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The EU Climate and Energy Package: Elements to assess its current performance and suggestions on the way forward

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This analysis was released to support the discussions of the European Dialogue session in Venice in October 2010. The European Dialogue is an initiative coordinated by IDDRI, CEPS (Brussels) and FEEM (Milan). During 3 sessions in 2010, the Dialogue discussed critical issues on climate change and energy policies with key decision-makers of the Commission, national governments, European industries and NGOs. Discussions focused on: the impact of the Copenhagen agreement on EU

strategy, instruments to drive transformation at the EU level, with particular attention given to the transport sector, along with financial and solidarity issues. The last session of the Dialogue was devoted to elements of a new EU strategy at the international level and the development of a new vision for EU domestic policies. This paper provides an assessment of the performance of existing energy and climate policies and suggests avenues to improve or complement the Climate and Energy Package.

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The EU Climate and Energy Package: Elements to assess its current performance and suggestions on the way forward

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Introduction

The EU's domestic climate policies and the international negotiations on climate change are at a crossroads:

- Domestically, the EU has been severely hit by the financial crisis and the subsequent economic downturn. It is still on the road towards recovering fully from this brutal and long-lasting shock. The focus within the EU is therefore on the need to restore economic growth while reducing public deficits. From a climate change perspective, the economic crisis has had mixed effects. The recession has cut demand and lowered GHG emissions: emissions from installations covered by the EU ETS fell by 11% in 2009 on the back of the global downturn (EEA, 2010), leaving European industries with large surpluses of emission allowances. But it also increased public deficits, reduced the manoeuvre room for public spending, raised capital-costs and increased the risk-adversity of the financial sector, lowered both carbon prices and fossil fuel costs, and led to a number of power sector investments being delayed or cancelled.
- Internationally, the Copenhagen Accord neither delivered the level of actions needed to limit the global temperature increase to 2°C, nor produced a legally binding global treaty that the EU and some others wanted. But it nevertheless scales up the global level of emissions reductions compared to provisions made in the Kyoto Protocol, as all key countries are now taking, or about to take, meaningful actions.

Taking into account these changing contextual elements, and bearing in mind the initial objectives of the Climate and Energy Package (CEP), an ideal opportunity to question the relevance and efficiency of the CEP presents itself.

Political discussion concerning the CEP is currently centred on the debate surrounding the opportunity to move from 20% to 30% emissions reductions in 2020 compared to 1990 levels. Although this discussion on the level of ambition is key, it should not hide two crucial factors: first, the rationale for increasing the pace and scale of sectoral low carbon transformations (or simply to maintain them at a constant level, taking into account the effects of the economic crisis); second, the concrete policies and measures needed to support and frame these sectoral transformations.

Beyond this general point, the move from 20% to 30% was initially framed in a very specific way. The 20% - 30% range was indeed the result of a double compromise:

- A domestic compromise: some countries within the EU were not ready to take on a unilateral commitment of 30% emissions reductions initially.
- An international compromise: the move from 20% to 30% emissions reductions in 2020 compared to 1990 levels was used by the EU to encourage others to take greater actions, at Copenhagen and beyond.

As a result of this double compromise, the move from 20 to 30% was conditioned by

two elements linked to international climate negotiations:

- The signature of a legally binding global treaty.
- The comparability of efforts by other developed countries and the adequacy of actions by fast growing developing countries.

The initial political debate on the CEP was therefore misleading in two different respects: too much emphasis was placed on the 2020 emissions reductions target when climate targets and policies were considered; and it did not sufficiently integrate into international discussions the domestic motivations to change the current ambition levels and the CEP content.

This paper aims to assess the performance of the CEP at its current level of ambition and content, and to identify the various reasons for a much-needed reappraisal.

Some reasons are cyclical, and due to the changing context:

- (a) The CEP was built on a multiplicity of interlinking targets and policies that were designed to be mutually supportive. The economic crisis has changed the balance of these targets and policies and raised the risk of one being detrimental to another.
- (b) Reform of the EU ETS also aimed at achieving a certain level of transformation in the covered sectors through an ambitious EU wide cap for Phase III. The economic crisis has significantly reduced ETS emissions, and, if the cap is not now strengthened, the level and pace of transformation will be much less than initially expected.

Some reasons are structural and more profound:

- (c) The 20% emissions reduction target in 2020 compared to 1990 levels is not sufficient to achieve a long term EU target (in a range of -80 to -95% in 2050) in a cost-effective manner.
- (d) The CEP sets certain objectives without putting in place the means to reach such objectives. The energy efficiency target for example, which provides key support for renewable and GHG emissions reductions targets, is far from being met.

(e) The CEP does not properly address all industry sectors, some of which are vital if the EU is to meet its long-term target, and for which emissions are rising steadily and rapidly. The transport sector probably provides the most important example of a sector that has not been adequately considered.

1. Assessment of CEP performance and reasons for a reappraisal

1.1. The relationship between targets and policies: Are they still mutually reinforcing?

The CEP was built around three key 2020 targets: a 20% reduction in emissions, for 20% of the total energy consumption to be derived from renewable energy sources (RES), and a 20% increase in energy efficiency (EE) compared to BAU. The 20% emissions reductions target is split into two instruments: a cap and trade on ETS sectors and a burden sharing decision on non-ETS sectors. The figure below provides an overview of the different targets and policies set at EU level.

There was a rationale behind the multiplicity of targets and policies within the CEP: they were intended to be mutually reinforcing.

1.1.1. Relationship between ETS and RES

The development and deployment of RES was intentionally placed partially outside the ETS by setting a specific RES target distributed among the Member States. The RES target was meant to facilitate the achievement of the emissions reductions target, in particular in the ETS sectors. However, the RES target was set well beyond the optimal level of RES penetration into the electricity system to meet at least-cost the ETS 21% emissions reduction target, compared to 2005 levels, by 2020¹.

In fact, the RES target was also a way for the EU to set the conditions for the development of its own RES industry. Furthermore, the development of an RES industry has other

^{1.} PRIMES models run by Ecofys show a potential 25% emissions reduction under 1990 levels when achieving RES target only.

Figure 1. Common coordinated policies and measures. Overlap of EU targets and policies

GHG emissions	EU 2020 Targets				EU Policies - transversal	EU Policies - sector specific
Industry (energy consumption and good production) Buildings (energy end-use) Transport (energy end-use)	EU ETS (-21%/2005)	Energy efficiency indicative target (20% energy savings)	Renewable energy sources (20% in final energy consumption inc. incorporation of 10% biofuels)	Effort sharing (-10% / 2005)	ETS Directive RES Directive CCS Directive IPPC directive Cogeneration directive LCPD directive Biomass Action Plan Energy taxation (energy products and electricity) Transeuropean networks and internal energy markets Energy Labelling Directive Motor challenge program Energy end-use efficiency and energy services Ecodesign directive (for energy using products)	Energy performance of buildings directive Energy Labelling Directive (on households appliances) Emission performance of passenger cars Directive clean and energy-energy efficient road transport vehicles Fuel quality directive Biofuel directive Rail Directives (shift to rail) HFC motor vehicle air conditioning
Waste management Agriculture						Landfill directive Waste framework directive
Other non CO ₂						CAP reform
Forest						EU forest action plan

Source: Adapted from EEA report 2009

objectives in addition to the facilitation of the emissions reductions target: domestic energy security, job creation, international market share, etc. The RES target was therefore set to deliver an optimal balance between the cost of public support schemes (through feed-in tariffs in particular) and the carbon price induced by the ETS. Indeed, the high level of ETS price was expected to increase the attractiveness of RES investments while reducing the level of public support such schemes required.

1.1.2. Relationship between EE, ETS and RES targets

The EE target was seen as a means of supporting the other two targets. Indeed, absolute levels of RES development and deployment are conditioned by the success of the EE policy. The EE target is formulated as a relative share of total energy consumption and is therefore pivotal to achieve the RES target: without real improvements in EE, reaching the desired levels of RES penetration in the supply mix will be difficult and expensive. Improving EE in the traded

sectors is also a way to take some pressure off internationally competitive industries.

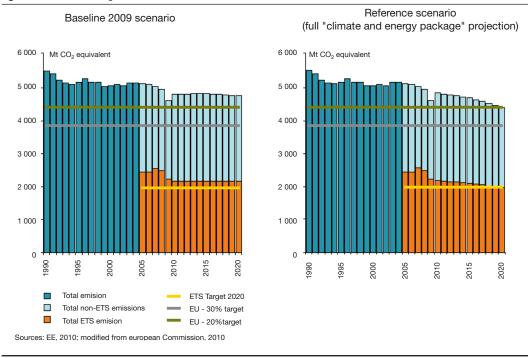
The economic crisis has disrupted this balance between the three targets. Although it would be false to claim that the system was perfectly fine-tuned from the beginning, the economic crisis has certainly made things worse. In particular, the carbon prices forecasted for 2020 under the ETS are lower than expected, the contribution of the public support schemes to the RES target will therefore have to be higher than anticipated. This is particularly concerning given the impacts of public deficit reduction efforts on RES feed-in tariffs.

1.2. Under the targets: What is the actual level of sectoral transformation?

1.2.1. Economy-wide emissions

The EEA 2010 report "Tracking progress towards Kyoto and 2020 targets in Europe" states that GHG emissions in the EU27 have

Figure 2. Achievement of targets under baseline and reference case scenarios



Source: EEA report 2010

decreased by 6.9% in 2009 compared to 2008 levels, corresponding to a 17.3% decrease compared to 1990 levels. The EU27 2009 emissions are therefore very close to the bloc's target of a 20% cut in emissions by 2020 compared to 1990 levels. Emissions reductions were particularly steep in 2009 due to the impacts of the economic crisis. The effect on emissions is more important in ETS sectors (due to a steep reduction of industrial output and corollary reduction of power consumption and production) than in non-ETS sectors.

According to EEA projections (with PRIMES/GAINS models), under a baseline emissions scenario (taking into account the existing framework of policies and measures), EU27 emissions would be reduced by 14% in 2020 compared to 1990 levels. The remaining gap of 6% could be achieved with the use of international credits. The report also considers a scenario where the CEP is fully implemented (RES and emissions reductions objectives). In this case, the 20% would be reached in 2020 domestically. Both scenarios call into question the realism of policies and measures that have already been implemented. Reasons for optimism based on the PRIMES results

are open to debate: are these sectoral trends credible? Is the existing set of policies and measures actually driving the transformation at the sector level?

The effectiveness of the existing CEP to decarbonise the European economy is a very different issue to meeting commitments from a purely accounting viewpoint. The 2020 objectives may well be reached through the CEP, but without guaranteeing the capacity to achieve a tougher 2050 target. In particular, the 2010-2020 period will be decisive in terms of launching investments that will govern medium-term emissions, independently of the real emissions level reached in 2020. Further review of the performance of existing policies and measures is necessary to estimate whether they will be sufficient to initiate transformation at the sector level by 2020, and whether they can pave the way for further decarbonisation, avoiding lock-in effects and demonstrating compatibility with long-term objectives.

1.2.2. A focus on the ETS

The financial crisis is severely impacting the ETS cap integrity: emissions from industrial

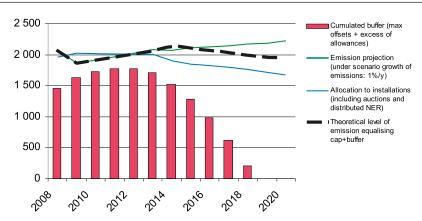


Figure 3. Emission profile in the ETS sectors (without aviation) under a scenario of 1% emission growth/year

Source: IDDRI

installations covered by the EU ETS fell by 11% in 2009 compared with 2008 due to the global downturn. As a result, in 2009, European companies were left with surplus emission allowances of at least 80 million tonnes of CO2 (Point Carbon). Consequently, it appears that the 2020 target will be met with virtually no further effort to reduce emissions when taking into account the amount of excess allowances due to recession in the beginning of the second period and the volume of offsets authorised to flow in the system (according to our hypothesis, based on an annual 1% emissions growth, the buffer may reach a total of 1.7 billion tons, of which around 1.5 billion are offsets²). Depending on the magnitude of the recovery, this will limit the need for internal abatement until late in phase III - possibly until 2018, according to IDDRI estimates.

As a result, it is likely that the price signal will be maintained at medium levels (however the price is currently low, at ~15€/ton) whereas higher levels were initially expected (according to the first impact assessment of the Commission, and around 40€/ton or 37€/ton according to the Deutsche Bank) to trigger investments in low carbon technologies in the longer-term. Limited levels of price are only likely to trigger incremental changes but may not constitute the main driver of investment in low carbon technologies by 2020. However, low carbon price levels between 2008 and 2020

are unlikely to pave the way for the emergence of low carbon technologies following 2020; whereas such investments should be anticipated.

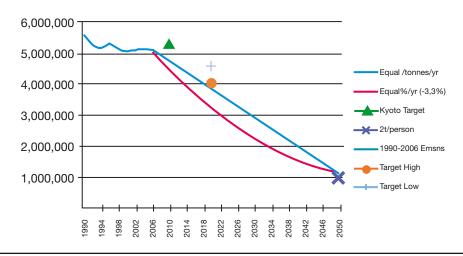
The excess of free allowances creates a rent for industrial sectors, particularly in times of recession. For example, the steel industry cumulated more than 140Mt in 2008 and 2009, which represents a rent of 2.1 billion euros (assuming a carbon price of 15€/ton). In comparison, for the period 2010-2015, the French fund dedicated to the demonstration of renewable energy amounts to 1.3 billion euros. The amounts of free allowances that some industrial sectors have accumulated due to the unprecedented economic crisis are likely to influence the debate on the level of free allocation and auctioning beyond 2013: to some extent, a part of the free allocation reserved for industries exposed to carbon leakage has already been distributed, while governments are struggling to reduce public deficit and to obtain new revenue sources.

1.3. The 2020 target viewed from a 2050 perspective: Is the EU emissions reductions pathway consistent?

Despite changing contextual elements, one key factor remains constant: the commitment by the EU, and even more importantly the need for the EU to make the transition towards a low carbon economy and to reduce its GHG emissions by at least 80% by 2050 as compared to 1990 levels. EU 2020 targets and policies must structurally prepare the EU economy for

^{2.} Considering the ETS cap and related offsets, as in the communication of July 2010 (w/o aviation and new sectors).

Figure 4. Trajectory indicator for the EU27



Source: Climate Strategies (2009): Comparability of efforts by Annex 1 Parties, an overview of issues

massive future cuts. The legacy of the CEP in 2020 will be key for the cost efficiency and, beyond that, the feasibility of the transition towards a low carbon economy, in particular for the 2020 – 2030 period.

There exists no single consistent emissions reduction pathway and further work is needed to identify the portfolios of consistent trajectories. However, simply through the use of a very straightforward indicator, it becomes clear that, if the EU sticks to the 20% target, it runs the risk of following an inconsistent pathway.

1.4. Does the CEP have the means to deliver its ambitions?

The CEP sets targets and also the means to reach these objectives; but the situation is different for the ETS, the renewables and energy efficiency targets. To some extent, given the nature of the ETS, the target also provides a means to reach the objective. This is not the case for the renewables and energy efficiency targets. The renewables target is binding, but the responsibility of putting instruments in place to incentivize the development and deployment of renewables (mainly feed-in tariffs) to reach the target lies mainly in the hands of individual member states. The energy efficiency target is non-binding, and purely indicative. There are some EU directives that contribute to the enhancement of energy efficiency, but they are not sufficient and again the responsibility

mainly lies in the hands of individual member states³. This somewhat questions the adequacy of means and objectives, both for energy efficiency and renewables targets.

1.4.1. A focus on energy efficiency

According to the Ecofys report "Energy savings 2020", existing energy efficiency policies (95 Mtoe), renewable energy policies (20 Mtoe) as well as the economic recession (70 Mtoe) are expected to reduce energy use in the EU 27 in 2020 by 185 Mtoe compared to the 2020 baseline projection, leaving a gap of around 209 Mtoe compared with the indicative objective. The report estimates that around 94% of the target can be reached in non-ETS sectors in conjunction with the RES target.

Some EU directives aim at increasing the energy efficiency of certain products or specific sub-sectors. However, it seems that these policies, focusing mainly on the improvement of the unit energy efficiency of specific products, are insufficient to control the absolute level of energy consumption. Currently, a more holistic approach to energy efficiency management lies in the hands of

^{3.} There is a lack of mutual understanding of the target at the EU level since it is not defined in absolute terms, but relatively according to a baseline. Achieving the overall 20% energy efficiency target requires around 394 Mtoe of savings in 2020, compared to "prerecession" baseline expectations of the 2006 EEAP.

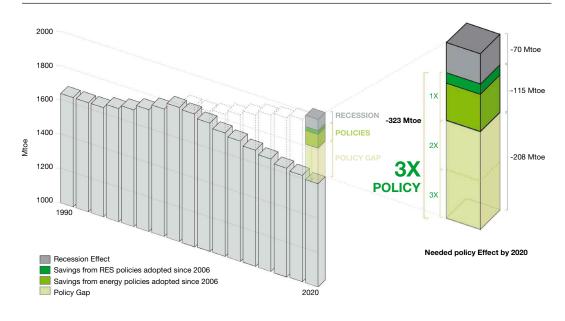


Figure 5. Need to leverage policy impact to achieve energy efficiency targets

Source: Climate Strategies (2009): Comparability of efforts by Annex 1 Parties, an overview of issues

member states which need to design national energy efficiency action plans as part of the Directive on energy end-use efficiency and energy services. These plans are not, however, uniform in ambition and effectiveness. As a result, the EU remains weak when it comes to demand-side management.

If the EU genuinely seeks to achieve its energy efficiency target, then either one of the following is necessary:

- The reinforcement of its current approach towards energy efficiency, namely: an indicative goal, a number of directives targeting certain products or specific sub-sectors, plus fiscal measures and financial support that help develop policies and measures at the Member State level.
- The design and implementation of a more coordinated approach.

A coordinated approach may be required:

- To encourage adequate national policies with national targets set by the Burden Sharing Decision, because not all countries have put comprehensive national policies into place that will enable targets to be met.
- When efficient policies need to address an entire sector's value-chain. This is the case for transport where an integrated

- policy (on transport end-uses and also on infrastructure) is necessary because the mere improvement of unit of energy consumption in road transport will not suffice.
- When efficient policies rely on some kind of trans-national coordination: within the context of the internal market, further harmonization is required to ensure better integration at regional level and ultimately, more coherence and efficiency at the EU level. This is notably the case for industrial development in certain key technologies (such as building, transport or energy), physical interconnections (power grids, energy and transport networks etc) and other infrastructure developments etc.

1.4.2. A focus on renewable energies

Tensions are emerging around the achievement of RES targets. The provisions included in the Package to allow for RES development are severely impacted by low carbon prices, increased public deficits and slow progress on EE. As a result, pressure is intensified on:

 Social costs related to support mechanisms and on how to finance new investments (through feed-in-tariffs) while continuing to support early-stage renewable

2000 Energy supply (trend, projections WEM) 1800 Energy supply [projections WAM] 1600 Energy use excluding transport (projections WAM) 1400 Transport (trend, projections WEM) Mt CO, equivalen 1200 1000 800 Industrial processes (projections WAM) Agriculture (trend, projections WEM) 600 Agriculture (projections WAM) 400 Waste (trend, projections WEM) 200 Waste (projections WAM) International bunkers (trend) Note: WEM: with existing (curent) mesures; WAM: with additional (planned mesures

Figure 6. GHG trends and projections 1990-2020, emissions by sector

Source: Energy savings 2020 - Roadmap 2050

technologies. The focus on wind raises two issues: increased pressure on the ability to massively develop new capacities due to social opposition and the possible eviction effect on other technologies. In particular, biomass has been insufficiently taken up, which is an issue given its huge potential, especially in new MS.

 The large scale integration of RES in the network.

The RES target was not only set to achieve emission reduction at least-costs, it also aimed to lay the foundations for the launch of a competitive RES industry in Europe. However, support schemes set at the national level are not sufficient on their own to achieve this objective: the existing combination of targets and feed-in tariffs favour the most mature technologies (i.e. wind and PV) to the detriment of less advanced technologies (biomass, geothermal power plants, tidal energy...).

1.5. Does the CEP satisfactorily address all key sectors?

The EEA 2009 report also details trends in emissions at the sector level. On an accounting basis, targets may well be met by 2020 due to a combination of successful measures taken both at the EU and national levels and, importantly, the impacts of the economic crisis. However, desegregation of sectoral level trends reveals insufficiencies in EU policies for addressing long-term transformation in many

sectors (see Figure 5), in particular the energy sector (while emissions have decreased during previous decades, more recently the rates are rebounding). It also highlights loopholes in structurally addressing rising emissions in the transport sector (continuously increasing: +26% between 1990 and 2007, in road, international aviation and shipping). To a lesser extent, nothing concrete seems to be happening in the agriculture sector, which is a sector with an inherent potential to usefully contribute to EU efforts to reduce GHG emissions. Lastly, European HFC emissions have been on the rise since the Montreal protocol and little has been done at the EU level to address the issue.

1.5.1. A focus on transport

A number of EU policies and principles need to be better coordinated (transport/climate and energy/internal market/territorial cohesion/EU solidarity) and existing financing instruments are not effective to drive low carbon trans-European infrastructure development.

As regards R&D policies in the transport sector, the example of Electric Vehicles demonstrates that there is a lack of shared opinion on which technological and industrial models should be backed at the EU level, based on a common understanding of the related industrial organisation to develop over the short and longerterm. The EU has a role to play to orientate such R&D choices, pushing and standardising technological options, backing the development

of innovative business models and ensuring integration with other EU policies (investments in ETS sectors, territorial integration, trans-European infrastructure development etc).

The example of rail revitalisation illustrates the absence of a reflective cost structure between transport modes that is required to develop a pan-European vision of infrastructure and to finance priorities in order to move to a low carbon transport system. Tremendous challenges surround the development of integrated and efficient TEN networks that would allow for more complementarities between modes. In effect, planning has essentially entailed the adding together of significant parts of national networks for the different modes and connecting them at national borders. From that perspective, the TEN-T policy was considered as a financial instrument, though with a limited budget and with little coordination of its disbursement between the various financial instruments and institutions. In comparison, national budgets were dominant and national priorities have orientated investment decisions with a significant priority dedicated to road.

2. Conclusion: Suggestions on the way forward

The CEP assessment isolates at least five different reasons for reconsidering the level of ambition and the content of the Package:

Due to the crisis, the balance of targets and policies has been disrupted (especially regarding ETS, RES and EE targets) and the level of transformation induced by targets is lower than expected (in particular in the ETS). In addition, there are structural reasons for reappraisal of the Package, which are linked to the way that climate and energy policies have been designed and how they operate:

- The time consistency of the emissions reduction pathway is not optimal: 2020 is not an end point. The heritage (in particular in terms of infrastructure) left at this time horizon is of crucial importance to make the 2050 targets industrially and socially feasible.
- The means implemented to reach certain targets are insufficient (especially the EE target).

 Emissions from some sectors have not been properly addressed (in particular transport).

We propose some areas of investigation to re-open discussions on the ambition of the CEP and on how to complement existing instruments:

(1) First, it is essential to reassess which objectives the CEP now intends to serve.

Initially, the climate and energy package in general, and particularly the 20 to 30% range of emissions reductions, aimed at: 1) promoting actions by others to increase the overall ambition level of the Copenhagen Agreement, and 2) transforming the EU economy domestically. The international context has now changed. As we have seen in Copenhagen, proposing a target increase, without clearly stating how this target can be met, does not trigger additional actions by others. Taking into account this change in the international context, what is the climate and energy package aiming at? The EU should now clarify how it intends to use the CEP, so as to propose improvements that are consistent with the objectives that the instrument is aiming at. Is it to reach a given level of emissions in 2020? Or is it to structurally prepare the EU economy to achieve its 2050 goal? The answer to these two questions might have been the same in 2008, but this is no longer the case. The economic crisis has changed the level and nature of the structural transformation induced by the climate and energy package.

(2) Considering the structural over allocation in the ETS due to the economic downturn, it is worth questioning how market dynamics can be restored in the short-term. This raises more profound questions on the evolution of instrument design.

The economic crisis significantly reduced emissions within the EU. The emissions reductions within the ETS were even higher than in non-ETS sectors. Electricity utilities remain short overall, but verified emissions from industries are well below their caps. But the economic crisis did not only provoke a fall in emissions: it also severely hit ETS sectors.

Within this mixed context, is there a need for short-term intervention in the ETS to address the over allocation of phase II and III (2008 -2020)? The 2008 crisis is exceptional enough to justify an occasional intervention in the system. But beyond the possibility of short-term intervention, the lessons from the economic crisis and from the first implementation phases must be drawn from a more structural perspective. The over-allocation issue could be dealt with if longer-term objectives for the ETS and its transformational pathway were clarified, in 2020, 2030 and beyond. This would restore credibility for market actors, who are currently freezing investment decisions, due to both the economic context and a poor understanding of the political willingness to decarbonise the power sector. Whereas they have little political acceptance at the EU level, price control mechanisms could also be discussed as a means of maintaining the price signal. Finally, the role of offsets in the system is definitely part of this issue: what the EU really wants to achieve domestically and how it can be rendered compatible with international support.

(3) A change in the nature of EU intervention on non-ETS sectors may be envisaged in light of the mixed results obtained in energy efficiency and mitigation of transport emissions.

Generally speaking, the EU has a better track record in the ETS sectors and in non-ETS sectors. This is certainly due to the specificities of sectors. But it is also due to the different forms of EU interventions between ETS and non-ETS sectors. Given the nature of the ETS target, the ETS is both a mandatory objective and also a set of means with which to reach the objective. On the contrary, the energy efficiency target is only indicative, but most importantly it is not associated with a full set of EU measures for reaching the objectives. There are EU directives that aim at improving unit energy efficiency. But the responsibility for reaching the target lies mainly in the hands of individual member states. The differences in the nature of EU action in ETS and non-ETS sectors are partially explained by institutional factors. But, does the EU want to take the same approach with non-ETS sectors? Or do all or some non-ETS sectors, in particular those

such as transport where emissions are rising steadily and rapidly, necessitate a genuinely EU and coordinated approach? To reach the right solution, subsidiarity should be regarded as what it really means: finding the best level of intervention to reach a policy objective.

(4) R&D is a cornerstone of climate policies. Additional funding and innovative instruments to channel these funds have yet to be determined.

The present investment in R&D (public and private) for the SET Plan group of technologies is estimated at approximately €3 billion annually. The Commission calls for more than a doubling to €8 billion a year or €50 billion over the next 10 years. Although the sources of this funding still need to be decided, it should be based on a combination of EU, national, public and private sources. The missing €5 billion p.a. funding will still need to be found and approved by the member states. This will not be easy as governments are trying hard to reduce their fiscal deficits and private companies continue to suffer the effects of the recession. Options include:

- Increasing the EU budget's share of funding
- Reinforcing the role of the EIB, in particular to encourage private finance on energy and transport infrastructures.
- Using ETS auctioning revenues either at EU or member state level through the use of the New Entrants Reserve (NER)⁴ or earmarking ETS revenues.
- (5) The EU may consider a strategy review to accommodate the specificities of Member States.

Generally speaking, the EU climate policy process has a tendency to give insufficient attention to the specificities of new Member States in the first phases of discussions, only addressing these issues in the final stages when the time comes to reach a compromise. This kind of process has two drawbacks. First, it does not create the best incentives to facilitate the transition towards a low carbon economy in new member states,

 $^{4.\ \}mbox{The NER}$ is already used to finance the 12 CCS demonstration projects.

taking into account their national circumstances (energy poverty, energy security vis-à-vis Russia, coal based energy production...). Second, it weakens the overall system by creating exceptions and loopholes. How can new Member States be engaged more constructively to better take into account their specificities and to strengthen the system as a whole?

(6) Finally, the international context is changing and the EU now needs to re-adapt both internal and external strategies

The international context has changed since Copenhagen. The US has announced that it no longer intends to implement a cap and trade system in the near future. It will

instead concentrate on the implementation of specific policies and measures (feed-intariffs for renewables, energy efficiency in residential building...). While this is much more than nothing, the US refuses to guarantee that it will meet its 17% emissions reductions target in 2020 compared to 2005 levels. And the possibilities for linking with the EU ETS have vanished. On the other hand, China is acting massively and rapidly, notably by aggressively supporting its renewables sector (wind and solar in particular). Where does this leave the EU? How does it need to frame its domestic targets and policies to fit into this new context, but also to have an impact on the actions of others? ■

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