

REPORT TO THE PRIME MINISTER

Energy Security and the European Union

Proposals for the French Presidency

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Introduction

The task entrusted to us by the Prime Minister concerns energy security. This report therefore addresses the issue of security, but it appears to us to be important to recall at the outset that any energy policy, whether national or European, must pursue three principal goals at one and the same time, these being, in addition to security, combating climate change, and economic growth, and there can be no question of choosing any measure that favours one of these goals to the detriment of another.

The first chapter (pages 4 to 6) contains an analysis of the risks we need to forestall. It makes a distinction between long-term risks (will the world's overall energy supply be inadequate?) and risks in the short term (interruptions in supply). With regard to the latter, it suggests that contrary to one received idea, the origins of most incidents affecting supply are internal and therefore that imports do not always have the drawbacks attributed to them.

The second chapter (pages 7 to 13) addresses the thorny problem of harmony between words and deeds in Europe when energy security is at stake. It concludes that the goal, so often referred to, of "speaking with a common voice" has no chance of being achieved if it is not preceded by very substantial progress in terms of solidarity between the Member States. However, solidarity must not be a pretext for lack of concern in Member States: solidarity is inconceivable without responsibility. It also demands that energy should be able to circulate as fluidly as possible within the Union's borders. The completion of the single internal market is for this reason a priority. The regulators' remit, which is an essential one, must encompass security.

The third chapter (pages 14 to 18) deals specifically with relations with Russia as a supplier. It suggests that the current dialectic should be turned on its head: instead of seeking to reform Russia despite itself, while at the same time demanding that it provide ever greater volume of supply to Europe, we should seek to ensure that we are less dependent on that supply through greater energy efficiency, liquid natural gas, renewable energy sources and nuclear power, and, secondly, we should accept that we need to remember that Russia is a sovereign nation, whatever we might think of how the Russian government manages its energy system. Examples are provided.

The fourth chapter (pages 19 to 22) discusses another example, one linked in fact to the previous illustration: relations with the countries bordering on the Caspian and future prospects for gas exports from those countries to Europe. Once again, the report

suggests that we need to be realistic, which means acknowledging that the Nabucco gas pipeline, whose advantages are undeniable, will probably be constructed only with Russia's cooperation, and never without that cooperation. This chapter also addresses the issue of negotiations on gas with Turkey and suggests that there should be a significant strengthening of the diplomatic presence and coherence of Europe and France in this area of the world.

The final chapter (pages 23 to 26) deals more generally with the role of international organisations and dialogue in the energy domain. Noting that such dialogue continues to be characterised by mutual suspicion despite the progress it has made, the report suggests ways forward for the building of trust between the parties to the dialogue, an outcome that will be achieved only if there is major high-level involvement on the part of the political authorities. Specifically, the chapter addresses the topic of transparency, lack of which interferes with the operation of markets and reduces security.

This report could not have been produced without a great deal of input from governments and companies from a number of countries and organisations visited or met with both inside and outside the Union, without contributions from the Commission, Council officials and members of the European Parliament, without the support of French organisations and companies and the International Energy Agency, nor – last but not least – without the enthusiastic cooperation of public servants at the Ministry of Foreign and European Affairs and the Ministry for Ecology, Sustainable Development and Spatial Planning, in both Paris and representations abroad, who assisted us in carrying out our mission. We extend our most sincere thanks to them.

The principal proposals defined in this report are *in italics* and highlighted with the symbol “√”.

I. Energy security: what are the risks?

I .1 The long term and the short term

Where security is concerned, it is useful to analyse what Europe's situation is in order to understand correctly the risks that need to be addressed. An important distinction must be made between security in the short term and security in the long term. Public opinion frequently thinks in terms of the first, which involves forestalling unexpected interruptions in supply caused by various factors such as the weather (hurricanes in the Gulf of Mexico, drought affecting the production of hydroelectricity, lack of wind in areas with high windfarm densities), politics (embargoes, wars, strikes), accidents (shipwrecks blocking the Turkish Straits), or terrorism (the examples are unlimited). Security in this sense may affect only a defined geographical area: Europe, or perhaps a Member State or an even more limited area. But it is necessary not to lose sight of long-term security, which relates to a different and usually global concern: will growth in energy production be enough to keep pace with growth in desired demand? The next paragraph will be devoted to this challenge.

Long-term security:

It is a fact that from this standpoint the future looks worrying for oil and gas. Long-term security of oil supply worldwide is not assured. It is now clear that the main producing countries, those with the largest geological reserves, do not wish to increase their production capacity to a level compatible with the rising trend in consumption, because they do not consider it to be in their interests to do so, preferring to keep in store for the future revenue sources of which they have no need in the short term. Although geological resources are probably greater than pessimists claim, there is increasingly general agreement that global production can only with difficulty exceed 100 million barrels a day (the current figure is 87 million) whereas an extrapolation of the trend in requirement leads to a figure for demand of approximately 120MBD by 2030 (IEA, World Energy Outlook). There is therefore a danger that the world will experience a very severe oil crisis in the next decade, with prices at extremely high levels.

If a sufficient increase in petroleum industry investment is not obtained – although even this investment would only postpone the problem – the world must as a matter

of urgency resign itself to using oil with considerably greater efficiency, especially for transport, which accounts for the principal uses of this energy source. More economic vehicles, whether hybrid or electrical, alternative fuels, development of public transport, imaginative town planning: all these are avenues to be explored. Europe is determined to set an example in the global context of the combat against climate change, but it must not be forgotten that ambitious energy efficiency policies will also help achieve, without a crisis, a balance between supply and demand. It is also imperative to sustain and strengthen dialogue between the world's principal actors in the energy domain, particularly in the International Energy Forum framework, with the aim of ensuring that our analysis of the situation is shared by others and recognition that reducing oil consumption is not part of a policy hostile to producing countries, but is dictated by the combat against climate change and by alignment with their own policy of limiting supply due to concern for future generations (cf. chapter V).

Proposals:

- *Adoption at European level of very ambitious medium term (2020) goals for vehicle consumption.*
- *Enhancement of the priority assigned in the Community research budget to electricity storage (batteries) and second-generation biofuels.*
- *Implementation of an open and active policy of dialogue with the producing countries within the IEF framework, moving from a dialectic that is adversarial ("I am acting in reaction to your hostile behaviour") to one more focused on harmony ("We are acting together to manage changes over time to match the expectations of both producers and consumers").*

The long-term security of gas supplies is no more effectively assured than for oil, and the reasons are identical: the producing countries, and specifically the three biggest, Russia, Iran and Qatar, who together hold 56% of the world's reserves (according to BP), are unwilling or unable to invest sufficiently to match the rising trend in demand. Several other producing countries (Norway, Algeria) are already showing signs of difficulties of geological nature with regard to increasing their production. The main difference between oil and gas is that the latter can be replaced by another energy source in all applications. Specifically, while gas is today the preferred fuel for new electricity generation facilities, it is of course not the only technology available.

The solutions for improving the situation are of the same kind as in the case of oil: greater energy efficiency, greater diversification and a changed approach to dialogue with the producers. Insofar as Russia is currently the supplier that arouses most concern in the countries of the European Union, we shall set out in detail the required proposals in chapter III, which is devoted to Russia.

1.2 Importing is not a problem in itself

It is currently fashionable to observe, with some disquiet, that the European Union currently imports 50% of the energy it consumes, a figure that could be as high as 70% by 2030. This is what is referred to as its import dependence. Although these figures are correct, they do not in our view correspond to the reality of the difficulties facing the Union. In an open global economy, importing energy is not a problem in itself – so-called energy independence is not only unachievable for most of the developed world, but there is also a danger that the use of import dependence as a criterion may lead to decisions that are absurd with regard to growth and protection of the environment, such as the very costly development of first-generation biofuels produced in Europe. After all, the Japanese economy built its prosperity while being more or less completely dependent on imports for its energy supplies (nuclear excepted). Moreover, the postulate that domestic energy offers greater security than imported energy fails to withstand examination in the light of the major interruptions of supply over the last thirty years, since most of these incidents were due to domestic failures: chaos in the United States in August-September 2005 with the destruction of refineries in Texas and Louisiana due to the arrival of hurricanes Katrina and Rita; drought affecting domestic hydroelectric production, causing in turn major electricity blackouts in Spain and Greece in the last two years; or the catastrophic mismanagement of serious nuclear incidents, endangering Japan's electricity supply and obliging Japan's Prime Minister to decree that ties should be abandoned in summer. It is certainly true that the oil and gas supply crises which hit Ukraine, Belarus and some Baltic States in succession were of a different nature, but they arose from a specific situation calling for a specific response, which is discussed in detail later in this report. However, it must be acknowledged that energy supplies from Russia — to name the country involved — have been totally secure, for customers agreeing to pay the market price, even at times of profound political crisis in that country. The objection will be raised that the danger is less that supplies may be interrupted than that of an abuse of dominant position, leading to excessively high prices. Such an argument is correct, but it would be more convincing if some of the tools considered as a response were not themselves even more costly (e.g. photovoltaic based on current technology).

The above comments should not be taken as suggesting that Europe's energy security position is satisfactory. On the contrary, it is serious, and it is a safe bet that there will be grave crises in years to come. But the indicator for danger is neither the level nor the growth of imports. The risks have three origins: the first is low investment, which means that capacity in every energy sector is either under strain or inadequate; the second is lack of flexibility and choice, which gives the impression that Europe has no room for manoeuvre, and is reduced to begging for every last cubic metre of gas from its present suppliers; and the third is lack of transparency: feelings of insecurity are intensified by the impression of ignorance of the true position with regard to pre-

sent and future supplies. These risks, and their solutions, are discussed in detail in the pages that follow.

II. Speaking with one voice: the requirement of responsible solidarity

II.1. General considerations:

In the face of the risks facing energy security in Europe, the call for all to “speak with a common voice” is made with an increasing sense of urgency. It is expressed in so many words in the conclusions of the presidency following the European Summit of 14 March 2008 (paragraph 25). The fact that the Member States act on a daily basis in a manner exactly opposed to this aspiration must lead to the recognition that this requirement is not easily met, and it calls for two observations:

The first is that it is governments and not companies that must endeavour to “speak with a common voice” – governments acting within their remit, which is the definition and implementation of a common energy policy and its links with international relations: energy efficiency, combating climate change, regulation of the internal market, negotiation of international treaties, prospective analysis, dialogue with producers and energy research. As for companies, they are working in a competitive context and it is normal and healthy for each to develop its own strategy and partnerships independently. To do otherwise would mean for example the creation of a monopoly for the purchase of natural gas (a “monopsony”), which would involve turning our backs on the very foundations of the internal competitive market as it has been constructed, and encourage the major supplier nations to adopt the very practices we denounce, which is to say excessive closeness between commercial activity and exercise of governmental powers. Yes, it is certainly necessary to speak to the Russian government with a common voice when the discussion relates to the rules for the internal gas market or negotiations on the “energy” dimension of WTO membership. No, Gaz de France, Eon-Ruhrgas and ENI must not be stopped from negotiating individual commercial agreements with Gazprom.

The second is that if the pursuit of individual interests is what prevails in practice, we should probably recognise that this can be excused, and perhaps even justified, on the grounds that there is no solidarity between Member States, making it impossible to take advantage of the weight and diversity of an entity made up of five hundred million consumers, the producer of 18% of the world's electricity, and leading, on the contrary, to uncoordinated efforts by each Member State to seek on its own behalf security that is usually illusory and invariably costly. As long as effective and credible mechanisms for solidarity have not been put in place in the Union, all indications are

that such undesirable practices will continue to be the rule. Solidarity between Member States must for this reason become a European flagship cause where energy is concerned, and it would be a good idea to display such solidarity in a solemn declaration warning that those who “compromise the energy supply of a State of the Union also compromise the supply of the whole Union”, as well as in concrete measures to prove that they are not hollow words. Such mechanisms will be set out in detail in the paragraphs that follow.

Nevertheless, it is immediately necessary to define exactly what is meant by solidarity. Some Member States have in fact openly indicated their concern and reluctance, sometimes vehemently, fearing to play the role of the ant in La Fontaine's fable while others played that of the grasshopper, that is to say, while others make no effort to enhance their own security or participate in the collective effort, content to rely on their neighbours if a problem arises. It will be necessary to explain clearly that there can be no question of this, that solidarity presupposes responsibility and that, to paraphrase John F. Kennedy, one should not only ask how my neighbours can help me, but also how I can help my neighbours.

II.2. The case of oil and petroleum products:

Oil is an enlightening example in this regard. At the present time there are two mechanisms for solidarity with respect to oil: one is the Union's, which is managed by the Commission, and the other is that of the OECD countries, which is managed by the International Energy Agency (IEA). The latter has the drawback that not all Member States of the Union are participants (those outside it are the Baltic States, Romania, Bulgaria, Slovenia, Malta and Cyprus), but it does have an advantage in that it functions effectively, as was shown at the time of the devastation caused in the Gulf of Mexico by hurricanes Katrina and Rita in the summer of 2005. The present discussions on bringing together these two systems are important and are to be encouraged, but the essential point here is that each of these systems is predicated on the responsibility of *each* Member State, each being under an obligation to maintain strategic reserves on its territory, to fund them and to have regulatory tools in place to allow them to be placed on the market in the event of a collective decision to do so. What this is then is a form of insurance policy, which comes at a price, as is only reasonable.

In addition, the IEA system would itself be even more effective if it were based on broader membership and the participation of the major importing countries worldwide, as well as more reliable data, especially in Europe. The publication of weekly rather than monthly data would also have the advantage of sending more balanced signals to markets, whereas at the present time they overreact to the position in the United States because it is on this that they have up-to-date information (statistics are published every Wednesday in the United States).

Proposals:

- ✓ *A goal should be set for the Commission and the IEA to arrive at as total a harmonisation of their emergency systems as possible, putting forward any legislative changes that may be necessary. Specifically, if an emergency procedure is triggered, exemption from the obligation to keep 90 days' strategic reserves should be automatic given that the goal is precisely to put them on the market.*
- ✓ *China and India should be encouraged to coordinate their emergency procedures with those of the IEA, with a view to those countries ultimately becoming members of the Agency.*
- ✓ *Data on Europe's reserves should be collected and published weekly (rather than monthly), along the same lines as the arrangements in the United States and Japan.*

However, such mechanisms do not exist for gas or electricity. We shall now look at how they might be created.

II.3. Gas:

The idea is frequently put forward of holding strategic reserves of natural gas just as there are emergency reserves of petroleum products. This does however come up against specific difficulties that make general application of this approach impossible.

First of all, at the risk of stating the obvious, gas is a gaseous substance. This means that the volume of any emergency reserves would much greater than the petroleum equivalent, the latter involving storing a liquid. The technical solution is to store gas underground using geological capture, but unfortunately not every country in the Union has the appropriate geology, and even those that are lucky enough to possess it must begin by building inter-seasonal storage facilities in those geological formations in order to manage the differential in consumption between the winter and summer months.

Furthermore, there is no point in having emergency storage to hand unless one can fill it and, even more important, take gas out of it if the need arises, and do so at very high rates of flow. What is possible for oil, which is easily transported, even by wagon, barge or train if necessary, is not possible for gas, which requires the emergency storage to be located alongside a large gas pipeline. And there is no particular reason why the geological formations for gas capture should be in the same places as high-capacity gas pipelines.

At best therefore, emergency storage can only be used to cover part of the risk and only in certain countries, leading to a danger of reawakening suspicion of improvi-

dent neighbours on the part of prudent nations, like La Fontaine's ant and grasshopper.

Fortunately, another characteristic of gas, this one being beneficial, makes it possible to envisage other solutions: unlike oil, for which there is no real large-scale replacement for vehicle propulsion, gas, which is used in particular to supply heat and produce electricity, can always be replaced, with at least a minimum of planning, which is to say that certain customers can, without a great deal of notice, switch from gas to fuel oil, or to coal, or to electricity produced by other means such as nuclear power stations or renewables ... or they can simply agree to reduce their consumption (by laying off part of a factory, for example). This is the idea behind so-called interruptible contracts, which provide for just this possibility in return for a lower price.

- ✓ Considerable progress could be made towards gas security if (a) in accordance with the provisions of the Directive of 26 April 2004, *each Member State accepted the obligation to provide for emergency resources equal to, say, 10% of its peak consumption, and to use them when decided collectively by the Union, even if the national territory of the State concerned was not directly affected by the supply interruption to be addressed, and each State would have a free hand in choosing between storage, interruptible contracts or a combination of both, (b) an authority such as the regulator were to be given the task of verifying that such contracts are indeed interruptible, that is to say, that the customer genuinely has the option of doing without gas if asked to do so.* Our country's experience would seem to indicate that this is far from being invariably the case.

These measures would guarantee the responsibility of each individual Member State, although not necessarily solidarity between them. The latter requires in addition that the gas should be easily moved around within the Union without being impeded by lack of interconnections or technical, regulatory or contractual constraints. In other words, there can be no solidarity on gas supply without complete and resolute implementation of a single internal gas market. Before discussing the topic of the internal market, which concerns electricity just as much as it does gas, a few words are necessary precisely on the subject of electricity solidarity.

II.4. Electricity:

Much of what has been said above about gas also applies to electricity. Even more than gas, electricity lends itself with great difficulty to the creation of emergency reserves, with one exception – but an important one: hydroelectric reservoirs in the mountain regions, which can supply very considerable levels of power to the grid at a few minutes' notice. It is this that enabled the serious electrical incident in Europe in

the autumn of 2006 to be contained, and prevent it becoming a major blackout. One country plays a key role in this system, both because of its geographical situation and its topography, and that is Switzerland; every effort must be made to ensure that Switzerland remains solidly anchored to the Union's energy policy.

Alongside this, preventing and dealing with supply failures require, as in the case of gas and often at even shorter notice, customers to be "taken off" the grid. The development of information technology now makes it possible to cut off demand in ways that are intelligent because they are selective: it is possible to choose to cut off only part of a household's consumption (household appliances, part of the heating or part of the lighting, as desired). Once again a measure for greater responsibility is to demand of each Member State, subject to control by a regulator, that it plan and put in place a system capable of reducing its electricity consumption, by 10% for the sake of argument, on the basis of a collective decision by the Union, even if its own territory is spared the impact of the incident that needs to be addressed. As in the case of gas, this measure, however necessary it may be, is not a solution unless electricity can circulate without impediment – in other words, unless the internal market has been completed.

II.5. Completion of the internal electricity and gas market:

We must emphasise in the strongest possible terms that the complete and resolute implementation of the internal market does not compromise security, as one hears it said far too often; on the contrary, it is the key tool for solidarity within the Union. Even then, it must genuinely be a single, fluid market, and not twenty-seven markets that while undoubtedly liberalised are nonetheless effectively compartmentalised by contractual practices and lack of production capacity, transmission infrastructures and regulatory harmonisation.

Europe is in danger of running short of sufficient capacity for the production of electricity in the near future. We are all familiar with one of the reasons for this insufficiency: the familiar "NIMBY" syndrome (NIMBY = Not In My Back Yard) corresponding to the gap between citizens' appetite for energy services and their dislike of the infrastructures that allow them to be produced and transmitted. However, we must not lose sight of another reason: necessary investments in production are being postponed due to growing uncertainty as to the operational parameters that will govern the industry. How easy can it be for an investor to decide whether to build an electrical power station with a potential lifetime as long as half a century and which can be nuclear or coal-fired, when he does not even know what the penalty regime for CO₂ emissions will be in 2012? This illustrates the importance of reaching a conclusion in the global negotiations on the post-Kyoto era in 2009 in Copenhagen.

- ✓ This also means that, contrary to the current position adopted by the Commission, *it is necessary to define as rapidly as possible the regime that will be applied to industrial facilities consuming large quantities of electricity.* It is not possible to wait until 2011.

Similarly, Europe is cruelly lacking in cross-border electrical and gas interconnections. The reasons for this are many: the history of network development is intertwined with national borders, the historical operators are national, the regulators, whose decisions on tariffs determine whether or not a given investment is viable, are also national, and as for the general public, they are especially hostile to cross-border links, for which they see absolutely no reason other than to make money. Nor do they understand, because unfortunately nobody has explained otherwise to them, that development of electricity production by windfarms *increases* the need for interconnections rather than the opposite, since the intermittence of supply from wind turbines leads to large excesses and deficits in production in certain areas depending on whether the windfarm there is operating or not.

This is not the first time this has been observed and the Union has already attempted to remedy what is a very worrying situation, in particular by announcing a list of thirty-two priority trans-European networks (TEN) and assigning coordinators to the four main ones. This is a laudable endeavour, and one that is useful and should be pursued. It is nevertheless the case that of the thirty-two priority projects, twenty are far behind schedule: we therefore consider that there is a need to go further, keeping in mind however that in the last analysis the relevant investments will need to be made by the corporate sector and that electricity and gas transmission is a business that should, like any other, be capable of generating profit and attracting capital.

- ✓ The profitability of installations will depend on the tariffs applied or approved by regulators. However, the assigned task of most European regulators is strictly defined in law and limited to establishing a competitive market, *without reference to security of supply. It is essential that security of supply should be part of the remit of each regulator in the same way as competition.*
- ✓ With regard to very major infrastructures important for core network structure and destined to operate for many years, investors need to be informed with complete transparency as to the future outlook for the market. Forgetting any notion of binding programmes redolent of the State intervention rejected by most Member States, it does appear to us to be imperative that *documents setting out the outlook for energy requirements in each geographical area over the medium term (to 2020, for example) should be issued at regular intervals under the authority of the public authorities in each Member State and reconciled across the Community under the auspices of the Commission.* This is the measure the British government has decided to implement under the title "Energy Outlook".

- ✓ Educating public opinion, and even certain opinion formers, is a long-term task. Which is all the more reason to begin forthwith with a small number of symbolic measures: we suggest that along similar lines to the Declaration of public interest (*Déclaration d'utilité publique*) for which French administrative law provides, *certain major electrical and gas network interconnections should be officially declared to be "in the interests of European solidarity"*.
- ✓ Contractual and commercial practice is not always conducive to solidarity. A striking example is provided by the gas crisis of 2006 in the United Kingdom, when the country was hit by several simultaneous incidents and unable to obtain as much gas supplies from the continent as it wished, despite the very high prices it offered and available capacity via the so-called "Interconnector" gas pipeline: in reality, several operators had reserved capacity from this pipeline and were unwilling to relinquish it despite the fact that it was not being used. Such practices are not acceptable and should be replaced by *general application of a "Use it or lose it" mechanism* (i.e. an obligation to sell on capacity if it is not taken up), a mechanism examined by European regulators and implemented by some.
- ✓ In spite of all efforts, substantial barriers to the fluidity of exchanges continue to be raised by the diversity of regulatory provisions and specifications, in addition to the many entities involved once one goes beyond national borders. *The work on harmonisation done by ETSO (the organisation of European Transmission System Operators) under the oversight of ERGEG (European Regulators' Group for Electricity and Gas) needs to be stepped up in order to arrive at a situation in which it is as easy to exchange electricity and gas across national borders as it is inside national borders.* Over the long term, the development of this process will probably lead initially to the creation of an Agency for the Cooperation of Energy Regulators (ACER) and subsequently to a single European regulator. This prospect should not be a cause for alarm.

We should also bear in mind that the effort to create a single market does not stem from any ideological mindset. What is at stake here is the effective possibility of achieving energy solidarity within the Union. Many more detailed measures have been examined by the Ministry in charge of energy and by the experts of the French Energy Regulation Commission (*Commission de Régulation de l'Énergie*). Such measures are excellent and must be put forward to the Commission and the other Member States. It is suggested in some quarters that it would be more effective to move forward initially within a more limited framework, the "Pentalateral Energy Forum" for example (France, Germany and Benelux). Such an approach needs to be managed with considerable care and can only be envisaged if it is clear that the measures being considered by the group's five members are such as to be rolled out rapidly to all twenty-seven Member States, which in turn requires that all should be brought into the relevant studies without delay.

Certain interconnections are particularly essential for responsible solidarity and must be resolutely promoted. We cite two below:

- a) Gas supply to Poland. Without dwelling on the clumsy manner in which the Nord Stream project was adopted and announced (a gas pipeline linking Russia directly with Germany under the Baltic), the existence must be acknowledged of a project that will become reality, on condition naturally that it is unimpeachable where protection of the environment is concerned, which is useful for supplying Europe, and which must also be useful for supplying Poland. This involves the construction of a link a few dozen kilometres in length between eastern Germany and western Poland, and it would seem that this idea (it is not possible as yet to call it a project) is on hold, with each party suspecting the other of the worst possible hidden motives. This type of problem can be overcome only by political dialogue at very high level. France could, during its presidency, play a constructive role in this context.
- b) Energy supply to the Baltic States. The position of these three countries is particularly difficult: they are totally dependent on Russia for their gas and electricity supply (they are connected to the CIS network and not the European UCTE network), and have had to cope with interruption in the supply of Russian oil, without, it must be admitted, the Union raising more than purely symbolic protestations. At the same time, probably trusting too much in Union solidarity, they have not effectively prepared for the consequences of the closing down of the Ignalina nuclear power station (in Lithuania, a facility of Chernobyl type), which is due in 2009 under the 2003 accession treaty. In relation to the Union, these three States form an energy enclave all of their own, making energy solidarity with them a practical impossibility, even if it were desired. The urgent need would appear to be to construct a direct current link with Poland, which would allow the synchronous connection with Russia to be retained, while enabling energy to be transmitted initially to Lithuania before reversing the process for the benefit of Poland once the facility that replaces Ignalina is on stream. Here again, temporising on both sides of the border is delaying an essential project for no apparent reason.

III. Relations with Russia

Contrary to what is sometimes asserted, the European Union's energy imports are fairly evenly spread, even where natural gas is concerned, the latter being frequently described as a source of grave concern. The Union produces a quarter of the gas it consumes, imports another quarter from Russia, 16% from Norway and 15% from Algeria, with the remainder coming mainly from Libya, Nigeria and Central Asia. We can add, as Russian managers constantly and justifiably repeat, that this gas has always been supplied with great reliability to Western Europe over the last thirty years, even during particularly turbulent periods in Moscow. Despite this, European dependence on Russian gas is usually presented as the illustration par excellence of the risks that threaten the Union's energy security. Why should this be so?

The first reason is that the figures provided above are averages masking very wide variations: Russian gas imports are non-existent in Spain, but represent 100% of Poland's imports, and indeed 100% of all gas consumption in the Baltic States and Finland. So long as European solidarity is a hollow sentiment that is not translated into practical action, it will be this second set of figures that really counts. Secondly, recent events in Ukraine and Belarus have aroused the fear that Russia wishes to use gas exports to gain political leverage. Lastly, because such fears are exacerbated by the attitude of the Russian government, in that it does not trouble itself to hide how close it is to the senior management of Gazprom, nor its concern to strengthen the latter's monopoly. It is therefore relevant, as our mission statement invites us to do, to focus our analysis specifically on relations between Russia and the European Union over gas, while however bearing in mind that several of our conclusions are valid even when applied to other suppliers.

III.1. The European Union with its back to the wall:

What is worrying in Europe's situation where Russian gas is concerned is not the percentage weight of that gas in the Union's total supply, since that remains quite acceptable, as we have seen; it is rather the fact that European consumers are continually sending out signals of panic at the very idea that they might lack sufficient supply of precious gas. Like addicts suffering from withdrawal symptoms, they are constantly demanding new contracts or an extra few billion cubic metres. What puts a customer in a position of great weakness when dealing with a supplier is not so much his dependence on the latter for gas supply, but his dependence on the supplier for marginal gas supply: in short, giving the supplier the impression that his back is to the wall. This state of affairs needs to change as a matter of priority.

We say again, at the risk of being repetitive, that there is no suggestion that we should do without Russian gas, which would be both impossible and pointless. On the contrary, we should recognise how reliable our supplier is and how lucky we are in Europe to have a neighbour not far away with such substantial geological reserves. We like Russian gas. But if the question arises of whether we should import ten billion cubic metres more of it (5% on average of our supply from Russia), we should be able to say: "Let's sit down and discuss price, terms and duration, because we do have other solutions and we shall choose the one that suits us best". So what are those solutions?

- a) First and foremost, much more intense effort to enhance our energy efficiency than has been the case hitherto. It is not necessary for the Union to set itself new targets, revising the 20% figure for 2020 defined in 2007 by the European Council. What is needed is to define in concrete terms the policies and measures that will enable the Union to meet that target as soon as possible, instead of allowing it to be thought that it is enough to set a target to ensure it is achieved.
- ✓ At the G8 Summit of 2005, under the British presidency, the International Energy Agency (IEA) was given the task of analysing and publicising best energy efficiency practice around the world. Having produced interim documents, it is to submit its final report in a few weeks, prior to the summit chaired by Japan. Its conclusions must be examined carefully as a matter of urgency *with a view to implementation as soon as possible*.
 - ✓ Similarly, several European directives have been published on labelling, energy consumption in buildings and "eco-design". Some of these are to be revised under the French presidency. *Our presidency must ensure that the Commission's projects include arrangements for immediate implementation.*
 - ✓ If standards are made uniform, where this is feasible, this will enable industry to reduce its costs and offer more efficient products. Our country must support the projected *International Partnership for Cooperation on Energy Efficiency to be launched by the G8 in Japan with technical assistance from the IEA.*

Policies aimed at improving energy efficiency have hitherto been proposed under the banner of the combat against climate change, and this is justified. But it is important to realise and to make clear to public opinion that it is also an extremely effective and inexpensive way of enhancing energy security. Particularly in the case of gas, which is increasingly used to produce electricity, efficient use of electricity will directly determine the degree of security of gas supply. Lastly, we should recall that this method was mentioned briefly on pages 3 and 4 of the present report with reference to long-term security: a

policy of enhanced efficiency is essential if the rising curve of global energy demand is to be moderated and covered by supply.

b) Next, an expanded role for liquefied natural gas (LNG). Liquefied natural gas has one substantial advantage, which is that ships carrying it can come from any LNG supplier provided the buyer pays the asking price. This is therefore highly flexible supply, from diversified suppliers, even if the resources of the latter are not unlimited and even if the other side of the coin of LNG's advantage is that Europe is competing with the entire world and especially with Asia. We can get LNG, but in limited quantities and it will be expensive.

- ✓ *New LNG terminals should be constructed everywhere in Europe, and especially in countries with high gas consumption that until now have depended exclusively on gas pipelines (Germany and the Baltic States). These terminals should be given the formal status of "projects in the interest of European solidarity" (see p.9).*

c) And lastly, how could we forget that nuclear energy is an obvious substitute for the use of gas to produce electricity, and that the premature closure of power stations that are safe and in good working order achieves precisely the opposite of what is wanted, i.e. a reduction in dependence on imported gas? Renewable energy sources naturally play a similar role, but it does not seem to us to be reasonable to raise the very ambitious target the Union has set itself in this area.

III.2. Relations based on greater regard for sovereignty:

The above proposals are directed at restoring to Europe a degree of room for manoeuvre in dealings with suppliers in general and with Russia in particular, room for manoeuvre Europe has lost, or believes it has lost. Assuming that this is done, or at least set in train, it is time we asked ourselves whether Europe's behaviour toward its Russian partner is always satisfactory.

All too often Europe's attitude to Russia in the energy domain is to lecture it, forgetting firstly that Russia is a sovereign nation and, secondly, that it would often be justified to add to the injunction "Do as I say", a murmured post-scriptum: "but not as I do". Here are a few instances:

- ✓ We insist that Russia should liberalise its internal market and allow third-party access to its transmission system. How can we be credible on this when every new project in the Union requests, and obtains, a derogation on third-party access to the system?

- ✓ We demand of Russia that it open up its energy sector to international companies. How do we in Europe react to proposed acquisitions by foreign investors?

Three cases deserve more detailed examination, accompanied by concrete recommendations: the ratification of the Energy Charter Treaty (ECT), the projected reciprocity clause in the Commission's third Energy Package, and the attitude to the Caspian States (due to its importance, this latter point is discussed in a separate chapter).

- a) Ratification of the ECT: the Russian authorities, up to the highest level, have been saying absolutely unambiguously for some years that they will not ratify this treaty, which, drafted nearly twenty years ago, is in their view obsolete and unfair. Some of their arguments are worthy of consideration:
 - The provisions of the "transit" protocol (which the Russian Party finds particularly irritating) must apply to Russia, but not to Norway (because the latter also refuses it), and not within the borders of the Union either (because other provisions replace them)!
 - The treaty purports to create the conditions for a competitive market, but where competition might be prejudicial to European suppliers it protects them (e.g. uranium enrichment services).

We should therefore ask ourselves whether it is really sensible to continue to demand of Russia, as we still do in all too many international conferences, that it ratify the ECT. Despite this, the treaty contains provisions that are both important and necessary, and indeed the Russian Party itself acknowledges this. For example, Russia applies the dispute settlement system voluntarily, even in the sensitive Yukos case.

- ✓ *We therefore propose the following approach:*
 - *We should refrain from demanding ratification of the Charter by Russia.*
 - *We should on the other hand remind the Russian Party that the Heads of State and Government of the G8, meeting in 2006 at the Saint Petersburg summit chaired by Russia, declared their support for the "principles of the Energy Charter" in the joint communiqué.*
 - *We should use the negotiations due to begin on the renewal of the partnership agreement to look together at the following question: What exactly does support for the principles of the Charter mean? What principles are covered by present and future agreements, such as membership of the WTO? What principles require a specific agreement?*

- *We should acknowledge the particular difficulty raised by the uranium enrichment issue to which we refer above, but also argue that it is an issue that requires specific negotiations between the three suppliers, i.e. Russia, the European Union and the United States.*
- b) The reciprocity clause envisaged by the Commission in its third Energy Package: this clause, which makes any investment by a non-EU company on Union territory subject to special authorisation following verification that it does not run counter to the spirit of the liberalised internal market, notably by merging the roles of supplier and transmission system operator, has been described by the Russians as an "anti-Gazprom clause", which makes their feelings sufficiently clear. And indeed, it is difficult to see what such a self-evidently discriminatory clause adds to the strict and non-discriminatory rules of the internal market, which are valid for all companies operating within Union borders, and in particular the much-discussed "unbundling" or decoupling, or whatever name is given to the principle that an investor cannot manage a transmission system if it is already in the supply business. This rule applies within the Union to Gazprom just as it does to Gaz de France, Sonatrach or Eon-Ruhrgas. In putting forward this proposal, we have been taxed with naivety: there is nothing to prevent a third-country operator forming a sister company, a totally separate entity in appearance but in reality under parallel management, and thus remain compliant with the rules of the internal market. That is possibly the case, but it does seem to us that exactly the same criticism can be levelled at the reciprocity clause and in any case it will be the Commission's responsibility to verify that the application of its rules is genuine and not merely formal, something it does very well.
- ✓ *To sum up, we suggest that the idea of a discriminatory reciprocity clause should be abandoned and that protection of the European market should be based on strict and unalloyed enforcement of its rules, which apply to all. If we do this, it is clear that we are not setting out to impose liberalisation within the borders of the Russian Federation. We are not abandoning our convictions, and we can, and indeed must, continue to say to our Russian partners that we believe this to be the best solution, but that we respect their national sovereignty.*

III.3. Assignment of priority to the development of projects in the common interest:

We did not have sufficient time to look more deeply into three topics that it appeared to us to be important to pursue assiduously in the context of relations between Russia and Europe, and notably with regard to renewal of the partnership agreement.

- ✓ Energy efficiency: the desire for Russia to make massive improvements in its performance in this area is justified from all angles: protection of the environment, and the combat against climate change in particular, along with increases in the volumes of hydrocarbons available for export. The framework for cooperation has been defined in the various G8 summits. The summit to be chaired by Japan should provide an opportunity to underscore yet again that the international community, and Europe in particular, is willing to contribute to this effort. Particular emphasis could be put on the renovation of heating networks, an area in which European competence, which exists not only in France but also in Northern Europe, could be of use.
- ✓ Gradual abandonment of the disastrous practice of “flaring” (burning off) the natural gas associated with oil deposits. Some estimates put the quantities of gas lost in this way (and turned into CO₂) at 20% of Russian gas exports. This is a sensitive topic because it is linked to the liberalisation of the Russian internal gas market, but once again the framework for cooperation has been defined in G8 summits, and notably at Saint Petersburg.
- ✓ The capture and sequestration of CO₂, essential for combating climate change but which can also increase the volume available for export (by means of Enhanced Oil Recovery and the replacement of natural gas by coal in Russia). The framework for international cooperation is clearly defined, and the goal must now be to test it on a large scale, including in Russia.

IV. Relations with the Caspian States: the Nabucco project.

IV.1. What is the purpose of Nabucco?

The Nabucco project is intended to allow the transport to Europe of natural gas extracted on the territory of countries bordering on the Caspian, specifically Azerbaijan, Turkmenistan and Kazakhstan, via Turkey and European countries, which would give Central Asian countries an alternative to having Russia transport the gas via Gazprom's pipelines.

A project of this kind has many advantages, as we shall see below, but it has been described in a simplistic and aggressive fashion in several quarters in Europe, with powerful encouragement from the United States, as providing Europe with the means to circumvent the dangers associated with Gazprom domination. The result of this verbally tough language has been diametrically opposite to what was wanted.

Alerted by numerous public declarations to this project's hostile character where it is concerned, Gazprom acted swiftly in two directions: (a) it acquired, under long-term contracts and at prices recently revised upwards, the major part of the gas available to the east of the Caspian, thus depriving the project of a significant part of the gas it was hoped to carry and compromising any possibility of a trans-Caspian connection between the fields of Turkmenistan and the Azerbaijani network, and (b) it proposed a competing route through Russia to carry both Caspian and Russian gas (the "South Stream" project connecting Russia directly to Bulgaria under the Black Sea), thus worsening a little more the divisions between the Nabucco project's supporters.

In the words of a Russian proverb of which we were told by contacts in a former USSR state, "We have awoken a peacefully sleeping bear; now it is laying waste to the forest".

This is a pity for Nabucco, which deserves better, but only on condition that we examine its future lucidly. Investors will not go into a project of this magnitude if they are not convinced that it can continue to carry gas for many years. However, according to US government statistics, which could hardly be suspected of bias against the Caspian States, the breakdown of the world's proven reserves as of 2008 is as follows: Russia 27.16%, Iran 15.33% and Qatar 14.64%. Next on the list come the countries of the Persian Gulf (including, at a modest level, Iraq), each with around 2% or 3%, followed by Venezuela, Algeria and Nigeria. *None of the three newly independent*

States on the Caspian equals even 2% of global gas reserves (cf. the website of the US Department of Energy, www.eia.doe.gov).

The figures provided to us by the Azerbaijani authorities themselves, figures we are entitled for this reason to consider optimistic, give no hope that Nabucco could transport, even according to the best scenario, more than 20BCM (billion cubic metres) of gas a year from Azerbaijan and Turkmenistan. This is not enough to justify investment on this scale. Even if there is hope that exploration will reveal new reserves not included in current calculations, the conclusion is obvious: Nabucco will not be built unless it is also intended to carry Russian or Iranian gas, or both.

Such a conclusion is not necessarily a cause for despair. In particular, Iranian gas merits close consideration by Europe. Certainly, present political circumstances doubtless obviate any plans to extract and sell it to Europe in the near future, but the present situation will inevitably change one day and if when that day comes Nabucco is not on stream, there is a great risk that the majority of Iranian exports, liquefied and carried on ships, will be heading for South and Southeast Asia. Nabucco is the pipeline that will enable Europe to take advantage one day of exported Iranian gas and we must anticipate that future need.

- ✓ Hence our second conclusion: if we wish to anticipate the point at which this infrastructure comes on stream, something we believe to be necessary, we must agree to its carrying Russian gas as well, and by the same token to its construction not as a project conducted against Gazprom, but along with Gazprom. *It is this stance that we propose France should suggest to its partners in the Union.* Such a change in outlook is far from self-evident. It is consistent with the suggestions made in the preceding chapter, which are directed at avoiding conflict with our Russian partner when conflict is pointless or unjustified. Naturally, the outcome will be that Nabucco will mitigate Europe's dependence on Gazprom only to a modest degree, but at least it will diversify the transit routes and, above all, prepare for the more distant prospect of the arrival on stream of Iranian gas.

Two changes must go hand in hand with this shift in stance, with respect to the Caspian States on the one hand, and, on the other, Turkey, the key country where gas transit is concerned.

IV.2. Relations with the countries of the Caucasus and Central Asia:

The countries bordering on the Caspian (other than Russia and Iran) are, where energy is concerned, subject to two, or perhaps three, strong centres of attraction: first, Russia, with the success we have seen, no doubt aided by common history and language; second, the United States, motivated by the best intentions but sometimes

using counterproductive methods; and third, increasingly, China. Europe, we were told on several occasions, is either not to be heard, or when it does speak, its messages are contradictory. Nowhere more than on the shores of the Caspian was it asked of us that Europe should “speak with a common voice”. Without going back over the prerequisites for such unity to be achieved, which are discussed in the second chapter, it does seem clear to us that the European presence in this region needs to be much more active. The countries involved must understand that the Union is a partner in dialogue that is there to stay, and is capable of helping resolve their problems, not in opposition to or as a substitute for the other powers, but quite simply on a friendly and independent basis. But what is probably most important is to recognise that the energy destinies of these countries are intertwined. In this respect:

- ✓ It is to be regretted that the remit of Ambassador Pierre Morel, who is accomplishing a great deal as special representative of the European Council for Central Asia, should be limited to the area east of the Caspian. *The French presidency should argue for close coordination between Mr. Morel, his counterpart for the countries of the Caucasus, and Mr. Van Aartsen, coordinator for the Nabucco project, under the auspices of Energy Commissioner Andris Piebalgs.*
- ✓ Similarly, where our own country is concerned, diplomacy in the energy sphere, although actively coordinated by the Directorate for Economic and Financial Affairs at the Ministry of Foreign and European Affairs, suffers from the way the geographical areas are divided up by this department of the Ministry, making the Caucasus and the Caspian region the responsibility of several different directorates. *It would be useful if an experienced ambassador could be entrusted with a permanent mission for coordination of energy diplomacy throughout this region, which should be extended to include Turkey.*

Here as elsewhere, and perhaps more than elsewhere, language that is moderate, but continuous and consistent with actual deeds, should be preferred to the occasional high-profile declaration belied later by the action that follows.

IV.3. Turkey's role:

Whether hydrocarbons are being transported to Europe from Russia, the Caspian, Iran, Iraq or the Middle East, geography has made Turkey a particularly important (but not completely unavoidable) transit country. Furthermore, the expanding population and economy of this large nation will demand sharp increases in its consumption of energy, and especially natural gas: forecasts by Turkey's government refer to consumption rising from 20BCM (billion cubic metres) in 2005 to over 60BCM by 2020. Turkey therefore has some aces up its sleeve, and it is important that it should play

them in its own interests as well as in those of Europe, of which it has aspirations to become a member.

What those engaged in dialogue with Turkey have understood so far of its strategy on gas is that it is determined to take on the role of a market place (a "hub" in the jargon), that is to say that it would buy gas arriving within its borders, consume what it needs, and sell on the balance at a profit to consumers further down the line, specifically Greece, Italy and the future users of Nabucco. It even appears to be the case that agreements with this in mind have been initialled with certain partners. This desire is incompatible with any role as a transit country as the concept is understood elsewhere and notably as it is defined in the Energy Charter Treaty, which has been ratified by Turkey: transit is a service for the transportation via one's national territory of gas that does not belong to you and to which you have no entitlement. Remuneration of this service is based on a toll.

Naturally, everybody has understood that Turkey wishes to consume abundant supplies of gas and to take advantage of its geographical position to buy it at the lowest possible price. Everybody has also understood that Turkey wants the transit activity to bring in remuneration; tolls are generally set by reference to international practice. It is indeed absolutely legitimate that Turkey should wish to develop a spot market on its territory, acting as the aforementioned "hub", along the same lines as locations of this kind in a number of places in Europe. But such a purchase and resale business cannot under any circumstances relate to long-term contracts signed between a supplier (SOCAR in Baku for example) and a customer (Gaz de France or ENI in Italy for example).

Government officials with whom we met in Ankara were adamant that their intentions were pure and that the hub project related simply to trading on a spot market. They did nevertheless acknowledge that communication on this point was not always clear.

- ✓ *It is important to remind Turkey, and at the highest level, that its position must be totally unambiguous where transit services are concerned, unless it wishes to run the risk of encouraging routes that bypass Turkey, such as South Stream. They should think long and hard about the precedent constituted by the transportation of Russian oil: in order to avoid the need for ships to go via the Turkish Straits, the preferred route is now the Bulgaria-Greece oil pipeline (Burgas-Alexandroupolis), which circumvents Turkey entirely, despite the feasibility of solutions routed via Turkey (Samsun-Ceyhan).*

As already indicated at IV.2, Turkey must be included in the European and French framework for permanent dialogue with the Caspian-Caucasus region on the basis of its key role for the energy side of that dialogue.

V. Dialogue and governance

V.1. Is it necessary to create new institutions?

The issue of whether it is appropriate to form new institutions with the intention of improving “governance” in the energy domain worldwide is one that is frequently raised. Our answer to this is in the negative: institutions for dialogue are numerous, and institutions for management are generally impractical, so deeply embedded is the notion of sovereign national competence where energy is concerned.

Three main international organisations have gone beyond the level of dialogue alone on energy: the Conference of the Parties to the United Nations Framework Convention on Climate Change, because it has become self-evident that global, coordinated action is required in this field; OPEC, whose decisions are more or less binding on its members; and the IEA, which manages the strategic reserves of the OECD nations. The first two call for no particular comment (dialogue with OPEC is discussed below) but the question of whether the IEA's role should be strengthened needs to be examined from two angles: firstly, should it not strengthen its links with countries that are not currently members but which are destined ultimately to become members, these being the major emerging consumers (i.e. China, India, as well as Brazil) and European countries not now member states? Secondly, should it not be given the task of working with the Commission on a European emergency mechanism for gas supplies, which, as we have seen, needs to take forms other than the management of strategic reserves?

- ✓ Both these ideas raise numerous questions as to fundamentals or to implementation, *but we suggest that the French presidency of the Union should launch (European countries) or support (emerging countries, gas emergency measures) such studies, to be conducted jointly by the IEA and the Commission.*

Coming at this from the opposite direction, we might ask ourselves if some regrouping might not be considered. For example, given the impossibility of obtaining ratification of the Energy Charter by certain of the most important actors, should not the Charter secretariat be associated with the IEA secretariat, whose efforts it sometimes merely duplicates?

V.2. The practice of dialogue:

As soon as debate arises in the energy sphere, misunderstanding is frequent, and dialogue at the technical level, although necessary, is not usually enough to overcome the obstacles, which frequently originate in a lack of trust. The Union in general and France in particular must engage in such dialogue at political level with a concern to bring down the barriers of suspicion. That is the theme we have developed with regard to relations with Russia and the Caspian States, but it also applies more generally to dialogue with all producing countries.

a) The example of oil: dialogue between oil producers and consumers has developed since 1991 in the wake of a Franco-Venezuelan initiative, and since renamed as the "International Energy Forum" (meeting in Rome on 21-22 April 2008). Considerable progress has been made, thanks to OPEC and the IEA in particular, which have developed together an initiative on transparency and the publication of oil data (the "Joint Oil Data Initiative" or JODI), but without eliminating the mutual suspicion referred to in I.1 (long-term security): consumers accuse producers of limiting their capacity in order to generate higher prices and producers accuse consumers of conducting policies that are anti-oil, or even anti-Arab, on the pretext of combating climate change.

- ✓ *It is now time to attempt to convince each other that the policies implemented are implemented in good faith and can be mutually supportive rather than antagonistic: producers wish to keep resources underground for the benefit of future generations, and see more drawbacks than benefits in extra inflows of cash, and consumers genuinely consider climate change to be threat to the human race. These two goals are travelling in the same direction.*

b) The example of gas: the position on dialogue between gas producers and consumers can be likened in some ways to that already described for oil, but there is one particular situation with which consumers will need to cope: all indications are that the informal conference bringing together the gas producing countries from time to time, and which is driven essentially by Russia, Iran, Qatar and Algeria, is to be transformed in June into a structured organisation with a permanent secretariat, characterising, according to some observers, a "Gas OPEC". The countries involved are seeking to calm things down by recalling firstly that the predominance of long-term contracts indexed on oil prices makes impossible any attempt to manipulate prices and quantities (which is true in the short term, but perhaps less so in the long term) and that it has been the unilateral initiatives of consumers, and especially the European Commission, which has imposed the rules of the internal market without consultation, which oblige the producers to take concerted action themselves. Rather than getting hot under the collar about what is inevitable, we would suggest the following reaction:

- ✓ *We do not like cartels and prefer markets in which prices are freely set through the matching of supply to demand, or by index-linking, without manipulation. If the new organisation were to go down this road, this would provide very strong encouragement for consumers to abandon gas in favour of the substitute energy sources which exist for all applications.*

On the other hand, if this is a research and consultation body, we express our interest and our desire to work with it, because we have many matters we wish to discuss with gas producers and debate can only be more effective if it is organised.

- ✓ The matters for discussion are indeed numerous: the long-term balance of the market and future levels of investment, the need to increase transparency and the possibility for the International Energy Forum to launch a “Joint Gas Data Initiative”, a calendar for the main interconnections such as Nord Stream, Nabucco, as well as Medgaz, the gas pipeline intended to connect Spain directly with Algeria, and which is subject to inexplicable delay. There is no question here of naive utopianism – the debate will frequently be vigorous – but rather the pragmatic realisation that no situation has ever been improved by inadequate dialogue.

V.3. Relations with the Union for the Mediterranean:

It is self-evident that energy and energy security are topics par excellence for the Union for the Mediterranean, and concrete projects can be envisaged. Firstly, the Mediterranean is a “sea for gas” in terms of the scope for transit it offers not only for methane carriers from Algeria and Egypt heading for Portugal, Spain, France, Italy, Croatia, Greece or Turkey, but also for gas pipelines connecting Algeria (directly or via Morocco or Tunisia) to Spain and Italy, as well as Libya to Italy. The difficulties encountered by some projects such as the Medgaz gas pipeline already mentioned between Algeria and Spain can be managed within the framework of the Union for the Mediterranean. As a general consideration, the countries of the Union for the Mediterranean include two members of OPEC and three potential members of a possible association of gas producers. The quality of the dialogue in this forum can only be to the benefit of the quality of the dialogue between the European Union and those bodies.

Other concrete projects would contribute to the energy security of all: the design and testing of large-scale solar power stations in the countries of the South, whether or not these are connected to the North via direct current lines, is among the most persuasive ideas for the development of renewables in Africa. The capture and sequestration of CO₂ is essential for Europe, which wishes to play a pioneering role in the combat against climate change, as well as for the hydrocarbon producing countries, which cannot continue indefinitely their production activity if this technology is not developed further and marketed. Another example is the twinning of test sites to the North and the South of the Mediterranean, under the management of competent research centres on both shores.

V.4. Transparency:

In reality, this paragraph summarises topics already discussed at a number of points in this report. More transparency is needed on data, more transparency on requirements and more transparency on behaviour.

- a) On data: actors' perception of the true situation in the energy markets is frequently very inadequate, and this contributes both to errors in decision-making and a general

feeling of insecurity, as one has when walking in the dark. While JODI is an initiative that has permitted significant progress to be made on oil data, much remains to be done to improve the quality and punctuality of the data collected and it would be highly desirable for European data on reserves to be published on a weekly basis (cf. chapter II.1.). Where gas is concerned, the launch of a “Joint Gas Data Initiative” is to be considered by the IEA, the secretariat of the International Energy Forum and if applicable by the new producers' organisation if this is formed. Experience with oil shows that efforts to enhance transparency can be compatible with the confidentiality of commercial agreements. And lastly, transparency in the electricity domain presupposes the implementation of the recommendations of the European Regulators' Group for Electricity and Gas (ERGEG).

- b) On requirements: this relates to the proposal made at II.5. for the drawing up of “outlook documents on energy requirements in each geographical area over the medium term”.
- c) On behaviour: the Union must continue to recommend forcefully the adoption by the producing countries and by operators of the Extractive Industries Transparency Initiative (EITI), which obliges the former to publish the amount and employment of the funds they receive, and the latter to publish the amounts they pay. This initiative, still all too rarely implemented in producing countries, must be promoted assiduously, without any great illusions as to the degree to which its rules will be actually observed by the signatories, but with the conviction that all and any progress in this sphere will benefit the international community and security. Particular attention should be paid to the signing of this initiative by companies in the emerging economies.