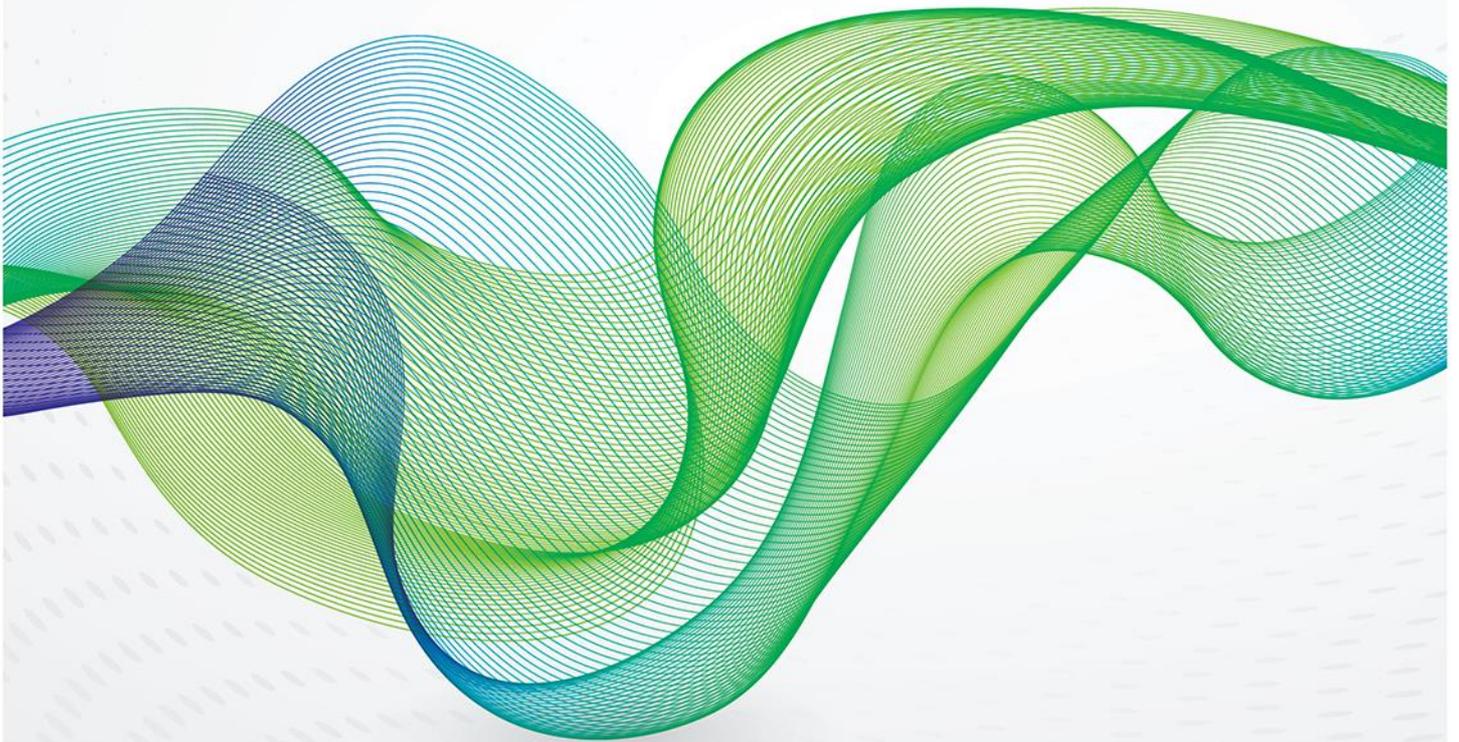




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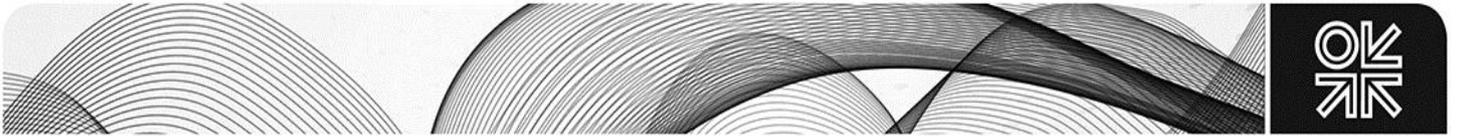
October 2014

# Energy and climate targets for 2030: Europe takes its foot off the pedal



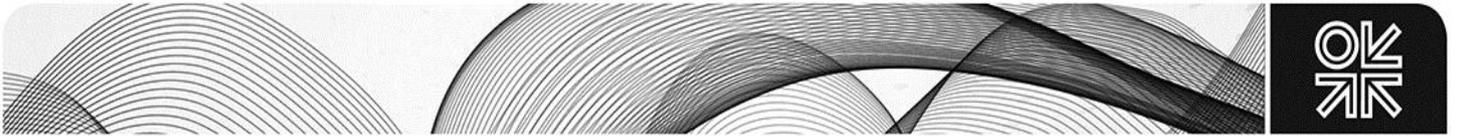
OXFORD ENERGY COMMENT

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## Summary

The European Union has decided its energy and climate goals for 2030, becoming the first major player in the international climate negotiations to make a commitment in advance of next year's United Nations climate conference in Paris. Europe has thus maintained its leadership role in terms of being the first mover, but no longer clearly in terms of ambition. The compromises needed to get agreement within the 28-country organisation have produced a 2030 emissions reduction target that is only barely consistent with the bottom end of the 80-95 per cent range of emission cuts that industrialised countries are aiming to achieve by mid-century. EU leaders have also decided on a future loosening of the policy framework that has been driving their national renewable energy and energy efficiency programmes. If the EU has decided to rely in the next decade primarily on the single target of emissions reduction to achieve progress, it must reform its chosen instrument – the Emissions Trading System – to deliver this target.



## Introduction

The European Union has set out its climate and energy goals for 2030. At their October 23-24 summit, EU leaders said they intended to achieve, by 2030, a 40 per cent reduction in emissions (from 1990 levels), a 27 per cent renewable share of overall energy consumption, and a 27 per cent improvement in energy efficiency compared to business-as-usual energy projections<sup>1</sup>. Where, beforehand, only five EU states had set themselves energy and climate targets for 2030, the summit decision now gives all 28 member states goals for 2030, albeit collective ones. However, after 2020, the looser policy framework for future renewable and energy efficiency development may no longer give investors certainty about putting their money into low-carbon energy and energy saving.

Procedurally, the European move responds nicely to the timeline agreed in the United Nations climate negotiations. This calls on countries to come up with their climate targets and contributions to mitigating climate change by March 2015, with the aim of working these into a global climate accord at the Paris conference in December 2015. Had EU leaders failed to agree their climate/energy package this autumn, they might well have become too distracted by the renewed economic problems within the EU to meet next March's deadline.

So, as it was in the earlier round of climate negotiations that collapsed in Copenhagen in 2009, the EU is again a first mover. But how much is it an advance on current EU policy? The current targets, for 2020, are for a 20 per cent emission cut, a 20 per cent renewable share and a 20 per cent improvement in energy efficiency. The EU is on track to hit or over-achieve its 2020 emission and renewable targets, and to come very close to the efficiency goal. However, merely continuing the present policies – without any ramp-up of targets – for a further decade would, according to the Commission modelling deliver a 32 per cent emission reduction and a 24 per cent renewable share of energy by 2030 (though efficiency would barely improve)<sup>2</sup>. In other words, the new 2030 targets do not represent much of the extra effort that climate scientists tell us is needed, from all countries and regions, to deal with accelerating climate change. Clearly the new 2030 targets are the highest common factor that could be agreed among 28 countries with widely differing energy mixes and income levels. The give-away of the compromises that took place is that each of the three numerical targets is prefaced by the phrase “at least”, a sop to those countries, mainly in western Europe, that had wanted to set the bar higher.

Might the EU agree to a larger emission reduction if, in Paris next year, the US and China were to come with major climate pledges of their own and to cement them into an ambitious global accord? EU leaders could only agree that they would “revert to this issue after the Paris conference”. There is a clear division on this. The president of the European Council, Hermann van Rompuy, and President Hollande of France, said if there were any change to the 40 per cent target, it would be to raise the target. That was the point of inserting “at least” before each target. Yet any post-Paris review of the target would take place in the European Council, the format for EU summits, where unanimity is the rule. “Any attempt to toughen European objectives will need our consent”, said a Polish minister, adding “and there will be no such consent”.

## Emission reductions

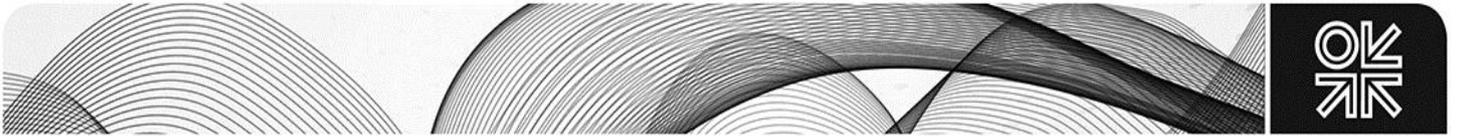
The only target that will really count is the 40 per cent emission reduction. This is because it can be enforced – on industry through the Europe-wide Emission Trading System that requires emissions to be matched with carbon allowances, and on non-ETS sectors such as transport, services and agriculture through national emission quotas. Having one lead target makes for greater simplicity, which previous OIES comments have argued for<sup>3</sup>. Is a 40 per cent cut by 2030 credible? At first sight it looks a stretch to replicate in 10 years (2020-2030) a cut of 20 per cent that it took Europe 30 years (1990-2020) to achieve. In the earlier period, there were one-off gains from transforming communist-era heavy industry in eastern Europe in the earlier period. Moreover, the EU is no longer to count any international emission reduction credits towards its 40 per cent target, but to achieve it based on

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<sup>1</sup> [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/145397.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/145397.pdf)

<sup>2</sup> Summary of Impact Assessment, SWD (2014) 16, page 4-5, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014SC0016&from=EN>

<sup>3</sup> OIES Comment, The EU's new energy and climate goals for 2030 – under-ambitious and overbearing? January 2014



emission reductions only from within Europe. On the other hand, we know, from verified data, that the EU reduced emissions by 18 per cent by 2012. So having cut emissions by 18 per cent in 22 years (1990-2020), a further 22 per cent reduction in 18 years (2013-2030) ought to be feasible. There is a caveat. Just as recent recession has made emission-cutting easier, so any future economic boom would make it harder.

If 40 per cent is feasible, is it also sufficient? Is a 40 per cent emission cut by 2030 sufficient to meet the EU's long term political goal, in tandem with other industrialised regions, to reduce emissions by 80-95 per cent by 2050? The Commission has claimed that cutting emissions by 40 per cent by 2030 would be an adequate milestone on the road to 2050, and is consistent with an 80 per cent reduction by mid-century<sup>4</sup>, despite, for instance, the difficulty in curbing transport emissions that continue to rise in Europe. Significantly, the latest EU summit called on the Commission to come up with a new emission strategy for transport.

As is currently the case, emission reductions will continue to bear more heavily on the 10,000 odd industrial installations covered by the Emission Trading System. Their emissions are to come down by 43 per cent by 2030 (compared to 1990), as the yearly rate of reduction – the downward slope – in ETS allowances is increased from 1.74 per cent to 2.2 per cent from 2021 onwards. However, this is only expected to give a minor lift to the price of ETS allowances, because of the huge current surplus in the system. The Commission has proposed a reform of the ETS by parking excess allowances in a “market stability reserve” and returning them to the ETS only when demand for allowances tightens. But, in proposing this reform, the Commission assured Poland, politically sensitive to the carbon price due to its dependence on coal, that this reform would only take effect after 2020. Some countries, notably Germany and the UK, have called for earlier introduction of this reform, but at the EU summit no one wanted to push this for fear of provoking a Polish veto of the whole energy and climate package. So there is still no sign of anything to lift the ETS carbon price to a point where it would redress the present price advantage that dirty coal has over cleaner gas.

## Free allocations

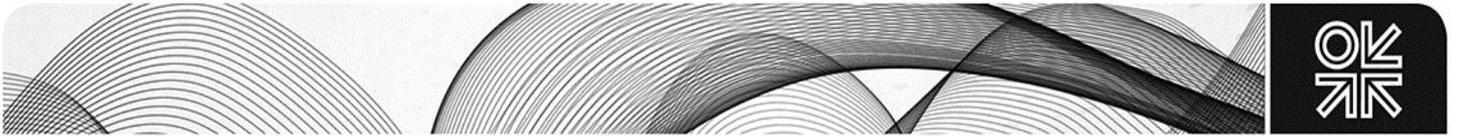
You might imagine that EU governments, given the financial pressures most of them are under, would be keen to auction as many ETS allowances as possible. And they probably would be keen, if the allowance were higher. As it is, the majority of governments prefer relief from pressure by their industrial lobbies, gained by appeasing them with free allowances, rather than maximising auction revenue. And free ETS allowances provide the main means of buying the support of east European states for the 2030 package. Under current legislation, east European governments are supposed to entirely phase out free allowances for their electricity generators by 2020. Under the new deal for 2030, they will be able to keep handing out up to 40 per cent of their total allowances to their energy sectors (chiefly electricity generators) for free.

Much of the value of these free allowances ends up as windfall profits on the books of eastern Europe's electricity generators. To some extent, this insulates such companies from any financial pressure from the ETS to move to lower-carbon generation. In return for allotting free permits to their generators, governments are supposed to ensure that money, equivalent to the market value of the freely-given allowances, is invested in modernising their energy sectors. This area of financial relations between east European governments and their (often government-owned) utilities is murky. But it appears that this quid-pro-quo of free allowances in return for modernisation has been widely ignored, and is likely to remain so after 2020, despite the EU summit call for greater transparency in this area.

The other recipients of free allowances are Europe's export industries deemed at risk of carbon leakage and of losing market share and jobs to other regions of the world operating without carbon constraints. The free allocation is not total – only up to a benchmark set by the 10 per cent most energy-efficient companies in a sector. But it has been too generous, because it has assumed a wildly unrealistic carbon price of Euros 30 a tonne and because the trade criteria to judge a sector's exposure to export markets have been too widely drawn. These flaws will probably be remedied. But free allowances to guard against carbon leakage are to continue after 2020. Europe's

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<sup>4</sup> EU roadmap to a low carbon economy in 2050, [http://ec.europa.eu/clima/policies/roadmap/index\\_en.htm](http://ec.europa.eu/clima/policies/roadmap/index_en.htm)



largest exporter, Germany, is insistent on this. “We have to make sure our competitiveness does not suffer internationally”, Chancellor Angela Merkel, told her fellow EU leaders. Moreover, carbon leakage measures are part of Europe’s negotiating hand and insurance against failure in Paris next year.

## Burden-sharing

How the 28 EU states share the cost of emission reductions among themselves is a matter of internal EU cuisine and so, strictly speaking, immaterial to the outcome of international negotiations. However, the compensatory provisions for poorer EU member states are an indicator of the incentives needed for poorer countries, especially those with coal-based energy systems, to sign up to climate agreements (although of course poorer EU states can rightly expect compensation on grounds of political solidarity within what the EU is beginning to call its Energy Union).

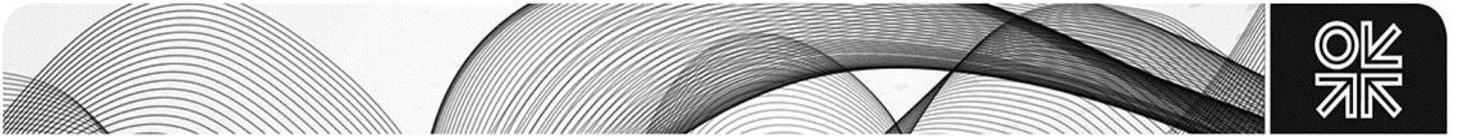
As under the present system, 88 per cent of all ETS allowances will be distributed to each of the 28 member states in proportion to its relative share of current emissions. But the remaining 12 per cent of allowances will go to the poorer member states to provide them with extra general revenue from auctioning, though a small part of it will be put into an energy modernisation fund. This 88/12 per cent redistributive split, for the post-2020 system, is exactly what was agreed nearly seven years ago for the system up to 2020. To carry this compensatory system on until 2030 seems unjustified in economic and environmental terms, given the fact that poorer member states have grown relatively closer to the EU average in income and carbon intensity in the intervening years. Politically, however, eastern Europe now exercises more influence inside EU institutions, where two former Polish prime ministers are to chair the European Council and the European Parliament’s energy committee and a Slovak has been made a Commission vice president responsible for Energy Union.

That said, east European member states are being asked, after 2020, to bite the bullet on reducing emissions in sectors not covered by the ETS – chiefly transport, agriculture and services. The current system allows them to continue to increase their non-ETS emissions up to 2020, the least developed states by up to 20 per cent, while richer member states have to cut non-ETS emissions by up to 20 per cent. After 2020, the non-ETS sector emission reduction targets will range from zero per cent (for the poorest) to 40 per cent (for the richest). In addition, richer countries will be able to get some relaxation in their non-ETS targets in return for a reduction in their ETS allowances. So a country like Denmark might choose to surrender some of its ETS allowances in return for more leeway in tackling road transport emissions. This is only intended to be a one-off operation, but it does at last provide a welcome link between the ETS and non-ETS targets and could pave the way to more general flexibility in the system.

## Renewables and energy efficiency

The post-2020 regime for renewables will be a free-for-all. The 27 per cent target is to be “binding at the EU level”, and, in contrast to the present system, is explicitly stated as “not [to] be translated into nationally binding targets”. How will it be delivered? The summit answer was that “it will be fulfilled through member states contributions guided by the need to deliver collectively the EU target”. Who will do the guiding? When it proposed the 2030 targets in January, the Commission suggested a new form of post-2020 energy governance by which it, as the EU executive, would monitor national policies on emission reduction, renewable energy and energy efficiency, and propose amendments to these policies where necessary. The Commission envisaged something similar to its intrusive fiscal supervision role for the 18 country members of the Eurozone. Clearly, EU leaders have no such government-constraining role in mind for the Commission. At their October summit, EU leaders would only go so far as to agree that “a reliable and transparent governance system without any unnecessary administrative burden will be developed to help ensure that the EU meets its energy policy goals, *with the necessary flexibility for member states and fully respecting their freedom to determine their energy mix*” (italics added).

The regime for energy efficiency is even looser – an “indicative” target of 27 per cent, with a review by 2020 “having in mind an EU level of 30 per cent”, again a sop to the Commission and member states like Germany and Denmark which had wanted a so-called binding target of 30 per cent.



Even these looser frameworks for renewables and efficiency are hedged with caveats. Individual EU states will be free to go for higher levels of renewables, but must beware lest these higher levels disrupt the EU electricity market. Likewise, countries should pursue cost-effective energy savings, but not to the point that such policies sap demand for carbon allowances and thereby undermine the carbon price in the ETS.

The EU decision on renewable and efficiency targets or non-targets has understandably dismayed environmental groups, while pleasing governments in eastern Europe and the UK. The latter will, after 2020, feel free to abandon any push for wind and solar power in favour of decarbonising its electricity supply by building more new nuclear reactors and possibly adopting capturing and storing carbon through CCS technology. However, the UK should not be under any illusion that this will be cheaper.

## Interconnections

The 2009 agreement on energy and climate targets for 2020 was accompanied by a large package of internal energy market legislation. This is not the case with the new agreement on 2030 targets, partly because the internal energy market is supposed to have been “completed” by now (even if it patently has not).

There is one exception. At the insistence of Spain and Portugal, the EU summit agreed to “take urgent measures in order to ensure the achievement of a minimum target of 10 per cent of existing electricity interconnections by 2020”, and a target of 15 per cent by 2030, between the Iberian and Baltic regions and the rest of the EU electricity market. The Baltic region has its own special problem of being still linked to the Russian grid, but the lack of adequate interconnection with France has long been a source of frustration to Spain. Indeed Spain used its chairmanship of the 2002 Barcelona summit to propose that every EU state should have a cross-border interconnection equivalent to 10 per cent of its total electricity generating capacity.

In the event, the idea was eclipsed as the EU turned to other ways to encourage cross-border infrastructure. It set up new EU-wide bodies of regulators and transmission operators to foster regional cooperation, legislated to streamline planning procedures for major projects, and has set aside some EU money to help fund interconnectors. The issue of cross-border infrastructure as a way of improving the resilience of the internal energy markets to external shocks has also moved up the political agenda with the Ukraine crisis, and with the perception that it supports trade in renewable energy. There is nothing magic about a 10 or 15 per cent interconnection target; much higher levels of cross-border interconnection elsewhere in Europe do not necessarily remove congestion or deliver competition. But whatever the merits of the targets, now that Spain and Portugal have returned to the charge on this issue, the EU may now have both the means and the will to deliver on such a target. In Spain, there is satisfaction that the Commission will be responsible for monitoring progress and will report to the European Council on all possible sources of financing, including EU funds, to ensure the 10 per cent target will be met.

## Conclusion

Europe’s early agreement on these longer term climate and energy goals chimes with the UN negotiating timetable. It also allows Europe to maintain its vision of its role in these negotiations – if you want to be a first mover, you do have to move first. How far it will encourage the really big emitters – the US and China - to be ambitious is another matter.

It is hard to resist the conclusion that the politicians who set the EU’s 2020 goals were more serious about tackling climate change than their successors who have just decided the goals for 2030 (though in Angela Merkel, they are one and the same person). The 2020 renewable targets, at EU and national level, have been much criticised for producing expensive forms of carbon abatement, but they have promoted clean energy in a way the ETS has so far failed to do. The 2020 strategy still has six years to run, and could still produce enough of a critical mass of investment in renewables and energy efficiency to continue the momentum of emission reduction into the 2020s. But thereafter if EU leaders opt for only one serious target – emission reduction – then they must ensure their chosen instrument of the ETS fulfils its potential. It needs radical redesign to be fit for purpose.