

**BLACK SEA TRADE AND DEVELOPMENT BANK**

**ENERGY SECTOR  
OPERATIONAL STRATEGY**

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# 1. Introduction

## 1.1 Context

The BSTDB views the energy sector as an area in which the Bank has an important opportunity to make commercially sound investments that fulfil its mandate to facilitate and accelerate development and intra-regional co-operation.

The energy sector strategy set out in this paper takes account of:

- ***The high priority given to energy sector development by member countries.*** It is interesting to note that, despite the variations between the natural, geographical and political circumstances of the member countries, there is a consistent emphasis on the importance of developing the energy sector throughout the region. This regional perspective is a recent development and whilst the Black Sea countries are deeply aware of the benefits of intra-regional co-operation, they also have legitimate concerns about security of energy supply which has been interpreted as being synonymous with maintaining state control of national energy production facilities.
- ***The global context and trends in the energy sector.*** The global energy sector is experiencing a period of unprecedented change.

Energy companies are polarising between asset managers that are interested in operating production facilities, power plants, pipelines and transmission networks and energy traders that are building particular expertise in answering the energy demands of particular markets. Electricity companies have long since ceased to regard national boundaries as particularly important, the system compatibility provided by UCTE combined with the market liberalisation that has been introduced by the EU directive is having an impact beyond the EU members.

In the oil industry international players are merging to form global companies that have the resources to operate in the riskiest project environments and realise economies of scale that were not available to the majors.

- ***The prevailing commercial, economic and political conditions in the regional energy sector.*** The Bank is a market facing organisation, it has to be aware of the realities of how global trends are likely to shape the regional market. Any strategy or policy developed in isolation of market forces is likely either to result in failure to find investment opportunities or to contribute to the Bank's overall strategic goals.

It is likely that the impact of the change in the global energy industry will influence the entire Black Sea region within a relatively short space of time. It can be anticipated that the regional oil and gas markets will split between the capital intensive upstream operations dominated by the mega-majors and the downstream energy sectors where there will be scope for niche operators to establish a presence by virtue of their inherent flexibility and low overhead financial profile.

Changing economic circumstances within the region will ultimately lead to increased energy demand. However, it is unlikely that energy demand will reach levels experienced in the early 1980's for the foreseeable future. There are two principal and connected reasons why the relationship between energy usage and economic activity will be fundamentally different in the future:

- the impact of the commercialisation of energy in the region; and
- the resulting financial pressure for modernisation of the industrial base.

Political conditions continue to have a significant impact on the energy sector, increasing stability in Russia and Turkey and the expansion of the EU to include Bulgaria, Romania and Turkey has a knock on effect on the Black Sea region. The blockage of the southern export routes for Caspian

crude ensures that the region will continue to play a significant role in the transport as well as production of energy.

- **The activities of the other IFIs in the region.** The bank is aware of the priorities and activities of the other IFIs operating in the region. In its own operations the bank will strive to apply the important lessons learned from the experience of the other IFIs in financing of the other projects. The Bank anticipates co-financing a significant proportion of projects with the other IFIs because of the capital intensity and long tenors of financing required by the sector, which very often cannot be provided by commercial lenders. Initially, particularly for big ticket deals the Bank shall prefer co-financing with IFIs partly in order to build up its own institutional sectoral expertise. However, this is an evolutionary strategy and with time the Bank's preference will be to be able to generate and lead its own projects and to attract other IFIs and commercial sources. At the same time, in order to avoid overcomplicating its operations by creating unnecessary inter-creditor issues the Bank shall prefer to co-finance projects with commercial sources (wherever available).
- **The Bank's overall strategic mission and operating capacity.** Although the energy sector has its own specific characteristics, the energy sector operating strategy is entirely consistent with the principles of the Bank's overall mission and operating capacity.

Throughout the process of preparing this strategy there has been an awareness that in order to maximise the value added by the Bank's investments in the energy sector the strategy should be flexible rather than prescriptive and permissive rather than restrictive.

## 1.2 Principal Conclusions from an Analysis of the Regional Energy Sector

This strategy paper builds on and should be read in conjunction with the results of the research into the principal features of the regional energy sector for each of the Bank's 11 member states that has been commissioned by the Bank as part of this project.

The main conclusions that can be drawn from the Diagnostic Report are:

- **The energy industry is increasingly international in nature.** Isolated national energy policies are unsustainable. The Black Sea region is particularly inter-dependent as there is a very marked energy imbalance and energy producers rely on the co-operation of the transit countries to access their and other European and world markets. The principle obstacles to further international integration and market development are political and physical. The Bank has to take account of the political situation in the member countries but cannot hope to have any direct impact. The Bank can, however, support projects that increase intra-regional investment and facilitate trade through improved physical market infrastructure.

It is widely accepted that no member state's energy industry benefits from isolation and market liberalisation and commercial pressures are impacting all national energy markets. The table below shows the broad correlation between the member countries that are net energy consumers and those that are EU members or candidates and are therefore committed to implementing the EU gas and electricity directives.

Energy net producers	Energy transporters	Energy net consumers
Azarbaijan Russia	Armenia Bulgaria (EU candidate) Georgia Greece (EU member) Moldova Romania (EU candidate) Turkey (EU candidate) Ukraine	Albania Bulgaria (EU candidate) Greece (EU member) Romania (EU candidate) Turkey (EU candidate)

In the terms of this analysis, the net energy producers rely on the transit countries to reach both regional and Western European markets and conversely, the net energy consumers rely on the producers and transit countries for security of supply. Energy dependence and independence is the product of distribution of natural resources and when energy dependence is ignored as a factor or independence is pursued as an end in itself the results can be economically damaging.

- **Energy Demand in the BSEC region.** Assuming that there is no political or infrastructure transportation obstacles existing for energy trade, the BSEC region is clearly self-sufficient in energy resources. Thus, cross-country energy transportation development is highly important from economic efficiency point of view rather than identification of new supply sources.
- **The Black Sea region is in a process of dramatic and dynamic change.** Until recently the European energy map has been relatively stable, Western Europe has been supplied from the North Sea, North Africa and Russia. It can be anticipated that his balance will change in the foreseeable future as:
  - North Sea sources diminish;
  - Economic and industrial restructuring in the Black Sea region eventually leads to an increase in energy usage; and
  - Significant Caspian energy exports reach the European market.

The basis on which energy is supplied and used in the region is also due to change. Historically, much of the energy supplied to the Black Sea region has been on non-commercial terms, there is now an ongoing shift towards commercialisation. This will make a positive contribution to the efforts of energy companies operating in the region to attract financing for their future development.

- **Market liberalisation and privatisation are gradually changing the structure of the regional market.** Whilst each of the Bank's member states has adopted its own variant in the transition process, there is a general overall trend towards market liberalisation and privatisation. Much has already been achieved, although some countries have made more rapid progress than others towards achieving their restructuring objectives. Success in this regard is an essential feature of an attractive investment climate.
- **The region is characterised by extreme diversity.** There are contrasts between:
  - Energy producers, energy transporters and energy consumers
  - Countries that are either EU members or candidates and are adopting EU directives and norms and those that are outside of the EU sphere of influence
  - Countries that are relatively economically advanced and those that are less developedIn this environment it can seem to be difficult to develop and implement a common strategy.
- **However, there are similarities between the priorities of the national energy sector strategies adopted by the member countries.** For example they often emphasise:
  - Inter-connection (with neighbouring countries and with international energy networks)
  - Diversification and security of supply
  - Energy efficiency
  - Development of environmentally friendly technology

But these similarities remain masked to some extent by the differing speeds of implementation of energy strategies.

- ***There are a number of generic pressures and specific projects that are likely to change the shape of the regional energy sector:***
  - private investors require market returns on their investments and so pricing policies have to be amended; and
  - there is considerable pressure on the global energy industry, reflected on a regional level, to take more account of environmental concerns.

There are a number of recent developments in the regional industry that reflect the environmental pressure:

- A gradual change of fuel mix for electricity generation, away from nuclear and coal towards gas and renewables;
  - Improvements in the environmental qualities of automotive fuels; and
  - A growing number of projects designed to improve energy handling and transport infrastructure.
- ***Radical economic restructuring has led to significant reduction in industrial activity and energy demand.*** Whilst energy demand is generally suppressed in the region as national economies are restructured, future industrial activity will be much more energy efficient than has been the case in the past. Therefore, even as industrial output picks up, there will not be the same demand for energy per unit of output that has been the case in the past. This is partially a reflection of improved manufacturing technology, but is driven to a large extent by the introduction of economic tariffs to energy consumers in the region.
  - ***Other IFIs have had a significant impact on the energy sector in the region.*** Some of this impact derives from the support that they have provided to countries undertaking energy sector restructuring, and some from direct participation as financiers of energy sector projects. Whilst there are many measurable and intangible benefits accruing to the region from the activities of the IFIs, their involvement in the region has not always been trouble free or escaped criticism, from both the countries of operation and from international investors. However, there is considerable scope for the Bank to learn from their experiences and to benefit from the groundwork that they have already performed.

### **1.3 Basis of preparation**

#### **1.3.1 Rationale for the energy sector strategy**

The Black Sea regional energy sector comprises an extremely complex web of interactions between national political objectives and competing commercial interests operating in a dynamic economic and legislative environment.

It would be difficult for the Bank to invest successfully in the energy sector without a deep understanding of the regional context as well as specific project issues. The main purpose of the sectoral analysis and strategy is to ensure that the Bank approaches investment opportunities confident that it has an objective and structured framework within which it can appraise the impact and value of participating in any individual project. The Bank has limited resources to apply to the energy sector (US\$300million), it will have to be extremely selective to optimise the value of its activities.

### 1.3.2 General principles

Projects in the energy sector must be in line with the Bank's overall strategic objectives, to:

- ***Facilitate trade and investment activities among the member countries.*** This is particularly important in the energy sector, where historically for political reasons, countries have attempted to develop energy independence. By contrast, the Bank's energy strategy will focus on projects that encourage intra-regional trade and investment giving due regard however to the security of energy supply especially for the energy net consumers and transporters.
- ***Promote economic prosperity in the member countries.*** The efficient production, transport and consumption of energy is key to the economic prosperity of the region. Whilst energy pricing has been distorted by isolation from international markets there has been a knock on effect on the whole national and regional economies. This problem has been exacerbated as national energy companies have been used to subsidise loss making industries by failing to enforce collection even of distorted energy tariffs.
- ***Facilitate mobilisation of domestic and foreign capital.*** As energy sectors are restructured and realistic energy tariffs are introduced, the Bank will be in a position to leverage capital investments in member countries.
- ***Achieve economic development in the region.*** The successful development of the energy sector is key to the development of the entire regional economy. By targeting finance at small scale but effective projects designed to develop the regional energy market, the Bank will make a positive contribution towards the overall economic development of the region by allowing consumers to access the most efficient sources of energy.

The Bank's operations in the energy sector will also be required to fulfil the general lending criteria by being:

- ***Economically justified.*** The economic justification of energy projects can be hard to establish in the absence of well worked least cost analyses for national and regional markets. In the distorted market conditions that have prevailed in the region and continue to exist in some countries, there has been little encouragement to look at alternatives to traditional energy strategies. For example, the economic benefits of energy efficiency programmes are undermined by the below market tariffs charged by many national energy companies, cross subsidies within the energy supply chain and the common practice of failing to enforce collection of receivables.
- ***Financially viable.*** In the case of energy sector projects this can only be achieved where there has been some progress towards open market conditions, or at least sufficient pricing transparency to allow for subsidies to be measured and collected. Assessing project cashflows will be a critical part of the evaluation process, the Bank does not see any contradiction between its development role and the need to apply sound banking principles to investment decisions.
- ***Technically feasible.*** Energy sector technology is constantly advancing under the pressure of demands for cheaper and cleaner fuel. However, in the Black Sea region there are significant opportunities for proven technology projects that contribute to the Bank's strategic objectives.
- ***Environmentally sound.*** The Bank's policy will mirror the consistent emphasis of national energy strategies on energy efficiency and reduction of adverse impact on the environment from energy production, transportation and consumption.

Putting these principles into action in the energy sector will present unique problems. Generally speaking, energy sector investment projects in the region are characterised by:

- The need for cross border co-operation;

- Complex commercial arrangements;
- Large investment in physical assets;
- Long lead times from inception to completion; and
- Domestic and international political considerations.

In the light of these characteristics and the resulting difficulties in viable project design and selection and with the intention of initiating projects that contribute to the achievement of the Bank's mandate, the Bank may need to set aside a budget for energy sector technical assistance. This would be justifiable where there is a specific and well defined objective and the costs could be recovered at a later stage as project expenditure. As a matter of principle, the Bank will avoid involvement in projects that are politically controversial even where there may appear to be economic justification.

The Bank's energy sector strategy aims to bring an objective appraisal perspective to energy sector project proposals. It requires that the Bank develops the expertise to identify instances where non-commercial considerations have a negative rather than a positive impact on projects. This approach allows the proposed strategy to be market facing, but to also take full account of the Bank's development mandate. There is a particular emphasis on projects that increase intra-regional co-operation. The Bank will add value to projects by leveraging investment capital in commercially viable regional projects, where the Bank has a specialist geographical or technical knowledge.

### 1.3.3 Conditionality and privatisation

The Bank will not impose direct conditionalities on its investment related to restructuring or reform of national energy companies or markets. There are two main justifications for this stance:

- It provides the Bank with a competitive advantage over other IFIs, which tend to tie their involvement with stated restructuring requirements.
- The Bank is of the region as well as for the region, it does not have any alternative agenda to promote any one model of energy sector structures and practices over another.

Clearly, commercial lenders and investors will expect and require that certain measures are taken by countries to create a favourable investment environment, but the Bank's position is that this is an issue for member countries to approach as they judge best. The Bank does not seek to impose solutions using investment promises as an incentive for change.

However, there is already a clear trend in the Black Sea region towards privatisation and market liberalisation, largely driven by commercial imperatives. As this process continues an increasing number of projects that satisfy the Bank's economic and commercial requirements will emerge.

The Bank intends to focus investment on post-privatisation projects.

### 1.3.4 Lending parameters

The Bank will not commit more than a single obligor limit stipulated by the Portfolio Risk Management and Investment Policies Document of the Bank or finance more than 35% or less than 5% of the total project costs. These indicative investment parameters allow it to consider projects with total cost of up to US\$300million, but the upper limit could be increased in exceptional circumstances where there is a demonstrably high co-operation and development impact arising from a project.

The Bank is able to provide finance on projects for up to 10 years with the potential to extend maturity for projects with high development and cooperation impacts. Lending rates vary from country to country, but are competitive with other IFIs and compare positively with commercial lenders.



Amongst the particular characteristics of energy sector projects are two features that may put pressure on the Bank to consider some exceptions:

- **Capital intensity.** In the early stages there are many suitably sized projects that fulfil the Bank's strategic objectives and lending criteria and fall within the lending parameters. However, it is likely that as the regional energy market develops, there will be a growing number of significant projects where the Bank could theoretically add value through its participation, but the indicative parameters described above prevent the Bank from doing so.
- **Lifespan of projects.** It could be argued that there is an essential contradiction between the pressures in the energy sector to provide long term security and the Bank's restriction on lending periods to maturity.

#### 1.3.5 Sustainable development issues

Sustainable development takes account of environmental and social issues as well as financial factors when appraising project opportunities. In the energy sector the Bank does not intend to go beyond the general requirement that projects should be environmentally sound; the strategy will be informed by sustainability issues rather than driven by them. Whilst environmental issues are key to project appraisal, the Bank will tend not to finance projects with the sole objective to remedy environmental damage or bring about environmental improvements.

There are many areas in the member countries that are not connected to national grids, where local renewable energy projects are not only justified by the positive environmental impact, but also by the contribution to local development.

The Bank is aware of the reputation risks associated with either ignoring or over-emphasising sustainability issues. The energy sector in the member countries is responsible for a significant amount of historic pollution and on-going polluting emissions. There are increasing international pressures on Governments to implement environmental standards legislation that is likely to have a significant impact on the energy sector. The Bank's strategy is to support projects that comply with local requirements and anticipate likely future developments in environmental and social standards. The Bank intends to elaborate its strategy in this specific area, to be presented as a specialised annex to this report.

#### 1.4 Co-financing issues

The Bank views the other IFIs as important co-financiers in energy sector projects. There is a lot that the Bank can learn from co-operating with other IFIs in the region and particularly in the early stages of the Bank's operations, this can be an important source of institutional knowledge transfer. Therefore the Bank will actively look for co-financing opportunities with other IFIs, but even so, it is important that the Bank approaches joint projects on its own terms. However, this is the first step in an evolutionary process and the Bank intends ultimately to identify and develop a niche position which clearly differentiates itself from the other IFIs.

The Bank also seeks to mobilise commercial domestic and international capital. Whilst there are inherent difficulties in doing so, by concentrating resources on commercially viable projects and building a credible track record, the Bank will gradually increase this capacity. In the early stages of operation it is likely that mid-range projects will be the most fruitful area to consider for commercial co-financing.

The Bank intends to give priority within the energy sector to projects that will attract commercial co-finance.

## **1.5 Limitations**

This strategy is not a prescriptive document, there are few areas within the energy sector that the Bank will not consider for funding and the Bank regards its flexibility of approach as an important strategic and operational feature. Amongst the areas that the Bank will approach with extreme caution are:

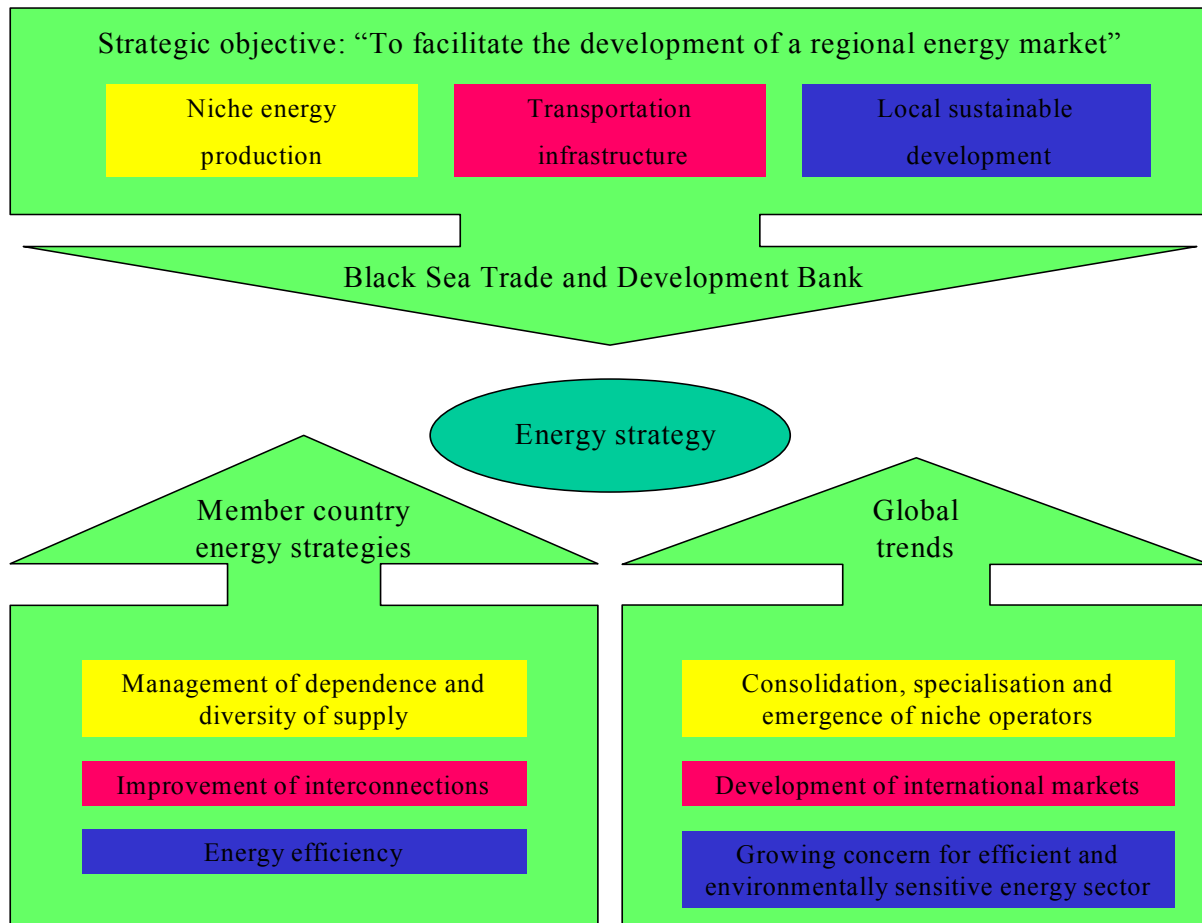
- Nuclear power projects;
- Natural resource exploration projects;
- Projects that appear to be motivated by political considerations or have an internationally controversial outcome; and
- Pre-privatisation financing.

The intention is to construct a facilitative and non-discriminatory framework for the appraisal of energy sector projects. The strategy recognises that the energy sector is experiencing a period of extremely rapid change and is therefore likely to require periodic updates to take account of changes to the commercial, economic and political climate.

## 2. Energy Sector Operational Strategy

### 2.1 Summary

The single objective of the Bank’s energy sector operational strategy is to facilitate the development of a regional energy market. The strategy is inclusive and in its implementation will build on the



common interests of the member countries and be entirely consistent with global energy sector trends.

The objective can be achieved through carefully selected investments in financially viable projects in the following broad categories:

- ***Niche energy production opportunities both in oil and gas production (not exploration) and electricity generation.*** Member countries, often for the first time, are having to face up to the economic realities of energy consumption and so alternative sources of energy are becoming more attractive, either local hydro-carbon production that was previously comparatively unattractive or from renewable sources.
- ***Energy transportation infrastructure projects such as oil and gas pipelines and the associated equipment (e.g. pumping and compression stations) and high voltage electricity transmission wires.*** The condition of the energy transportation infrastructure in the region is one of the principal limiting factors to the development of a regional energy market. Again, growing commercialisation is exerting economic pressure on national energy companies to seek access to alternative international energy markets.

- ***Local sustainable development oriented projects which incorporate the revenues and costs of the social and environmental impact of the project into the financial appraisal.*** There are many examples within the region of energy production projects that have had a detrimental impact on the environment. The problems have been exacerbated as energy consumption has historically been extremely inefficient, increasing commercialisation will encourage future industrial growth to be less energy intensive.

This strategic objective reflects the common concerns of the member countries:

- Diversification of supply and management of energy dependence
- Interconnection and security of supply
- Increased energy efficiency and development of environmentally friendly technologies

As well as the current trends in the global energy market:

- Consolidation and emergence of local niche players
- Development of international energy markets through market liberalisation and infrastructure development
- Growing concern with the efficient and environmentally sensitive production, transport and consumption of energy

The focus on the financial viability of any project reflects the growing trend amongst member countries to commercialise their energy sectors.

## **2.2 Oil**

The oil and gas industries are unusual in that international, commercial operators and lenders are accustomed to operating in the region. In many respects the structure of the oil and gas industry is not at the same stage of development as others, so the Bank's operational strategy for the oil sector is designed to focus the limited resources available to the Bank in key areas either because:

- The project sponsors would not otherwise have access to international capital markets; or
- The project is judged to be of particular importance to the development of the regional energy market.

### **2.2.1 Exploration and production**

The overwhelming majority of exploration and production activity in the region is in Azarbaijan and Russia. It is unlikely that the Bank would support exploration or production projects that fall outside of the parameters described earlier because of the:

- Restricted scale of financing that the Bank is able to mobilise;
- Availability of commercial financing; and
- Specific risk issues associated with exploration and production projects.

There is little that the Bank can contribute to the financing environment, the Russian domestic oil companies and international mega-majors have well established presence and are generally more able to access adequate capital resources.

However, the Bank will participate in smaller scale production projects elsewhere in the region that would support the Bank's strategic objective.

#### 2.2.2 Pipelines and port terminals

The pipeline network and port terminals around the Caspian, Black, Mediterranean and Adriatic Seas are a vital part of the regional energy infrastructure. There are a number of projects envisaged or underway that are designed to alleviate some of the existing bottle-necks and facilitate trade both within the region and with external markets. In some of these projects there is the added incentive of a significant environmental benefit accruing to the region as well as commercial rationale for the project. The Bank will support projects designed to improve the regional energy transport and handling infrastructure.

#### 2.2.3 Refining and distribution

The regional refining sector continues to undergo significant restructuring following some successful privatisations and other attempts to privatise that have so far not completed successfully. However, there is still non-complex refining over capacity in the region.

As fuels markets develop and more refining capacity passes in to private hands, new investment projects will come on stream. Having successfully privatised several refineries, it is in the interests of both energy producing and energy consuming countries to develop the refining capacity of the region.

The Bank will particularly support post privatisation projects designed to upgrade refineries in order to improve the quality or environmental acceptability of refined products, for example reducing sulphur content of diesel and allowing the production of unleaded gasoline.

Fuel distribution is generally poorly developed and again it is likely that there will be considerable rationalisation in the sector as a few regional major players come to dominate the market and small independents disappear. Considerable investment will be required to upgrade infrastructure facilities to bring them into line with international norms. Local fuel distribution is a vital link in the supply chain and the Bank will support projects that are designed to develop local delivery of fuels in an environmentally sensitive way.

## **2.3 Gas**

The Bank's operational strategy for the gas sector reflects the growing significance of gas in the regional energy consumption mix. There are a series of factors that are likely to contribute to an absolute and relative increase in the production, transport and consumption of gas in the region:

- Discovery of new gas reserves, particularly in the Caspian region, but also, to a much lesser extent around the Black Sea;
- Development of new transit infrastructure;
- An overall increase in energy demand throughout the region, but particularly in Turkey;
- Market liberalisation driven by the EU gas directive in consumer countries; and
- Environmental concerns that favour a shift towards gas as a cleaner fuel.

### **2.3.1 Exploration and production**

As with the oil industry, the Bank does not intend to support large scale capital intensive high risk upstream projects. However, it will support upstream projects where there are proven reserves that are commercially exploitable and there is a positive implication for one or more of the Bank's overall strategic objectives.

### **2.3.2 Pipelines**

As with oil, the gas pipeline network is the principal restricting factor on the development of intra-regional trade. Whilst new transit pipeline construction projects will tend to fall outside the Bank's lending parameters, there will be projects that the Bank can support which are peripheral, but integral to the development of intra-regional trade. The existing pipeline infrastructure is poorly maintained and as well as renovation work, there are a number of projects envisaged in the region for the construction of new facilities to increase the pressure and therefore the capacity of existing pipeline operations.

In this way, the Bank has an opportunity to make a significant and positive impact on regional development without becoming involved with the major pipeline projects currently under development.

### **2.3.3 Distribution**

There is probably little scope for the Bank to add value by supporting local distribution projects, except where there is a significant local development impact.

## **2.4 Electricity**

The Bank's electricity sector operational strategy recognises that the restructuring, environmental improvement, privatisation and development of the electricity sector are key common elements to the national energy strategies of the majority of member countries. Largely under the influence of the EU electricity directive, it is to be expected that in the medium term there will be significant further rationalisation in the regional electricity industry as international competition and investment increase.

The Bank views the electricity industry as a key growth area where there are numerous opportunities to support projects, but is also aware that there are specific issues requiring sensitivity to local circumstances and vision in project design.

### **2.4.1 Generation**

Generation has so far emerged as the fore-runner in the transition from public to private ownership and management in the regional electricity industry, often through joint ventures between national electricity companies and private sector operators. There is a significant need in the region to upgrade and improve generating capacity, which will become pressing as energy demand picks up. Whilst most member countries report surplus installed capacity, it is probably true that much of that over-capacity is not immediately available even if demand were to increase.

In this context, the Bank intends to target its activities on projects designed to improve the technical and environmental performance of existing plant. New build projects would normally qualify for support only where there is a wider development benefit arising from the project.

### **2.4.2 Transmission networks and inter-connectors**

Adequate transmission capacity and inter-connector facilities are clearly key to the development of a regional electricity market. It is also important that the electricity systems of member countries reach the technical requirements of the UCTE international network if full interconnection is to be achieved.

On the whole, member countries' restructuring plans envisage electricity transmission remaining in state hands on the grounds that as a natural monopoly it is an activity best owned and managed by the state. It remains to be seen whether this general trend will change as investment needs build up.

The Bank's lending parameters potentially allow it to participate in transmission network new build as well as upgrading projects. Public ownership of transmission network does not preclude the Bank's involvement in infrastructure development projects, but the Bank will seek to target its involvement in cross-border rather than domestic transmission projects.

### **2.4.3 Distribution and supply**

Low voltage distribution and supply are generally targeted for privatisation by member countries. Indeed, some privatisations have already been announced or successfully undertaken.

As with gas supply, it is unlikely that there is a significant role for the Bank to provide value added input in this area. Certain local distribution and supply projects where there is a significant development impact may qualify for consideration.

## **2.4 Energy efficiency and renewables**

Energy efficiency is a key element in every member country's energy strategy. It is widely acknowledged that it is cheaper to solve capacity issues from a demand rather than supply management perspective. Official statistics from member countries demonstrate the potential for improving energy efficiency, energy intensity (the amount of energy consumed per unit of output) varies considerably between member countries and is on average substantially higher than in more developed economies.

Renewable sources of energy already play a significant part in the electricity generating capacity of many of the member countries. On the whole this is in the form of hydro electric schemes, but other new technologies such as solar and wind energy are also being put into operation.

These two areas are entirely complimentary, energy efficiency deals with demand management, renewables with supply. Together they offer the opportunity to make substantial improvements to both the competitiveness of regional industry (through reduced energy consumption) and the environmental problems associated with hydro-carbon based electricity generation.

The Bank will support energy efficiency projects from its energy investment allocation. Renewable energy projects that have a local development benefit, or where there is a widely applicable knowledge transfer benefit will also qualify for support.

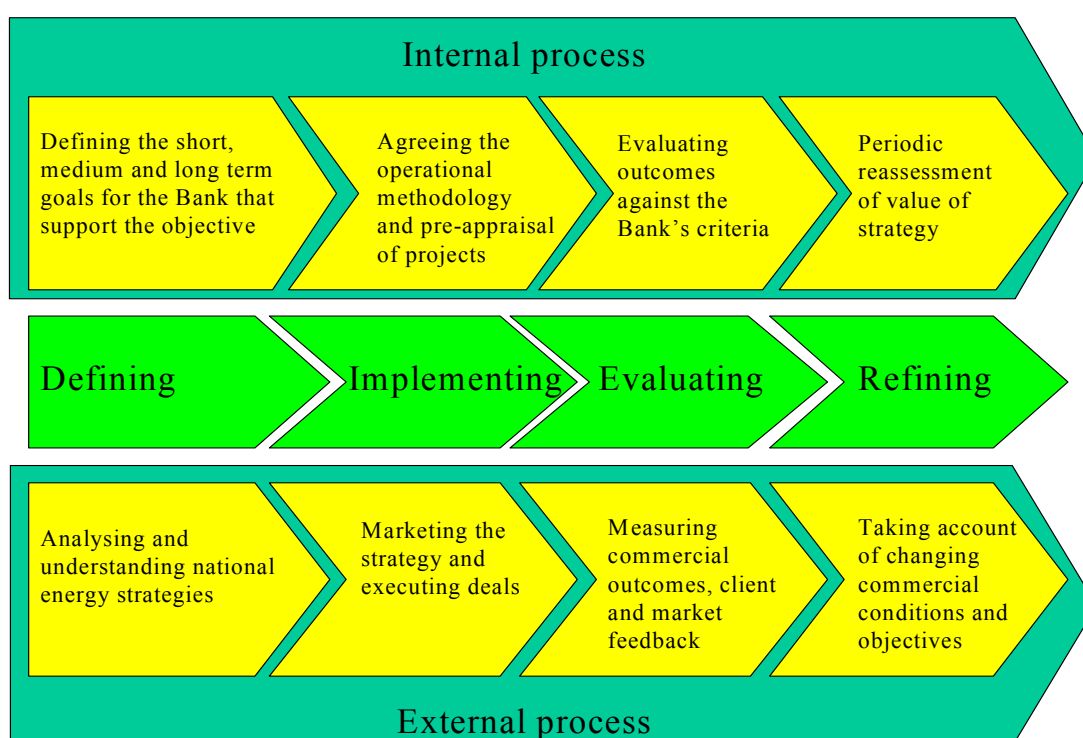


### 3. Implementation framework

#### 3.1 Implementing a dynamic strategy

The energy sector in the Black Sea region is in a state of dynamic change, the Bank's strategic development and implementation cycle must in itself be flexible enough to respond to anticipated and unanticipated changes in the market in which the Bank will be operating.

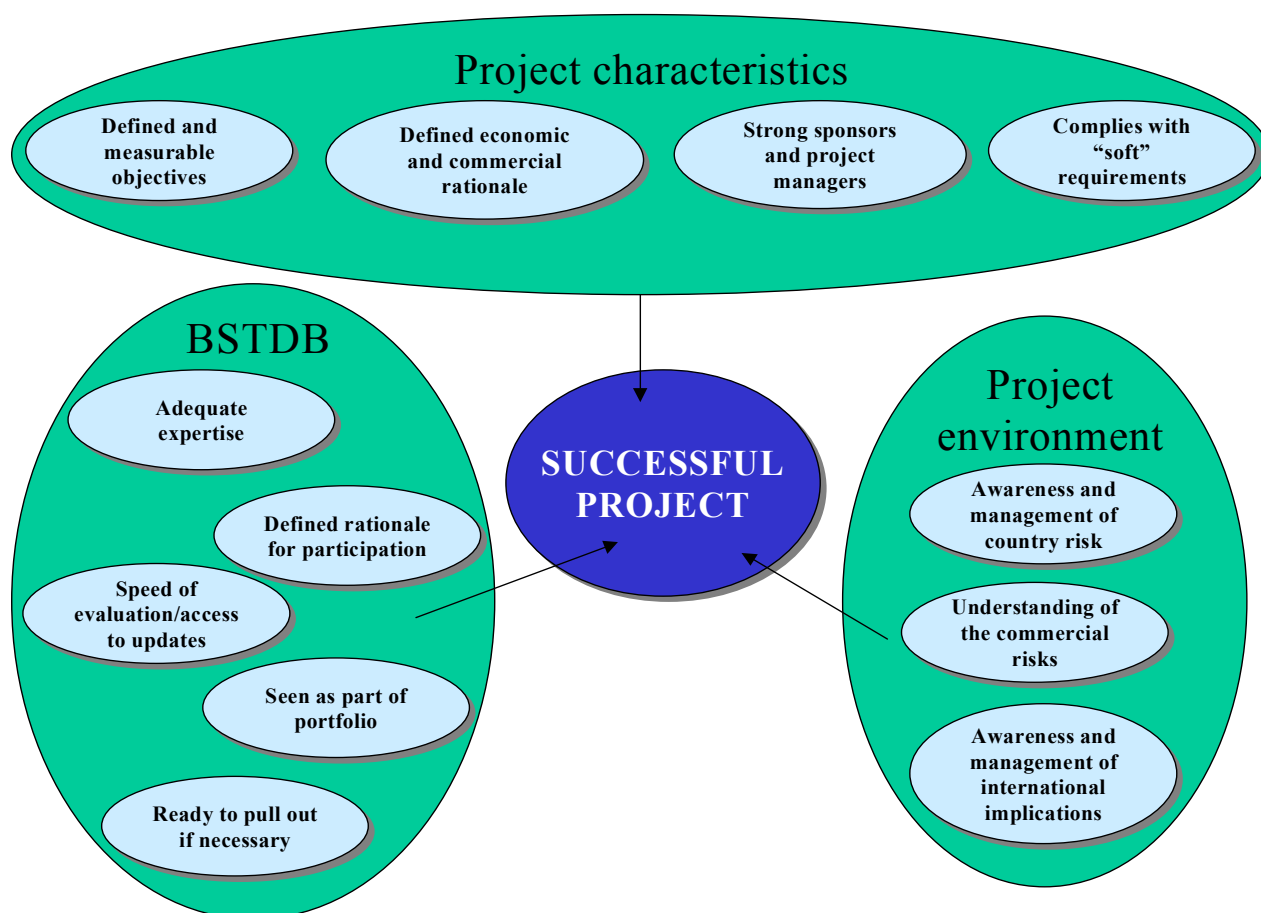
Looking at this process from both an internal and external perspective, it is possible to describe a four stage continuous, iterative process that the Bank could apply to the future development of this strategy.



- **Defining.** This strategy paper is the culmination of this phase. The strategic objectives defined in this report are drawn from an analysis of the regional energy industry and an understanding of the strategic objectives of member countries.
- **Implementing.** This second phase is the next challenge faced by the Bank, the project key success factors and the already defined project implementation policies and methodology should provide the necessary framework, but clearly this also will be subject to change.
- **Evaluating.** As well as external review of the work of publicly funded institutions, the process of critical self-appraisal is well established amongst IFIs.
- **Refining.** This strategy is designed to evolve as the Bank gains experience and builds a presence in the market. It is unlikely that the Bank's long term strategic goals will change significantly in the near future, but it is extremely likely that the Bank will become aware of, and be able to implement, new alternative ways of achieving those objectives.

### 3.2 Project key success factors

The other IFIs have considerable experience that can benefit the Bank as it commences operations in the regional energy sector. A number of key success factors have been identified, illustrated in the diagram below.



#### 3.2.1 Project characteristics

The foundation of the successful implementation of the Bank’s energy sector operational strategy is a portfolio of good quality projects. The selection process, particularly in the energy sector will be complex. There are a number of key features that the Bank should look for when appraising a project for funding:

- **Defined and measurable project objectives.** Many projects fail because the objectives have not been sufficiently clarified in advance. The stated objectives should be defined in two ways; in terms of the Bank’s long term objective and the shorter term direct project objectives.
- **Defined and measurable economic and commercial rationale.** The economic and commercial rationale of any project can be difficult to measure in an emerging market environment. The number of unknown factors that have to be estimated for project appraisal can lead to wide margins of error. However, as much as is possible, the Bank should develop and apply a consistent set of assumptions on variables such as projected demand levels and risk factors.

- ***Strong sponsors and project management team.*** The challenging commercial environment demands that projects should be supported by sponsors and management teams that are experienced in both the project location and the market. The value of strong sponsors with adequate capital resources and appropriate management control cannot be over-emphasised.
- ***Compliance with the Bank's "soft" requirements.*** The Bank's strategic framework demands that projects are environmentally sound. There are also social factors that should be built into any project appraisal methodology.

### 3.2.2 BSTDB attributes

Another vital component in the project selection and execution process is the Bank's own resources. Financing energy sector projects in the Black Sea region is not a mechanical process and it is extremely important that the Bank applies the right resources to the sector:

- ***Adequate expertise.*** The energy sector requires particular expertise for the effective evaluation and successful execution of projects. The Bank should take into account and enhance its staff expertise and knowledge in identifying key country/sector issues for appraisal, monitoring, management, and evaluation in order to benefit from specific technical knowledge that should be available in-house. Whenever a required technical expertise is not internally available, the Bank should seek external professionals and make efforts to absorb essential know-how and benchmarking practices. Enhancement and steering of BSTDB expertise should be backed by suggestions from the Project Evaluation Department based on lessons and experiences, initially coming from other IFIs and later, from BSTDB evaluations in the sector. The critical mass of technical expertise should ensure prudent presentation of risk/returns of energy projects within the project files, especially considering that management staff cannot be assumed to be entirely familiar with specific industry norms. Further, the unique character and high-risk nature of most energy projects should be stated in the rates of return analyses and linked to expected value outcomes.
- ***Defined rationale for supporting the project.*** This goes beyond a simple fit with the Bank's strategic objectives for the sector. Within a relatively short period of time it is possible that the demand for finance from the Bank will exceed the Bank's capacity to support projects. In anticipation of these circumstances it is important that the Bank understands why it chooses to support one or another project.
- ***Speed of evaluation and access to updated and reliable information.*** Speed of project evaluation has already been identified as one of the Bank's competitive advantages over other lenders. Because of the rapidly changing nature of the regional energy sector, where projects take longer to close, the Bank will need to have access to up to date and reliable information.
- ***Portfolio approach.*** Viewing projects in isolation can lead to erroneous general conclusions. Particularly in the early stages of operation, it is important that the Bank takes or simulates a portfolio approach to managing its project commitments.
- ***Ready to pull out if necessary.*** It is not only important to have the contractual mechanism to pull out of projects before it is too late to rescue anything from them when they start to go wrong, it is also important to have a clarity of purpose and proactive decision making process to avoid unnecessarily delay.

### 3.2.3 Project environment

The project environment is beyond the control of the Bank, and it has already been stated that the Bank will not attach conditionalities to its lending. However, in order to manage the risks arising from this situation, the Bank needs to be aware of the risks inherent in the project environment and the impact that they may have on project design and co-financing opportunities.

- ***Awareness and management of country risk.*** Because of the Bank's unique position in the region, it will have its own perspective on the risk of operating in each of the member countries. However, awareness of external perceptions of country risk will help the Bank to construct its project portfolio and understand the perspective of investors and co-financiers.
- ***Understanding of the commercial environment.*** The global energy sector commercial environment is extremely complex. In the Black Sea region there are a number of additional complexities arising from the transitional nature of the commercial environment.
- ***Awareness and understanding of the international implications of projects.*** In order to achieve its stated strategic intention of avoiding projects that are internationally controversial, the Bank has to be able to assess the immediate and future implications arising from the implementation of any given project.

### 3.3 Sector Specific Risks

In addition to the generic success factors described above, a number of sector-specific factors can also be identified based on the experiences of other IFIs:

- Geological and other specific risks are inherent to oil, gas and mining projects, and a well-balanced portfolio of such projects averages out the risk of individual projects. Therefore, success in this sector is particularly sensitive to the ability to maintain a diversified sector portfolio.
- Land acquisition is often a major problem for energy projects in the region. Appraisal and monitoring teams evaluating green-field projects in virgin industrial areas should be conservative in assuming land acquisition time frames. This is likely to have a bearing on project cost and commissioning schedule. There is also the dimension of environmental impact assessment and obtaining planning consents in the face of growing public awareness of the environmental issues associated with the energy sector.
- In calculating the ERRs (Economic Rate of Return) of projects that deal with natural resources, it is essential to value correctly the natural resources at each stage in extraction, processing, and distribution. Under certain circumstances, it might be appropriate to charge a depletion cost to reflect the economic cost of the utilization of such resources.
- Oil, Gas and Mining projects often require changes in design as new information becomes available, including after project approval. Thus, it is important in these projects to have an experienced operator and flexible financing arrangement able to adjust project planning and implementation effectively as circumstances change.
- During appraisal, BSTDB should identify key technical and operational assumptions and ensure that as far as possible these have been comprehensively tested and questioned. For oil, gas and mining projects, this should include extending the sensitivity analysis to consider flaws in highly

specific process parameters. At appraisal, BSTDB should also conduct a sensitivity analysis on the combined effect of lower output prices and higher unit costs, since these often occur in tandem in many energy projects.

- Energy sector project inputs are often controlled/influenced by government enterprises. Thus, pricing behaviour may not reflect market business processes (power) and service delivery might be characterized by a "take it or leave it attitude" (gas). It is worth considering to what extent these factors must be built into the cost structure of projects, which are dependent on non-market determined pricing. Furthermore, it is essential to stay away from projects where sustainable growth is not possible due to distorted prices that restrict a country's ability to generate its own resources. To this end, a guiding principle should be to ensure efficiency not only within the physical investments in energy infrastructure, but also to make sure that energy input prices are not below real costs as otherwise the project will hamper the effective utilisation of (the importer) own resources.
- Environmental supervision needs to be undertaken on a regular basis as energy projects parameters at test phases could soon deteriorate. A special attention on poorly maintained infrastructure, even when not directly within the project boundaries, is important as it is associated with a number of environmental and safety hazards that were overlooked in the past. Environmental compliance requirements should be addressed at the early stages of energy sector projects implementation.
- A strong local sponsor is often essential for an energy sector success as it can benefit a project by: (1) facilitating approval processes through the local bureaucracy; (2) helping to diminish the intrusive effects of an oil, gas and mining project in the eyes of the public; (3) by encouraging better adaptation by widening the company's perspectives and injecting greater corporate awareness towards the citizenship role of the company in the country; and (4) by reducing the risk of premature abandonment of a project during a time of distress.
- The energy sector projects often compete in a highly regulated and expanding market. Therefore a project's major cost components should be extensively reviewed/monitored since its continued global cost-competitiveness is its best defence in a down market.
- BSTDB should consider the vulnerability of energy projects, which depend on local markets for their return, particularly relying on either natural protection or economic distortions, such as duties. Such distortions are typical for most countries in the region and are at the core of operators' profitability fluctuations and export dependency. Careful evaluation of export alternatives, competitiveness and the sensitivity of project returns, debt service capability and equity returns, is therefore needed.

#### **4. Conclusions**

There are two main conclusions that can be drawn from this document:

- It is vital that if the Bank's energy sector operational strategy is to be implemented successfully it should be well defined but also reflect the dynamic and changing environment of the industry itself; and
- Identifying and closing energy investment projects successfully is going to be extremely challenging, but there are well-understood project key success factors that can be used to increase the chances of success.