

**A contribution by the European Tribune  
to the Public Consultation on  
The European Commission Green Paper:**



**A European Strategy for Sustainable, Competitive and Secure Energy**

[The European Tribune \(http://www.eurotrib.com\)](http://www.eurotrib.com) is an open online forum for civic debate, with a strong focus on European issues. We consider the formulation of a European energy policy a vital and urgent matter about which all European citizens should be well informed and in which they should be actively involved. But the approach of the current consultation falls short of this goal, and demonstrates instead a top-down approach to policy-making. We believe that this is more likely to foster political apathy and resentment, instead of the consent, support and active participation of citizens that will be needed in what may be a time of stress and change for the entire European Union.

Furthermore, although the consultation appears to support conservation and the promotion of renewables, it does this by presupposing a policy of economic liberalization. We argue below that this makes the document inconsistent and unlikely to be useful for building a strong European energy policy.

Our position is that an effective policy for Europe must focus on true conservation and demand reduction. This requires a realistic appraisal of the necessary role of public authorities in the energy sector, both for investment decisions and for the management of relationships with external fuel suppliers.

So while the main focus of the Green Paper is, quite properly, to try to define what should be the main objectives of a European energy policy, its approach is flawed: it is predicated upon an ideological bias towards 'liberalisation', the benefits of which are presented without convincing case studies, references or proof.

As a result of these flaws, the stated objectives (sustainability, competitiveness, security of supply) are incompatible with each other, incoherent, and impossible to realise.

We discuss these flaws in more detail below.

## 1. The interference of market ideology

Too much of the Green Paper is ideologically, rather than factually, oriented. Expressions of market ideology are often stated with no discussion or justification. For example, in the introduction, (page 3), a series of bullet points laying out undeniable facts such as:

- Our import dependency is rising
- Global demand for energy is rising
- Oil and gas prices are rising

also contains:

- Europe has not yet developed fully competitive internal energy markets. Only when such markets exist will EU citizens and businesses enjoy all the benefits of security of supply and lower prices. (...) Furthermore, the consolidation of the energy sector should be market driven...

This is presented as a declaration of fact, when it is debatable, and a far from generally accepted, proposition. This was demonstrated recently in the form of various attempts by Member States to bring about the creation of “national champions”. On page 4 a single internal market for energy is indeed offered as an open question:

Is there agreement on the fundamental importance of a genuine single market to support a common European strategy for energy?

but, on page 18, an unequivocal response is given:

The EU needs to complete the internal gas and electricity markets.  
(...)

These must be addressed as a priority; the Commission will reach final conclusions on any additional measures that need to be taken to ensure the rapid completion of genuinely competitive, European-wide electricity and gas markets, and present concrete proposals by the end of this year.

This has now become a declaration of intent to act rapidly. Between the two the only justification for the need for further liberalisation is a sermon rather than factual analysis:

Sustainable, competitive and secure energy will not be achieved without open and competitive energy markets, based on competition between companies looking to become European-wide competitors rather than dominant national players. Open markets, not protectionism, will strengthen Europe and allow it to tackle its problems. A truly competitive single European electricity and gas market would bring down prices, improve security of supply and boost competitiveness. It would also help the environment, as companies react to competition by closing energy inefficient plant.

We feel it is necessary to restate the definition of a [European Commission Green Paper](#) (our emphasis):

**Green papers are discussion papers** published by the Commission on a specific policy area. Primarily they are documents addressed to interested parties – organisations and individuals – who are invited to participate in a process of consultation and debate. In some cases they provide an impetus for subsequent legislation. The consultations can be accessed on the Your voice in Europe site.

White papers are documents containing proposals for Community action in a specific area. They sometimes follow a green paper published to launch a consultation process at European level. **While green papers set out a range of ideas presented for public discussion and debate**, white papers contain an official set of proposals in specific policy areas and are used as vehicles for their development.

We have complained previously (in an Open Letter which is attached to this message) about the biased nature of the Public Consultation on the Energy Green Paper, and we will give one more example here. In Question 1 of the Consultation, the issue of the internal energy market is presented in the following biased way:

1. In order to achieve the goal of a genuine single market, what new measures should be taken...?

The single market is not presented as a subject for discussion. It is a predefined goal, assent for which is assumed.

The Energy Directorate seems to have confused green paper with white, and the on-line poll used as part of the public consultation process is badly flawed if it is intended to elicit the opinions of citizens.

## 2. The incoherence of the stated objectives

The goals of a European energy policy are stated to be (i) sustainability, (ii) competitiveness and (iii) security of supply. The aims listed under sustainability (developing renewable and low carbon energy sources, curbing demand, working to limit climate change) and security of supply (diversifying, encouraging investment to meet growing demand, coping with emergencies, helping European companies getting access to global resources, ensuring that all have access to energy) are goals we fully subscribe to — indeed these are the objectives that Europe must set itself to guarantee stability and growth.

But there is an incompatibility between wanting to reduce demand and investing to meet growing demand at the same time. The goals should be to “reduce demand” and to “encourage investment to meet the appropriate level of demand”.

The items included under competitiveness are not energy policy goals: they assert the assumption that unguided market mechanisms are the only possible solutions. A more realistic and fact-based approach would propose them as one possible tool that may — under certain favourable economic conditions — help achieve the stated objectives. Different policy tools should be analysed in several likely scenarios involving uncontrollable external factors.

Similarly, *“Ensuring that energy market opening brings benefits to consumers and to the economy as a whole, while stimulating investment in clean energy production and energy efficiency”* (p.17) is not a clear policy definition or a valid strategic goal, but an ideological preference moving forward under the camouflage of appropriately consensual language.

**An objective and fair assessment of market mechanisms shows that, to a large extent, they are incompatible with the real policy objectives stated under (i) sustainability, and (iii) security of supply.**

Consider the example of the electricity market and of the natural gas market with which electricity is increasingly tied as a result of past policy choices. As in other markets, the sale price of electricity is equal to its cost to the seller plus the seller’s margin.

Market liberalisation, which allows for more competition, has two effects: to reduce the sellers’ margins, and, if the conditions are right, to encourage lower-cost producers to join the market. The latter requires additional analysis, as the cost of electricity production is quite complex and incorporates several very different components, namely:

- the initial investment, and the **discount rate** used to amortise it over the life of the power plant;
- the **fuel costs** (for those power plants that need a fuel, like coal, natural gas or uranium);
- the operating costs of running plants safely and efficiently;
- network-imposed costs, such as balancing requirements or spare capacity availability, if imposed by regulation;

- the **externalities**, i.e. the cost imposed on society by the power plant (pollution, carbon emissions, impact on landscape, etc...), if internalised by regulation.

This list shows that power prices are influenced by several things:

- in the liberalised world advocated by the Green Paper, fuel costs are essentially imposed on Europe by global markets. In practice Europe has some influence (i) if it acts on its internal demand for the fuel, thereby affecting the overall market equilibrium or (ii) by negotiating long-term contracts with pre-agreed price formulas with outside suppliers;
- operating costs are controlled by market players, but constitute a small part of the total cost;
- network costs and externality costs depend exclusively on regulation by public authorities, whether at the national or European level.
- the absolute levels of the interest rates used to finance investments.

Costs that can be influenced by regulation should reflect policy objectives. *"Working to limit climate change"* would suggest that prices should account for greenhouse-gas (GHG) emissions by the power sector, via emissions trading certificates, carbon taxes, or similar mechanisms that penalise carbon-emitting power sources. *"Developing renewable energy sources"* suggests that network regulations should acknowledge the intermittence of these sources, not penalize them for the corresponding burden on the network, spread the cost to other producers. Spreading the remaining above-market-price costs with the help of feed-in laws, that is guaranteed purchase at fixed higher prices, also spurs development: it creates a market for competition of renewables producers among themselves.

A proven way to *"curb demand"* is to increase taxes on consumption. Ensuring *"access to energy"* and ensuring *"solidarity"* (pp. 5 & 9) suggest regulation of prices (to avoid price peaks under market mechanisms). It also implies supply obligations towards those who might not otherwise be supplied under pure market mechanisms, whether for technical or contractual reasons, or poverty.

The financing cost would appear to be the least contentious topic. After all, a level playing field in that respect (by means of prohibition of public guarantees for producers) should allow the best technologies to be chosen. In fact, that apparent policy neutrality is nothing but. **The single most important determinant of which technology is competitive and which one is not is the discount rate.**

This derives from the fact that hydrocarbon-burning technologies tend to have much lower initial investment costs for a given production capacity, whereas renewable energies and nuclear, which have nil or low fuel costs, require much larger initial investment outlays. That means that, all other things being equal, a higher financing rate favours coal-fired and gas-fired plants, and a lower interest rate favours nuclear and wind. Choosing to finance the energy sector by the financial markets and not by Member States thus creates a structural bias towards coal-fired and gas-fired plants, as **private sector investors need to pay higher interest rates than sovereign or sovereign-backed entities.**

To show how significant the interest rate is, here are some calculations made by the French Ministry of Industry (Source: <http://www.industrie.gouv.fr/energie/electric/cout-ref-3.pdf>; <http://www.industrie.gouv.fr/energie/electric/cout-ref-4.pdf>):

2015 – Mean value	Nuclear EPR (European Pressurized water Reactor)	Combined-cycle gas turbine	Pulverized coal	Circulating fluidized coal bed
8% discount rate	28.4	35.0	33.7	32.0
5% discount rate	21.7	33.4	29.5	28.1
11% discount rate	37.0	36.9	38.5	36.4
CO <sub>2</sub> costs (€/t and €20/t)		1.4-7.1	2.9-14.6	3-15

(Table 1 – Full-time production costs in 2015, with individualized CO<sub>2</sub> costs (2001€/MWh, \$1 = €1)

€/MWh		2000 h	2200 h	2400 h	2500 h	2600 h	2700 h	2800 h	3000 h
<i>Actualisation à 8%</i>	2007	63,4	58,0	53,5	<b>51,5</b>	49,7	48,0	46,5	43,6
	2015	52,6	48,1	44,5	<b>42,8</b>	41,4	40,0	38,7	36,4
<i>Actualisation à 5%</i>	2007	54,0	49,5	45,7	<b>44,0</b>	42,5	41,1	39,7	37,4
	2015	44,6	40,9	37,8	<b>36,5</b>	35,2	34,0	33,0	31,0
<i>Actualisation à 11%</i>	2007	73,5	67,2	62,0	<b>59,6</b>	57,5	55,5	53,7	50,4
	2015	61,2	56,0	52,6	<b>48,1</b>	44,5	42,8	41,4	40,0

Changing from a 5% rate (typically the rate at which governments or public bodies can borrow long term) to 8% (a more typical rate for the private sector) increases costs:

- for gas-fired plants by less than 5%
- for coal-fired plants by a bit more than 10%
- for nuclear plants by more than 30%
- for windpower by just under 20%

That is, equal interest rates are not enough to compare competing power sources, the absolute level chosen matters as well.

It is thus not technology-neutral to promote, as current European policy does, private ownership of generation assets (and, more specifically, to forbid State support). This policy will always skew investments towards gas-fired and coal-fired plants, unless there are specific regulations or subsidies encouraging investments in other sectors like renewables or nuclear.

As the Green Paper includes as goals to "halt climate change", "improve local air quality", "diversify the EU's energy mix", current policies that favour burning coal and imported gas go directly against stated goals and therefore need to be balanced by other measures that would make hydrocarbon-burning plants less attractive and renewable energies more so.

**The conflicting impacts of these various objectives and the tools to implement them are not discussed in the Green Paper – in fact they are not even acknowledged, when the necessary trade-offs imposed by competing constraints stemming from the stated policy goals should be the core topics of the debate.**

### 3. Points missing from the Green Paper that should be discussed

The following questions are never discussed and must be an essential part of a Green Paper discussing energy policy choices:

- Competitiveness

An important point to discuss is the criteria needed to judge whether a market is “competitive”. Should it be absolute price levels? Share of imports? Market share of non-incumbents? Share of sales made by foreign companies? How is the market territory which is most relevant defined? How does one take into account explicit policy choices such as: carbon taxes, support for renewable energies, regulatory burden, etc?

- Price peaks

Should price peaks, a frequent occurrence in electricity markets, be passed on to consumers? If so, how is that compatible with the goal of “making sure that all citizens and businesses have access to energy”? Who will take the political heat of justifying such peaks? If peaks should not be passed on, the problems of who should be protected from them, and who should bear the cost of that protection, need to be discussed.

- Technology choices

If each Member State continues to have a say in the technologies it wants to encourage or restrict, how can such choices be justified, either under market rules already prevailing, or those that the EU wants to impose? If they can't be justified, who will decide which technologies are favoured? If that decision is left purely to the market, we must face the likely consequence that hydrocarbon-burning technologies will be favoured because they require less capital outlay.

- Nuclear

In the specific case of nuclear power, which seems to be mildly supported by the Green Paper, there is no clear discussion of who should decide whether it is to be encouraged or not. If it is encouraged (as part of policies favouring zero-carbon generation), how is this going to be (i) financed, (ii) supervised and (iii) who is going to deal with the waste? Will this be done at a European level or, as is most likely in view of the differences in public opinion, on a country by country basis? And if Member State involvement in any of the above is authorised, how is this made compatible with (a) the denationalisation of the regulatory framework and (b) the explicit ban on public support for investors?

- Long-term contracts

One of the tools that are used to improve stability and security of supply (and, to some extent, protect from short term price shocks) are long-term contracts. EU policy has been to fight these tooth and nail in recent years on the spurious grounds that they are incompatible with “market liberalisation.” That policy needs to be discussed publicly. Should it be changed so that long-term contracts are encouraged? What is the evidence for or against the efficacy of these contracts? If they are encouraged, who will be given the opportunity to negotiate them?

- Russia

Who will be responsible for defining policy towards Russia's exports of oil and gas to the EU? Without alternative energy supplies, these are set to become a vital strategic resource, but the EU policy seems confused about how negotiations should be handled. Where should the main diplomatic and economic interface be? With those who consume the most gas? Those who import the most gas in proportion to their consumption? Those who import the most Russian gas (in volume or in proportion)? Those who have otherwise close diplomatic links with Russia? Those who have access to the Russian pipelines? How should existing elements, like long-term contracts, storage capacity, pipeline infrastructure, and financial structures, be taken into account?

If dependence on Russian gas is a major problem, then perhaps active measures to reduce demand should be discussed, and decisions made on whether these should apply in priority to the power sector, the industrial sector or to residential users. Should those who have only recently switched to gas be treated differently from those who have relied on gas for a long time (either because they have domestic supplies, or longstanding supply arrangements)? How should domestic supplies be taken into account? Should countries with domestic supplies be allowed to regulate production levels? Should taxes on domestic European production be collected at the European level (by an EU-wide regulator) or at the national level?

- Import dependence

Looking beyond the sole case of Russia, we note that the EU's indigenous sources cover about half of its energy consumption at the moment. This coverage will fall off drastically as indigenous fuels like oil and natural gas dwindle, and as demand rises – as projected by the Green Paper. Renewables are and nuclear can be an “indigenous” energy source (to the extent that fissionable materials are readily available) and biomass, including second-generation biofuels, can be developed. By and large, however, we depend on imports of oil and, increasingly, natural gas. This dependence will increase in future.

Gas prices traditionally tend to follow oil prices, but the tighter link with electricity markets and the emergence of global arbitrage via LNG prices are making it a more and more separate market. However suppliers are increasingly the same in both cases (Russia, as noted above, North Africa, Gulf of Guinea and Persian Gulf producers).

The Green Paper offers some wishful thinking on the future availability of oil (120mbd global production in 20-25 years), but admits:

it remains an open question at which price oil will be made available to the global market under a “1.5-2% annual increase” scenario. (Working Document, p. 20)

Yet oil consumption is predicted, in the Working Document, at a similar level in 2030 as in 2000, with natural gas at a much higher level (and imported gas at double its present level). These future scenarios seem oddly detached from the objectives supposedly set for Europe's energy policy (reduce demand, focus on security of supply.) They also ignore policies that would presumably be put in place to meet these aims (move away from gas-fired power plants, switch transport away from oil-burning, penalise hydrocarbon use).

**As a result, it is extremely improbable that the EU will be able to rely on low-priced gas in the future as the Green Paper assumes.** Very simply, there is no reason why Russia, Algeria or others should agree to arrangements that go against their national interest. Oil prices will rise dramatically over the next 20-30 years. Gas prices will rise with them.

**This is a key strategic fact. It needs to be analysed realistically, and planned for. In this area particularly, vague appeals to market ideology are not a substitute for focussed, informed and insightful policy determination.**

Very few of these questions are analysed in the Green Paper, and yet they hide a wealth of fundamental policy choices. The *implied* policy choices of the Green Paper, which focus more than anything on market liberalisation, go against most of the *stated* objectives of the same Green Paper. The very worthy objectives with respect to renewable energy, energy efficiency, ability to withstand supply shocks and climate change, are not supported by more detailed proposals that would allow the EU to move measurably towards these goals.

Fundamentally, the Green Paper cannot reconcile market “liberalisation” with the need to forcefully regulate the sector to promote effective strategic public-sector solutions for EU-wide energy policy, thus:

**Renewables** require taxation or regulatory limitation of the polluting alternatives, subsidies, and a supportive legal and financial framework.

**Efficiency** requires public action to define standards, assertive definition and enforcement of efficiency goals, supported by public funding of R&D, and also by monetary incentives.

**Security of supply** requires direct public intervention in the market to negotiate long term commitments, and foster diplomatic/commercial relations.

Markets, with their proven record of rigidity, short-termism, and severely limited strategic vision, cannot attain these goals without strong public sector oversight and policy direction.

## 4. Our proposal

**Demand reduction must be the first focus of an EU energy policy.** Energy prices will continue to rise as both EU demand and that of others such as China and India increases in an environment where either supplies struggle to keep pace with demand or, in the optimistic case, they are available from a small number of producers with strong leverage over us. Internal energy market liberalisation is not going to change that geopolitical fact: it may actually aggravate it by channeling investment towards gas-burning power plants, increasing our exposure to imports and thus decreasing security of supply and increasing the risk of high electricity prices through marginal cost pricing. Market forces do not always produce lower prices.

Demand reduction can be obtained through energy efficiency, and new technology, which the Green Paper is right to focus on. Unfortunately these topics never make it into the headlines: we need less of “Barroso takes whip to energy monopolies” (Financial Times, 12 September) and more (for example) “Barroso takes whip to high energy consumption”, or “Barroso takes whip to industry failure on renewables”, or “Barroso takes whip to industry neglect of recycling”.

An effective energy efficiency policy will require large-scale education campaigns, coercive measures to lower consumption, setting tougher standards for energy-consuming goods and changing building regulations to force the construction industry to focus on energy efficiency. It would mean Community-wide programmes to inform and explain, and to start genuine public discussion of the issues. The institutions of the EU and those of Member States should work together on this with NGOs and representatives of civil society. These measures and the research and development associated with them would encourage new jobs and investment in the technologies required to deal with the changes in the economic landscape caused by rising energy prices and give the EU an opportunity to become a world leader in this area.

**But energy efficiency will not be enough.** If we wish to be free of dependence on imports and of rising prices, then we will simply have to reduce energy consumption.

This means **a different transport policy.** It is surprising that the Energy Green Paper makes no mention of this. It is urgent to make an absolute priority of rail and water for freight (with an end to all talk of prioritising air and road), and to invest in first-rate, attractive, integrated public passenger transport. The policy must have teeth, with strong, EU-wide taxes against road transport and massive funding for rail and river transport projects. This doesn't just mean a few expensive prestige lines, but broadly spread investment into linked-up networks with dense coverage.

It also means **tax incentives to reduce energy consumption**, and, more generally, **significantly higher taxes on energy** – either as it is consumed, or upon import in the EU (to encourage domestic sources) – with the funds to be used in the public transport projects and to kickstart a continent-wide R&D programme on energy-saving technology.

As a final and all-encompassing point, an energy policy must acknowledge that energy is a strategic concern, and thus that it requires attention from the bodies in charge of the public interest, i.e. national governments and the EU institutions. Intervention in markets is not an evil to be fought, it is useful, necessary, and should be encouraged, explained – and carried out transparently, after public debate of the real stakes.

We have a choice between carrying this out in an open, democratic manner, with public involvement in building stable, long-term policy, or finding ourselves abruptly obliged to think again by price rises that force the issue while hurting the least fortunate of our fellow-citizens. Member States and their public opinions will naturally react to such emergencies without consideration for the Community level, because, if it does not acknowledge what's at stake, the EU runs the risk of failing to build credibility on the issues.