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SUMMARY

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Summary of the report

Climate Change and Energy Security in Europe

Policy Integration and its Limits

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Energy production and consumption on the scale practised by Europeans has enormous environmental impacts. In the European Union (EU) roughly 80 per cent of energy consumed comes from burning fossil fuels which is the main source of greenhouse gases (GHGs) and so climate change. At the same time fossil fuels are largely externally sourced thus increasing European dependency upon a handful of suppliers, many of which are volatile politically or economically. Therefore, GHG emissions reduction and energy security have become two of the main energy-related policy drivers in the EU today necessitating fundamental changes in the way we produce and consume energy.

Despite the recent new era in EU energy and climate policy, few in depth analyses have examined the relationship between these two policies. This report analyses how far the EU is integrating its energy and climate change policies. As an international leader in climate change policy, it is necessary for the EU not only to make sufficient progress in both these areas but also to take steps towards better integration of these two policy areas in future. Therefore this report also focuses on identifying possible synergies and trade-offs between the EU's most recent package of legislative measures to combat climate change and its energy security objectives. Better understanding of these interactions will allow potential win-win situations between these two policies to be maximised while also identifying inevitable trade-offs.

Progress on Integration Commitments

The issue of energy and the environment has been on the European political agenda since the 1980s and has gone hand in hand with the EU's desire to act as a global leader in international cooperation to combat climate change. While progress was initially rather slow, a number of policy initiatives have now been developed in the field of energy efficiency, renewables, research and development as well as the completion of the first trial run phase of the EU Emission Trading Scheme (ETS).

Energy Efficiency

Energy efficiency is a core component of both energy security and climate change objectives. However, despite a number of initiatives aimed at energy efficiency and savings, progress made within Member States has been particularly disappointing. The Energy Efficiency Package presented by the Commission in November 2008 will give new impetus to this policy area but it is notable that a legally binding target on energy efficiency was not explicitly part of the 20-20-20 agreement.

Energy efficiency, and specifically the effective implementation of EU legislation in this area, should be made a priority to reach both energy security and climate change objectives. There is considerable scope to improve performance, especially in the residential sector.

Renewables

In the field of renewables – the other obvious component of a truly integrated energy and climate policy – progress has also been slow. The Commission anticipates that the EU will fall short of its initial "indicative" target of 12 per cent renewables in energy supply by 2010, as set out in the 2001 renewables Directive. Rather than too difficult, the Commission claimed that the 12 per cent target was insufficiently ambitious to drive change and proposed a *binding* 20 per cent target by 2020 which was adopted as part of the recently agreed 'Climate and Energy Package'.

Much greater effort will be needed from Member States to ensure that their renewable energy targets are met. It is important not to place too much confidence in the legal nature of new commitments and to gain a better understanding of why the original 2010 targets are likely to be missed.

Research and Development

The EU has made efforts to increase funding for research in recent years but it is still lagging behind countries such as the United States and Japan. Funding currently received by 'alternative' forms of energy is dwarfed by that received by nuclear fission and fusion and fossil fuel related energy technologies. A positive outcome of the recent Climate and Energy Package, however, has been the allocation of a proportion of the ETS emission allowances (with an estimated value of between €6-9 billion) towards the funding of large scale Carbon Capture and Storage (CCS) projects in the EU.

A great deal more investment will be needed in research and development, in particular to fund research in non-nuclear energy and energy efficiency projects. Member States should ensure that their 'willingness' to allocate up to 50 per cent of their revenues from ETS allowance auctioning to mitigating climate change is translated into a significant new investment in cleaner technology such as CCS rather than simply a repackaging of existing spending.

Emission Trading Scheme

The ETS is the EU's flagship policy initiative and has gone some way to fill the gap left by the earlier failure of the Commission's carbon/energy tax proposal and internalise some of the environmental costs of energy intensive industries. This scheme therefore has the potential to reduce the amount of fossil fuels used in the EU and so contribute to both climate change and energy security objectives. In its initial trading period, a number of lessons were learnt but it remains to be seen whether the second trading period will spur innovation and emission reduction effort.

The amended ETS Directive has extended the scope of the scheme but many loopholes have been added for new Member States as well as exceptions for industrial sectors at risk of carbon leakage. The admittedly considerable increased pressures on EU industry in the current economic climate should not be used as an excuse to further weaken the implementation of the scheme in the post 2013 period.

Synergies between the 'Climate and Energy Package' and Energy Security

Further integrating climate and energy policy will bring both win-win situations (that is to say synergies) as well as trade-offs to different sectors and actors. Maximising the former and minimising the latter is vital if sufficient and timely progress is to be made towards a secure low carbon economy.

The main synergy between the goal of energy security and the four legislative instruments resulting from the 2008 'Climate and Energy Package', in particular the Decision on effort sharing, the new renewable energy Directive and the revision of the ETS Directive, is the likely reduction in fossil fuel consumption and imports. A further synergy is the potential role of the revenue raised from the auctioning of ETS allowances, which could be used to bolster the development and deployment of clean technologies. This would have knock-on impacts on energy security by promoting energy diversification and energy efficiency. In addition, renewable energy, and biofuels in particular, are seen by the Commission as a major opportunity to wean the European transport sector off its overwhelming dependence on imported oil. This would reduce national and European dependence upon imported oil. Renewables also offer a possible way in which the EU's climate change agenda can be promoted in the Union's bilateral relationships with other key actors and major oil importers, encouraging them to diversify their own energy supply whilst retaining their partnership in cooperating on a green agenda. The CCS Directive offers a number of possible synergies with energy security objectives. Mainly it puts Europe in a strong position to deal with its CO_2 emissions while also continuing to use its indigenous coal supplies and in addition to maintain coal as a possible external energy source.

Conclusions

This report discusses the progress made by the EU so far in integrating its climate and energy policies as well as pointing to areas where extra efforts will be needed in future. A greater focus on the possible synergies and, where necessary, trade-offs between EU climate and energy policies is one area deserving greater attention in future. The European Commission already has Impact Assessment as an instrument which it can use to clarify the relationship between these two high level EU objectives in specific policy proposals but much more thorough use could be made of this tool for this purpose. Win-win situations will not always be evident and complete coordination of competing objectives may not always to possible or even desirable. However, as we enter a 'new energy era' with the rise of both energy security and climate change policy issues up the political agenda, there appears to be a better chance at greater integration than any time in the past. Better understanding of potential synergies and trade-offs in these two policy areas will facilitate this further integration. Somewhat counter-intuitively, creating a new 'super-DG' for energy and climate change, possibly under the authority of a single Commissioner, as has been proposed by an internal task force of senior officials acting under a mandate from the outgoing Commission, may well turn out to be detrimental to further integration aimed at promoting sustainable development in Europe and beyond.

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