

## EDF position on EU ETS Review

**EDF supports European efforts towards long term reduction of greenhouse gas emissions at an affordable cost for the European economy. In that way, EU ETS needs to be maintained, as it provides the best route for delivering emissions reduction at the least cost, but adapted to impact less heavily on operations now than in the future, and to focus on influencing power generators' and clients' long term investment choices towards carbon efficiency. This needs stable but relatively low carbon prices in the short term, together with clear predictable and stronger economic signals in the longer term.**

### Proposals

European ambitions in fighting climate change, particularly in the scope of the GHG targets adopted by the March 2007 EU Council, can be made more efficient with:

- Evolution of ETS rules to focus the economic incentives on investments choices, allowing to recognise the value of generation technologies that do not emit CO<sub>2</sub> (nuclear, hydro and other renewable energy sources better than gas or coal) or that emit less CO<sub>2</sub> (gas, high efficiency coal, and later coal with Carbon Capture and sequestration better than conventional coal)
- A more mature and robust emission allowances market that has the confidence of investors and is capable of providing the long term price signals required, considering the use of supporting mechanisms such as the carbon hedge if appropriate
- Ensuring that all sectors make a contribution to reductions of all greenhouse gas emissions through market and/or regulation mechanisms
- Greater consistency towards climate change issue, in the design and implementation of the various energy and environment policy instruments in Europe, such as energy efficiency, renewable energy sources, water, ...
- The active promotion of emissions reductions policies and economic mechanisms in other parts of the world, through development of project mechanisms and emission allowances trading schemes linked with the European system.
- Research and Development programs that focus on the long term in favour of low or no emissions innovative technologies either in generation (CCS, new solar, nuclear Generation IV, ... ) and in demand side devices (heat pumps, plug-in hybrid vehicles, ... )

## PROPOSALS

**European ambitions in fighting climate change, particularly in the scope of the GHG targets adopted by the March 2007 EU Council, can be made more efficient with :**

### Predictability and allocation methodologies

The evolution of the rules need to focus on the economic incentives for investments choices, recognising the value of generation technologies that do not emit CO<sub>2</sub> or that emit less CO<sub>2</sub>. It is therefore important to define long-term rules to encourage investments in electricity generation technologies that emit less or no CO<sub>2</sub> and reduce distortions between countries.

- Define realistic emission targets for a 20-year period (at least) based on a realistic roadmap to achieve emissions reduction concerning the ETS sectors, consistent with the availability of carbon efficient technologies at affordable cost levels and with appropriate investment pace. This target determines the quantity of allowances to be emitted by countries and thus, the price of the allowances. The allocation of these allowances can be done partly through free-allocation and partly through auction.
- Allocation rules have also to be defined for a 20-year period to determine the part of allocations to be given for free vs to be auctioned. Different families of free- allocation rules can be designed :
  - **First type** : free allocation according to the best available benchmark for each fuel. This type of allocation would give a strong incentive to choose coal generation for base load, and deter operators to invest in lower emitting or carbon free technologies. It will likely not put Europe on the track of long term and deep CO<sub>2</sub> emissions reduction and raises issues of competitive distortions between actors and countries.
  - **Second type** : free allocations based on a unique European benchmark (adapted to each sector). To be fair towards low/no emission technologies, the same free-allowances should be given to each new entrant asset whatever the technology. Free allocations for incumbents should progressively tend to an equivalent system, taking into account national specificities. This type of solution will actually push operators to invest in carbon efficient technologies but raises a certain number of issues : compatibility with the European Directive, competitive distortions, ...
  - **Third type** : reduce free allocations progressively to zero, for new entrants and incumbents. A reduction for new assets will be a strong driver to invest in carbon efficient technologies and a reduction for incumbents is a driver to phase out non efficient old plants. The combination of both is likely to lead to lower carbon price and higher emissions reductions. This “third type principle” can be applied to a “first type” or a “second type” starting point.

*EDF supports changing progressively free allocation rules moving towards auctioning allowances, provided that national specificities are taken into account in the necessary European harmonisation requirement (down to no free allocation in the long term according to the “third type” principle).*

- Cap setting should be done with the expectation of delivering real reductions without major competitive distortions between Member States. An absolute EU cap could be set up accordingly, leading to appropriate sectoral sub caps. At this stage each sectoral cap should be distributed to actors and/or installations in a fully harmonised manner at EU level, which would avoid competitive distortions, by using an appropriate mix of “second type” and “third type” allocation principles, previously described. That mix of methodologies could evolve over time towards full auctioning. An articulated dialogue between EC and EU is necessary on the basis of transparent information, for achieving such a process.

### **Creating a predictable and trustworthy framework**

A more mature and robust emission allowances market that has the confidence of investors and is capable of providing the long term price signals required : Give the CO2 market more stability and depth to give CO2 prices a credible value, and gradually incorporate this value into players' choices and behaviours. This will only be possible if CO2 prices stabilise at levels that are seen to be credible and sustainable for the European economy.

- Make the ETS a bona fide financial market, with all the associated requirements in terms of transparency and disclosure of sensitive market information.
- Set up a European body in charge of centralising information and ensuring that it circulates in a transparent way to limit price volatility.
- Gradually develop the allocation of allowances via auctions.
- Make it possible in all cases for CO2 allowances to be transferred from one period to the next (banking).
- Consider opportunities to implement a protection mechanism for price peaks, like “safety valves”, by turning the present penalty into a buy-out penalty, set at a reasonable level for the initial years but gradually increasing to allow for the development of new technologies.
- Consider how confidence might be given to investors that the market price of carbon will not in future fall below a level that properly rewards emission reduction, perhaps through carbon hedging contracts or minimum prices for auctioning permits.

### **Articulating ETS coverage and other sectors**

Ensuring that all sectors make a contribution to reductions of all greenhouse gas emissions through market and/or regulation mechanisms : do not limit CO<sub>2</sub> emissions reductions to sectors involved in the ETS system, neither focus the reduction on electricity generation.

- Share the burden of emission reduction between sectors according to targets levels that are effectively accessible, taking into account, of all possible retrofitting options, of the pace of new investments and of the development of new technologies
- Enlarge ETS to other greenhouse gases provided that their reduction objectives are set on realistic targets
- Include other industrial sectors, the transport sector, the heat market and greenhouse gases other than CO<sub>2</sub> within the scheme in principle, provided this is practical, cost-beneficial and well-signalled. However, initiatives to expand the EU ETS must not undermine the scheme as a firm basis for investment and further work should be undertaken to collect data and develop monitoring methodologies for other sectors and gases. It is essential that expansion does not introduce price shocks and undermine investment.
- Develop efforts on non ETS sectors and activities, through regulations and domestic projects mechanism

### **Consistency with other policies and measures**

Greater consistency towards climate change issue, in the design and implementation of the various energy and environment policy instruments in Europe, such as energy efficiency, renewable energy sources, water, ... : The reduction of the GHG should appear as one of the main drivers of different programs related to energy :

- Focus first and foremost energy efficiency regulations on the usages that produce the most CO<sub>2</sub> on the global value chain, regardless of the type of energy used.
- Adapt the “Water Directive” to avoid reduction in hydro potential of generation ( the generation of hydro energy may be reduced by 5% in France )
- ...

### **Opening and linking the scheme**

The active promotion of emissions reductions policies and economic mechanisms in other parts of the world, through development of project mechanisms and emission allowances trading schemes linked with the European system :

- Remove barriers to imports of CDM and JI credits in the ETS system and simplify the procedures for accreditation projects. Allow all large low carbon generation developments to get into the system or to benefit more easily from the mechanism.
- Encourage the setting up of similar emissions trading schemes in other parts of the world,
- Recognise that although international agreement on reduction targets post-2012 is likely to take a long time to secure, a number of other trading schemes may emerge as a step towards a global market in carbon e.g. initiatives in the USA (California, Arizona, et al), Japan and Australia. It is therefore important to ensure that there are appropriate safeguards in the linkage with these schemes, and to ensure that the stability of the EUETS is maintained. These include strong environmental integrity and a comparable set of rules including a consistent basis for setting caps in relation to scarcity of allowances over the longer term, appropriate monitoring, reporting and verification requirements, and sufficient market transparency to avoid price shocks. Any planned linkage with another scheme must be signalled to the market well in advance.
- And build links within all these environmental public policies against climate change in order to achieve as much CO2 reduction as possible at the least possible cost.

#### **Preparing the future technologies to be in the market**

Research and Development programs that focus on the long term in favour of low or no emissions innovative technologies either in generation (CCS, new solar, nuclear Generation IV, ... ) and in demand side devices (heat pumps, plug-in hybrid vehicles, ... ) :

- Develop public-private partnerships at European level for the technologies of the future that require costly development: R&D programs for third-generation solar photovoltaic, industrial demonstrators of CO2 capture and sequestration with coal-fired generation, development of fourth-generation nuclear, R&D for mass storage technologies that resolve the problem of intermittence...
- Support the development of cleaner innovative demand-side technologies, like high-temperature heat pumps, solar water heaters with electric backup, electric and plug-in hybrid vehicles, electricity-based industrial processes that are innovative and efficient.