-subsidies between consumer groups. However, a cost-plus tariff mechanism may be prone to condoning inefficiencies in cost structures and levels. A price-cap type of regulation of tariffs is generally preferable?	Low tariffs do not provide incentives to end-users to save energy and distort allocations of investment into energy saving R&D, technology transfer, and project implementation. This leads to continuing use of energy-intensive applications and technologies that are, as a rule, not environmentally friendly. Investment in generation and distribution are also discouraged by tariffs that do not reflect costs. However, full- cost tariffs should go in hand with their differentiation by classes of consumers and provision of mechanisms for the protection may be in the form of lifeline tariffs, targeted subsidies, or (preferably) a mix of the two. Another caveat related to applying price caps: capping end-user prices and <i>not</i> capping wholesale prices (or capping them at levels that are too high compared to end-user tariffs) may lead to California-style brownouts and the accumulation of debt with utilities. In general, capping should be applied in a way that does not create a situation of "too little market". On tariffs, consider, for example, EBRD's <i>Transition Report</i> <i>2001</i> .
Sufficient competence to supervise mergers, acquisitions and concentrative joint ventures should be established.	The existence of able regulatory and anti-trust institutions with the ability to efficiently regulate and promote competition in private utilities is fundamental to the overall efficiency of the economy and satisfying the basic needs of the population. One issue raised is whether it is preferable to have different sectoral regulators or a single regulatory body. The latter option can be appealing in transition economies due to scarcity of highly qualified staff in this field and financial resources in the public sector: see OECD/CCET Advisory Group on Privatization, <i>"Privatization of Utilities and Infrastructure: Methods and Constraints"</i> , Proceedings of Eighth Meeting, October 1995.

⁹ On tariffs, consider EBRD's conclusions in its *Transition Report 2001*.





Sector-specific regulations must be fully in place and sufficient personnel competent to apply these regulations should be available. If necessary, amend existing regulatory instruments to ensure that they are adequate and the and maintain powr market centre

suitable to facilitate and maintain new market entry and competition, as well as to control (privatized/demonopolized) companies. Ensure that such powers are exercised free of political interference and if necessary, establish an independent Regulatory Body. Make provision for representations by the regulated enterprises and appeals to the Courts against regulatory decisions.

The mandate of these institutions is basically twofold:

- i) to formulate and implement specific privatization policies and
- ii) to ensure that the interests of the state and society as a whole are adequately protected, so that the process remains politically acceptable.

The issue of "independence" of the regulatory authority both from the government and the entities subject to their regulation remains crucial. For example, the 1999 Progress Report of European Commission relating to the the candidacy of Latvia for EU accession pointed out shortcomings in the regulatory mechanisms and bodies governing natural monopolies in Latvia. The Energy Regulation Council has not been provided with an independent source of income but is dependent on funding from the state budget. In practice, this has also led to problems with the employment of necessary personnel casting doubts on whether the License Office in particular will be able to attract and retain sufficiently qualified employees. In response, the Cabinet of Ministers has approved the establishment of a "united professional and independent institution" for the regulation of all natural monopoly tariffs and rules to be set up by January 1 2001. A Law on "Regulator of Public Services" has been adopted. It stipulates that a united regulator called the Public Services Regulation Commission will cover all sectors regulated by the state including the energy sector. The independence of the PSR will be ensured by the financing mechanism. Following the practice in other countries, the new Commission will be funded by payments made by public service companies. Implementation of the plan to develop the united regulation institution will proceed by means of the National Programme for Integration into the EU and World Bank Loan Agreement for structural changes. Since 1999, a Project Group located in the Ministry of Economy has been set the tasks of designing the structure of the new institution, allocating the functions of the staff, estimating costs linked with establishment and human resources training.



Ways and means to ensure that all companies respect environmental and consumer protection and universal supply obligations must be designed. Overall, the rules should provide for the protection of vulnerable customers, and secure social and economic cohesion, environmental protection, and security of supply. Differentiate the obligations on public service, environment, and supply security according to energy industry sub-sector, e.g. at generation level, request respecting minimum environmental standards and other environmental objectives, and possibly primary fuel mix requirements to address security of supply; at grid level, consider meeting minimum public service requirements to be met by operators, inclusive of, for example, equivalent tariffs to equivalent customers, protection of vulnerable customers, transparency of contracts, etc.	One way that this can be accomplished is by the establishment of a quasi-independent "watchdog" body by the government whose primary function is to protect consumers in all sectors. An example is the Consumer Protection Board in Estonia. This body also encourages broad participation at the grass roots level by co-operation with non-governmental organizations in the same field such as the Consumer Protection Council and the Consumer Protection Union (a voluntary organization with 300 civilian members). See, for example, <i>ECS Restructuring Report on Estonia (Nov 2000)</i> p 21.
The need should be assessed for setting up a body to manage and review the execution of obligations under contracts concluded between the state and the new owner, as well as powers to enforce such contracts, if they exist.	For example, in 1996, the Latvian Privatization Agency established a "Contract Control Department" (CCD), which is responsible for reviewing fulfillment of the privatization contracts for up to 3 years following the signing of the agreement with the strategic investor. The standard procedure includes the review of the following purchasers' obligations:
	 Supervision of payment. Payments usually have to be made by installments over a 3-5 year period.
	 Supervision of investment guarantees given. These investments were usually taken from the business plan submitted by the purchaser of the privatization object.
	 Review of the company's financial situation, if the state has retained a minority stake.
	 Supervision of fulfillment of workplace guarantees.
	In addition, the CCD may arrange changes in the privatization contract, if it is proved that non- fulfillment of the contractual obligations is not within the entire responsibility of the purchaser (for example, if the market conditions have changed dramatically) to prevent bankruptcy of the company. In serious cases of non-fulfillment of obligations, the CCD may initiate certain steps like penalties for non-compliance or even cancellation of the privatization contract.
Some degree of contractual flexibility should be provided, avoiding obligatory pooling or other measures that may lead to oligopolistic practices.	Observance of the principle of contractual freedom and party sovereignty is key to markets and competition.



The effects of competition on employment and the ways to deal with the likely decrease of the size of the workforce, which may be due to, <i>inter alia</i> , technological change, reduction in non-core personnel, and outsourcing of some functions, should be accounted for. Consider programs that help deal with these effects in a socially consensual manner, e.g. through skill profile changes, voluntary early retirement schemes, re-training and redeployment, working time reductions, etc. Develop strategies that enhance adaptability and employability, rather than workforce conservation.	reduced, if potential negative employment effects are made known beforehand, and in conjunction with the programs that are instituted to mitigate such possible negative effects. Reduced employment mitigation should be clearly structured and demonstrably and convincingly efficient.

Theme D: Preparation of entities for privatization and/or	
competition	



The core tasks/functions to be attributed to entities intended for privatization should be identified and separated.	Approaches to this task are varied. The Czech and Slovak Republics created strategic business units from non-core activities using privatization plans written by company management and outsiders. In Romania, management can sell off entire business units before privatization. In Poland, consultants have been used to propose the breaking apart of industrial sectors into units that make commercial sense.
The split of assets between entities to be privatized or between those and a residual state entity needs to be defined in detail.	Hidden liabilities are the worst form of promoting restructuring and privatization programs with investors.
Measures to allocate the accumulated debts of the entities in question (where relevant) should be considered as an essential part of the creation of appropriate balance sheets.	Most of this debt was usually accumulated under the centrally planned economies, under which debt reimbursement was not generally required and high debt burdens did not affect enterprise operations or the behavior of managers. In response to this issue, a number of innovative solutions have been proposed: the creation of debt clearing houses such as the Estonian National Debt Fund; the establishment of banks to restructure loans such as the Slovenian Bank Rehabilitation Agency; debt-equity conversions for inter-company debt in Lithuania; write-offs in Romania and bad-debt work-out programs in Poland and Czech Republic. In Germany, financial restructuring of former GDR enterprises took the form of the provision of tranches of liquidity credits to enterprises. One-time capital injections were also made to create viable balance sheet structures. These loans were often assumed by the Treuhandanstalt, the German Privatization Agency, as a concession to investors. The debt burden, including pre-unification enterprise debt, is now carried to a large extent by the German government.
The needed measures must be taken to clarify liability (if any) for past environmental damage.	Environmental interests are often represented in the purchase agreement (or if the government is maintaining a stake in the privatized company, the shareholders agreement). The following is an example of a clause in the purchase agreement for the privatization of the Czech refining and petrochemical sector. The <i>environmental clause</i> specified that the strategic investor should establish a capital expenditure program, which would also require certain amounts to be allocated to upgrade the refinery's capacity to produce cleaner fuels. As a long-term approach to <i>research and development</i> issues, the Czech government also restructured a research institute and made provision for its continued funding in parallel with the petrochemicals industry privatization process.

Theme D: Preparation of entities for privatization and/or competition



Where appropriate, mainly in the coal sector, extensive social obligations should be transferred to institutions external to the restructured entity.	As a rule, overall efficiency is considerably improved, if non-core and social functions and obligations are performed by specialized agents, and not by the privatized or restructured entity.
Forward thinking in a real-world framework is indispensable: be prepared to answer questions related to the expected conditions of particular markets after privatization/liberalization, especially in network sectors. For example, in an emerging market environment a proper mix of contract-based markets and balancing pools is likely to satisfy the investors' need for certainty and at the same time to secure some competition on the market after its liberalization. An entirely pool-based market may risk creating unmanageable uncertainty for the investors.	Contract or/and pooling market functional solutions should generally be designed in a way that does not deter regional trading schemes. There may be instances in the power sector where least cost is achieved at considerable levels of imports rather than developing new generation capacity.



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Clearly identify which authorities should be involved in restructuring and privatization, how their mandates are established (and whether they are subject to review by parliament or by the	Privatization institutions that take the form of separate agencies (e.g. the German Treuhandanstalt (now dissolved), the Latvian Privatization Agency, the Hungarian SPA) have usually been vested with direct legal personality which implies the right to enter into contracts and to stand as a party before a court of law in the context of a contractual dispute with a strategic investor. In relation to ministries, the legal situation is not so clear: <i>cf.</i> S.P. Nestor: <i>Institutional Aspects of the Privatization Process in Central and Eastern Europe</i> in Trends and Policies in Privatization Vol. 1 No. 2 OECD Centre for Co-operation with Economies in Transition. 1993.
A clear set of responsibilities for managing restructuring and	There are a variety of approaches to this issue:
privatization must be established.	1) <i>Privatization Institution</i> could be either:
	 a body organizationally separate from the ministry but with a responsible minister in charge (e.g. Hungarian SPA, Russian GKI), or
	 b) a body which is financially and legally independent (e.g German Treuhandanstalt which is organized along corporate lines).
	2) A Responsible Ministry(ies) e.g. UK, Spain, Poland, New Zealand. However, even when the country concerned has a quasi-independent privatization agency or a specific privatization law, privatization of SOEs in the energy sector is often considered of such strategic importance to the state, that it is conducted under direct governmental supervision.
	For example in Estonia, privatization in the energy sector was transferred from the Estonian Privatization Agency to the direct control of the Ministry of Economy by decision of the Minister in December 1998. A similar transfer of control over privatization in the energy sector has occurred under the August 2000 amendments to the Energy Law in Latvia.
Optimal timing of the process, taking into account internal and external factors, should be ensured.	As in any complex and long-term project, wrong timing increases the critical path and leads to greater, often unanticipated, cost.
A clear, well-planned consultation process with identified experts must be established.	In the Republic of Uzbekistan, for example, active co- operation with the World Bank in the privatization of large enterprises currently takes place in two ways. Firstly their consultation is required in the holding of international tenders or investment bids. Secondly, their expertise is used in the actual process of rehabilitation or restructuring, including the development of market strategies, searches for partners, and raising the quality of production up to the level of international standards. <i>ECS</i> <i>Restructuring Report on Uzbekistan (Nov 2000, Draft)</i> , <i>p 14.</i>





Mechanisms must be established for building consensus on the aims of the restructuring/privatization process with principal parties affected (i.e. , e.g. targeted companies,

stakeholders, e.g. targeted companies, consumers, trade unions).

To build consensus among stakeholders in a privatization, it is important to incorporate their interests into the process. A detailed and thorough approach was undertaken by Estonia in the Social Program for Restructuring of Narva Power Plants and Eestii Polevkivi (oil shale company) where approximately 700 staff will be laid off by 2005. To mitigate the social consequences caused, the Ministry of Economy introduced a series of options:

- 1) early retirement subsidy program;
- 2) or a voluntary retraining program, and
- 3) a program of entrepreneurial support under which individual or groups of employees may be eligible for special grants or loan assistance or to start new business ventures: *ECS Restructuring Report on Estonia (Nov* 2000) p 34.

Poland's policy towards the necessary changes in the hard coal mining sector was defined by the Government Program "Reform of the hard coal mining sector in Poland in the years 1998-2002". The Program served to adjust entities operating in that sector to function effectively in market environment conditions, which involved indispensable asset, financial and employment restructuring. Both in the liquidated and operating mines the level of employment was reduced successively. Necessary reductions were conducted in such a way as to allow miners leaving their jobs while they were still professionally active, to remain on the labour market, and longest-serving miners, who had the least chance for retraining, were provided with social protection measures for themselves and their families.

In order to minimise the negative social impact of a complete or partial liquidation of hard coal mines, *"The Mining Sector Social Plan"* (*Górniczy Pakiet Socjalny*) was elaborated and implemented. In accordance with the provisions of the document, reduction of employment levels was conducted both with application of protective measures (compensation was paid to miners giving up their jobs voluntarily), and with instruments motivating employees to seek new employment opportunities, such as financing of professional re-training, organisation of courses and vocational training.

In the years 1998-2001, as a result of mining reform implementation, although employment was reduced by as much as 40%, compulsory lay-offs were avoided. Those activities were conducted without any social unrest (strikes or protests). *The Mining Sector Social Plan* proved to be extremely effective - as many as 66.5 thousand persons took advantage of its instruments, leaving their jobs in mines voluntarily. In accordance with the Government Program, by the end of 2002 employment had been reduced to the level of approximately 128 thousand persons, i.e. almost 53% of the early 1998 figure.



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Strategies necessary with respect to dealing with pre-privatization long-term supply contracts or long-term purchasing commitments should be	In many instances, grandfathered contracts and long- term sale and purchase agreements can be integrated and co-exist with other arrangements in the evolving competitive market environment. If properly handled, they can contribute to the energy stability of important international markets.
The selected approach to privatization, its application to the relevant sector, and if based on a model from another country - its transferability and relationship to various aims, must be clearly evaluated. Identify specific factors in the national energy situation which may call for a distinctive approach to privatization.	 Uzbekistan, for example has expressly approached privatization with a view to formulating its own country-specific approach to privatization, expressly evaluating the approaches undertaken by other countries and taking into account its own specific conditions. The specific features of the privatization process in Uzbekistan are: a) renouncing privatization by vouchers; b) ensuring the stage by stage approach in privatization; c) preparing social guarantees for the population to alleviate hardship of transition; d) privatization be accompanied by parallel legal, organizational and operational restructuring. <i>Draft ECS Restructuring Report on Uzbekistan (Nov 2000).</i>
The existing know-how and managerial competence and the need for involvement of the investors to ensure the competence needed to manage the privatized company must be evaluated.	A balanced mix of experience with the entity, which often provides intimate knowledge of technology, procedures, and problems, and experience in managing private entities in competitive environment, could be beneficial for the company. However, steps must be taken to ensure that the "old-timers" and the "newcomers" have the same objectives and are prepared to work in a team towards the achievement of these objectives.
Proper company law and rules of corporate governance with a view to ensuring proper protection for all investors and particularly those with minority shareholdings, must be introduced. Government must indicate the matters on and circumstances in which it might exercise its vote as a residual shareholder.	The lack of proper company law, corporate governance and minority shareholders' protection drives away investors and makes capital more expensive, or even inaccessible, to the company. In the long run, this leads to loss of competitiveness and the company may eventually be driven out of business altogether. Extensive and continuous government interference often has similar effects, especially when such interference is not subject to clear rules.
Controls must be established over remaining state entities in the sub- sector to ensure they do not discriminate against private sector companies in favor of their own subsidiaries.	The consequences of failing to address discrimination and cross-subsidization in the case are similar to those described above.



Adequate transparency in the privatization process must be ensured. Evaluation criteria for bids for companies should be clearly set out in advance.	It has been argued that transparency is the most important procedural goal in the privatization process (J Arbess and J. Kiernan 'A Step by Step Guide to Going Private: The Guide to World Energy Privatization, joint publication by Andersen Consulting and Co. and The Petroleum Economist). A program based on well-defined and widely publicized rules and procedures will also encourage participation by potential investors and enhance the attractiveness and potential value of the company to be privatized. Full bid information packages and standard documentation. The package of bid documents should contain:
	 a) up to date general information on investing in the power sector in the relevant economy
	b) a detailed description of the type of proposals sought
	c) guidance to bidders on the information they are to provide
	 d) the relative importance attached to various aspects of the proposal and
	 e) a clear description of the evaluation criteria to be applied in assessing the bids.
	Price should be only one of several criteria. The adoption of standard model documentation also serves the useful functions of promoting consistency of procedure and understanding of the utility's desired position, and aids the creation of a level playing field by reference to which bidders may be assessed (the extent of their proposed amendments to the documents could be one of the evaluation criteria).
Clear management and decision procedures for bidding processes must be established.	Ambiguity in bidding procedures may lead to court challenges or other delays that increase the cost of the privatization program and could also undermine public and investor trust.
Ways and means to ensure that all procedures involved in the selected method of privatization are implemented on a transparent basis must be provided.	Inadequate or untimely information is frequently a cause for diminishing public support of restructuring and privatization programs, which in turn could lead to delays and additional cost.

Theme F. Controlling and benchmarking restructuring programs (including privatization)

The broader social, environmental and non-discriminatory goals associated with the restructuring (privatization) program should be defined, along with the narrower set of economic and market objectives, and the possible nature and magnitude of the problem, especially the likelihood of detrimental event(s) and the consequences must be determined. Determine any linkages between an underlying market failure and the broader problems ¹⁰ . Design a simple and graphic system of assigning values and tracking actual performance compared to goals, for example a "stoplight" system preferably in conjunction with benchmarking.	Note that many possible impacts of restructuring in the energy sector will be felt beyond the sector itself and could affect resource allocation (e.g. likely changes in production, transportation and marketing procedures, shifts to alternative sources of supply), international trade (and therefore possibly trade and payment balances), etc.
The possible impact of each restructuring (including privatization) option and its associated regulatory instruments, compliance and enforcement regimes should be considered. For each option, assess costs and benefits for the community as a whole, for different groups in the community, and for stakeholders. In identifying impact groups, differentiate between government (central, regional, local), business (big, medium, small, importers and exporters) and consumers (by degree of being informed, urban/rural location, age, cultural, gender, family and income characteristics). Set trigger levels for "alarm" where negative impact may be expected, and formulate ways and means to address such negative impact (if any).	While econometric models of various degrees of complexity can be useful and should be developed where applicable, it is necessary to complement such models by elaborating scenarios and clear vision of the desired results. Restructuring in a mature market economy environment may take advantage of established methods and procedures of forecasting and estimating impact; privatization, which involves systemic restructuring, often results in a moving target that is harder to track and predict. It is important to achieve a degree of understanding that the vision and the desired objective are at least as important as the development of formal tools to attain the objective.

¹⁰ *Cf.*, for example, the Guidelines for Commonwealth (Australia) Regulation Impact Statements, 1997 (as revised, also referenced in other items in Theme F).

Theme F. Controlling and benchmarking restructuring programs (including privatization)



A systemic approach must be conceived to estimating and tracking the cost of restructuring and privatization to each impact group. For example, for the government restructuring/privatization enforcement agencies, assess numbers and levels of staffing, salary costs, and the cost of other items (such as advertising and public awareness, accommodation, travel). For each item, indicate the source of revenue against which it would be charged (e.g. budget appropriation or fees) and, if possible, indicate net cost to government. For businesses, a possible approach would be to assess paper costs (cost of reporting and complying), costs of meeting standards incorporated in the regulations, license fees, costs caused by likely change in production, transportation, and marketing procedures, shifts to alternative sources of supply, and lost net revenues due to delays in the introduction of goods to the marketplace or restrictions on product availability. For consumers estimate, for example, probable higher prices of goods and services, reduced quality and choice, and the costs related to delays in the introduction of goods to the marketplace or restrictions on product availability. Design similar procedures to assess benefits, and provide cost/benefit assessment for the community as a whole. If a quantitative estimate is not possible, provide a qualitative assessment of costs and benefits.	Public support of restructuring and privatization programs is to a large extent dependent on understanding what the consequences would be for particular groups in terms of cost and benefit. Privatization, in particular, leads to the direct generation of cash flow that would otherwise be non-extant, but also entails considerable cost, especially at the stage of privatization planning, preparation of the entities to be privatized, design of procedures, etc. Restructuring and privatization therefore require careful budgeting procedures and detailed quantifiable assessment of the cost involved. Costs should then be compared to expected benefits, assessed in equally careful and detailed manner. It is also important to remember that the timing of cost incurred is at least as essential as its amount and type.
Benefits must be assessed and target levels set at particular points of time ("benefits trajectory"). For example, benefits (not all of which may be quantifiable), may be derived from economies of scale, reduction in compliance and reporting costs and administration cost, reduction of prices and costs due to greater competition, improvements in product and service quality, availability of wider range of products and services, improved environmental conditions, and improvements in information available to all groups.	Just like in the case of cost, benefits are likely to transcend the energy sector and be unevenly distributed across the economy and the affected groups. Restructuring (including privatization) programs should clearly indicate what benefits might be expected, at what moment of time are they likely to occur, whether they would be of long-lasting or one-time nature, and what groups are more likely to reap benefits in the short and in the long run.
Performance should be checked along the cost and benefits target trajectories, and design corrective action to achieve desired cost/benefits targets, if needed.	Restructuring is a continuous process of searching for better solutions. Energy industry structure is ever evolving and changing, reflecting advances in both its inherent technologies, cost and market structures, energy demand, and other factors related to the sector itself, and a host of exogenous factors. In a sense, privatization can be regarded as a subset to the never ceasing task of restructuring. Both require continuous monitoring to make sure that targets are met and corrective measures are introduced when needed.

Theme F. Controlling and benchmarking restructuring programs (including privatization)



A permanent vehicle must be provided for consultation and reconciliation between government, business, consumers, unions, environmental groups and other stakeholders who may be affected by the restructuring and/or privatization process. Design a clear set of criteria against which the merits of grievances and proposed solutions would be assessed, and a procedure to remove circumstances that have been found to cause a warranted complaint about an aggravation to a group.	The likelihood of particular groups complaining about perceived or real aggravation in the process of restructuring and privatization is very high. A restructuring and privatization program that does not address this likelihood is therefore missing an important tool that can help keep the program on schedule and within budget.
In implementation, sunset clauses, ways to conduct regular reviews and benchmarking, and regular reporting to the public must be provided.	Various elements of a restructuring and privatization program would, as a rule, have a different "life cycle". It is useful to have in place a way to assess their relevance from time to time, phase out elements that are no longer relevant, or replace them by other ways and means that serve the objective better.