Policy implications

There is a widespread consensus that the current economic crisis represents a ‘window of opportunity’ for policy makers to lay down the foundations of a low-carbon economy. Green measures have accordingly been included in most European fiscal stimulus packages. However, when set against what experts recommend in order to seriously shift towards a low-carbon future, these measures fall short. Green spending in Europe is considerably smaller than what is widely acknowledged as necessary and is left behind by the green investments of Asia and the Americas. In terms of targeting, the picture is brighter: in most countries the emphasis is on investment in energy efficiency which is considered a very effective green measure in the context of the current crisis. However, not all measures claimed by governments as ‘green’ will in fact contribute to a more sustainable economy and, worse, the effects of positive incentives are often offset by negative ones. There is a serious risk that in some areas crisis-related measures will contribute to the lock-in of polluting and inefficient energy technologies and modes of production and consumption for decades to come.

Introduction: the case for green measures in the context of national recovery plans

While the global economy is in serious but temporary decline, climate change poses a long-term but extremely severe risk to human development and prosperity. As a consequence of the increasingly wide acknowledgement that this is a phenomenon induced by human activity, and thus one that is potentially manageable, the notion of climate change has entered the societal debate. However, for a long time the deep complexity and apparent remoteness of the consequences of climate change, as well as persistent scepticism concerning the likely severity of these consequences, prevented any real involvement of politics and society in concrete actions. Yet there is now a broad scientific consensus that ‘warming of the climate system is unequivocal’ (IPCC 2007) and that, if no action is undertaken to mitigate the process and adapt to it, climate change is liable to become ‘unmanageable and catastrophic’ (Edenhofer et al. 2009).

Accordingly, there is a general agreement also that the current economic crisis and the growing involvement of national governments in recovery initiatives represent a unique opportunity to tackle, simultaneously, both short-term economic and long-term climate-change challenges. The good news for climate-change mitigation is that falling demand is already reducing greenhouse-gas emissions. Emissions in the EU ETS1 fell by 3.07% in 2008 compared with 2007 and the ensuing unprecedented fall in economic activity will exert considerable downward pressure on emissions. EUROSTAT has projected a GDP decline for the EU27 of ~4.0% in 2009 and a further decline of ~0.1% in 2010. Some experts even predict that over the next four years (2009–2012) the combination of climate-change policy – and notably the carbon price – and economic decline will reduce emissions in the EU by up to 20% from 2008 levels, which would mean that the EU would

---

1 EU ETS stands for the European Union Emissions Trading Scheme for greenhouse gases which is the largest multinational administrative approach used to control greenhouse gas by providing economic incentives to reduce emissions (also called ‘cap and trade’).
meet its emissions reduction obligation eight years earlier than scheduled (Convery 2009). Meanwhile, the recovery plans could also lay foundations for more sustainable growth in the medium and long term. As low-carbon forms of production and consumption are driven in the medium term by government regulation and incentives, national stimulus packages could, already today, provide low-carbon industries with incentives to achieve the necessary transformation swiftly (Mabey 2009). A strong economic argument is that, without such changes, future energy price rises will trigger subsequent economic slowdowns. Furthermore, studies show that economic recovery could also benefit from the creation of the millions of jobs that a low-carbon economy could provide (see for example Pollin et al. 2008 and WWF 2009).

The OECD has warned against using the economic slowdown as an excuse to weaken efforts to achieve long-term, low-carbon economic growth. The investments made by governments today have important implications for the decades to come and that is why it is crucial ‘to ensure that economic stimulus packages do not lock in inefficient or polluting energy technologies or dirty modes of production and consumption, but instead promote clean alternatives’ (OECD 2009a).

According to trade union bodies such as the ETUC and Global Unions, it is the right moment, in the context of green technology and the need for more highly skilled jobs, for Europe to provide workers with the qualifications necessary for tomorrow’s low-carbon economy (ETUC 2009). Measures urgently required to tackle climate change must not be delayed or derailed by the current economic crisis. Trade unions insist that governments must use the fiscal response to the economic crisis to move ahead with the ‘green economy agenda’, while simultaneously recognising the social and economic impact of such measures and acting in accordance with a ‘just transition’ strategy2 (TUAC et al. 2009)

A number of recent publications have analysed and compared the climate friendliness of the economic-stimulus packages devised by various European and non-European countries and the EU. This paper aims to provide an overview of the green measures included in the economic-stimulus packages issued by the EU, ten of the EU member countries and Norway, and at the same time to compare the assessments of these policies offered by experts and, in some cases, trade unions. The choice of countries is determined by the availability of information on the stimulus packages and, in particular, on the climate-friendly policies within these packages.

An important source for the findings is information provided by respondents to a survey on national recovery policies carried out in the framework of a TURI joint report on the financial and economic crisis (Watt 2009). The fiscal-stimulus packages in question are in many cases subject to frequent revision or update and the current document portrays the situation at the time the information was collected, i.e. March – July 2009.

For the quantitative evaluation of the climate friendliness of the national recovery packages, two main studies have been used – ‘A Climate for Recovery’ by HSBC (February 2009, update May 2009) and ‘Economic/climate recovery scorecards’ prepared by Ecofys and Germanwatch for E3G and WWF (April 2009). The HSBC study has analysed the economic recovery plans by categorising the spending and tax-cutting measures according to 18 investment themes grouped under four main headings: low-carbon energy production; energy efficiency & energy management; water waste and pollution control; and carbon finance. The Ecofys/Germanwatch study applies a different methodology which takes into account not only the area of investment but also the overall climate impact of all measures included in the fiscal-stimulus packages. The effectiveness of the measures is rated by means of standardised effectiveness factors for each area of investment and for the different policy instruments used. The actual investment per area is multiplied by the two effectiveness factors to obtain an ‘effectiveness adjusted expenditure’ figure.

In the next section we review the literature on the ‘quantity’ of green measures that should be incorporated into the stimulus packages and in order to meet climate related goals, the types of measure considered most effective. We then move on to report on the measures actually adopted by the EU and selected European countries and, in some cases, on the involvement of national trade union organisations in drawing up the measures and their positions on those that have been adopted.

A framework for evaluation

Due to the complexity of the issue, and given the large number of channels through which economic-recovery policies and climate-change policies interact, it is very difficult to establish a normative benchmark for the proportion of the stimulus packages that should be allocated to green initiatives. Bowen et al. (2009) urge for some € 280bn of extra public spending worldwide on the green measures which is around 20% of the total anti-crisis package recommended by the authors. A report commissioned by the UN Green Economy Initiative calls on the high-income OECD countries to spend at least 1% of GDP on national actions to reduce carbon dependency over the next two years (UNEP 2009). The study carried out by Ecofys and Germanwatch recommends that at least half of the stimulus packages be devoted to low-carbon investments (2009).

The question of what sum the fiscal authorities should earmark for green measures goes hand in hand with that of what kind of green policies should be supported. While there is no clear consensus on what is actually a good green investment, experts have drawn up sets of criteria to assess the effectiveness of the measures and have come up with similar results. In their report submitted to the G20 London Summit in April 2009, Edenhofer and Stern (2009) suggest that any proposed policy should meet

---

2 Just Transition recognises that support for environmental policies is conditional on a fair distribution of the costs and benefits of those policies across the economy, and on the creation of opportunities for active engagement by those affected in determining the future wellbeing of themselves and their families (TUC 2008).
the following criteria: speed of decision and implementation (especially important in the current economic downturn); large multiplier effect (measures should be able to trigger additional spending from the private sector); and long-term climate benefits. According to these criteria, they recommend the governments of the G20 to concentrate their investments, in a first phase, on improving energy efficiency, upgrading the physical infrastructure and supporting clean technology markets.

The effectiveness factor used by the Ecofys/Germanwatch study is based on both short-term and long-term considerations such as emissions-reduction potential, marginal abatement costs, positive lock-in effects, removal of barriers to implementation, the degree to which dependency on fossil fuels is reduced, etc. On this basis, renewables is the policy area with the highest effectiveness factor, followed by energy efficiency in buildings and consumer goods. The instruments to implement these policies have also been rated, with low-interest loans coming out as the most effective, followed by government guarantees.

Bowen et al. (2009) also suggest some criteria to assess the potential benefits of different measures in stimulating the economic recovery in the short term and tackling climate change in the longer run. Timeliness, i.e. the extent to which a significant proportion of the associated spending is likely to take place over the next year, is, according to these researchers, a first precondition for effectiveness. In order to assess how well measures are targeted, they look into the potential long-term social returns, positive lock-in effects, likely extent of job creation, and use of under-utilised resources. The last criterion is ‘time-limitedness’, i.e. the extent to which spending is likely to be brought forward in time, thereby reducing the amount of subsequent necessary spending. In accordance with these criteria, energy efficiency measures come out as the most useful in the current situation and with regard to the transition to a low-carbon economy. Some measures relating to the transport sector, such as supply-side efficiency in new vehicles, also score quite well.

**Green measures as part of stimulus packages**

**EU**

In November 2008, the Commission published its ‘European Economic Recovery Plan’ (EERP) recommending a comprehensive package of measures at the EU and national levels, amounting to € 200bn (1.5% of EU GDP) out of which only € 30bn will come from the EU’s own budget and the European Investment Bank (EIB). The focus of the recommended green measures is on investments for energy and climate-change-related infrastructure, sustainable power generation from fossil fuels (e.g. CCS) and renewables (such as wind energy), the electric grid, energy efficiency in buildings, green cars and transport networks. According to the HSBC estimation, the European level is planning to spend almost 64% of its own total stimulus (€ 18bn out of € 30bn) on green measures. However, some comments are required here. Firstly, so far, only a € 5bn stimulus package has actually been agreed (March 2009) out of which only 33% is ‘effectiveness adjusted expenditure’ according to the Ecofys/Germanwatch report. Out of this small package, a relatively high share is devoted to climate-friendly measures such as investments in new turbines, structures and components of offshore wind projects, international interconnectors and support for European CCS demonstration projects.

Turning from the EU as a policy level to the EU as a whole, i.e. considering the share of low-carbon investments by the EU and its member states taken together, two facts are particularly relevant. Firstly, the percentage spent on green measures is much lower, namely less than 10% (HSBC 2009b). Secondly, the total EU green spending represents only around 11% of the total global green investments and is dwarfed by spending in Asia and the Americas.

**The five largest EU countries**

The two successive stimulus packages announced in Germany in November 2008 and January/February 2009 combine tax cuts with infrastructure investments, with a focus on climate protection and energy efficiency in both private and public buildings as well as in transport. Expenditures on renewable energy are almost non-existent as the sector already benefits from feed-in tariffs established in the past. In the case of Germany the external evaluations of the percentage of the overall package to be spent on climate-friendly policies do not differ very much (15% according to Ecofys/Germanwatch and 13.2% HSBC) The German ‘Abwrackprämie’ (cash for clunkers) is not regarded as environment-friendly as no fuel-efficiency conditions are linked to the purchase of a new car.

In December 2008 the French government announced its € 268m (1.3% of GDP) economic revival plan out of which € 5bn (or 35%) are claimed to be investments in environmental sustainability (OECD 2009b). According to the HSBC report, the climate-relevant portions of the package amount to 21.2% of the total, which, although considerably below the official estimate, is the highest in the EU according to the ranking of this bank. However, the Ecofys/Germanwatch study’s estimate of effectiveness adjustment expenditures is only around 6% of the total package. This is because, to a considerable extent, negative incentives such as new road construction and funds for fossil-fuel power plants offset the positive ones. What is more, while some of the measures in the plan are considered neutral, they could also have negative effects depending on their implementation, e.g. support for the car industry.

---

3 CCS stands for Carbon Capture and Storage which is a technique for trapping carbon dioxide as it is emitted from large point sources, compressing it, and transporting it to a suitable storage site where it is injected into the ground. (http://ec.europa.eu/environment/climat/ccs/what_en.htm)

4 It should be noted here that in July 2009 the European Commission and industry announced the first round of research calls for proposals injecting € 268m in three key green market areas, ‘Factories of the Future’, ‘Energy-efficient Buildings’ and ‘Green Cars’, in order to trigger economic recovery and make it more sustainable.
In Budget 2009 the British government announced a €1.65bn package to create a low-carbon economy. However, according to initial analysis of actual government spending (rather than support expressed), only €602m – around 10% of the government’s total spending – will be allocated to climate-friendly policies. The 2009 budget is widely viewed by NGOs, academics and environmental industries as a missed opportunity to introduce a low-carbon economy in the UK, to significantly reduce emissions and create new jobs (The Guardian 2009).

Italy’s Emergency package announced in November 2008 was supplemented by three subsequent legislative acts adopted – in reaction to the crisis – in January, February and March 2009. The HSBC report evaluates just 1.3% of the first package as climate-friendly. Moreover, according to the Ecofys/Germanwatch study, all positive incentives in the plans of the Italian government are outweighed by negative incentives such as the building of new roads, which is why the evaluation is negative (-6% of total). The only climate-friendly stimulus, according to this study, is to be found in relation to the transport sector.

The Spanish government included in its recovery plan incentives for renovating buildings to make them more energy-efficient and a fund of €500m for environmental projects. Some of the measures contained in the plan had been proposed by the trade union confederation CCOO. Prime minister Zapatero has undertaken, over the long term, to change the current production model to a new sustainable long-lasting economic growth model and to achieve this aim in collaboration with the social partners. Although the positive intentions of the government in this respect are appreciated by the trade unions, CCOO’s position is that these measures are still insufficient to bring about the transition to a low-carbon economy. According to HSBC, the percentage of green spending in the Spanish government plans adopted so far is no more than 5.8%.

The Benelux countries

The green measures included in the Belgian stimulus package are focused on offering incentives to households for structural reduction of their energy consumption while boosting employment in the ‘green economy’. A large part of the Belgian stimulus package that was adopted in December 2008 is the result of a compromise between the government and the social partners. In October 2008 one of the two big Belgian trade union confederations – ABVV/FGTB – issued a document entitled ‘Alliance for Sustainable Growth’ containing policy proposals to tackle the economic and financial crisis. The project ‘Alliance for work and environment’ proposed in this document has been taken on board by the government and a joint platform (including the social partners, the building sector and the federal entities) has been set up to devise measures to stimulate sustainable investment in a green economy. The trade unions continue to insist that the government include in a second stimulus package the proposals that were set aside when negotiating the previous one. They still consider it crucial that short-term measures should be a first step to a structural and socially just greening of the economy in the medium and long run (ABVV 2009 and OECD 2009b).

5 There is no assessment of the Spanish stimulus plan by Ecofys and Germanwatch.
One of the four sections of the new Dutch recovery plan announced in March 2009 is devoted to sustainable economy and the measures in question amount to 20% (or around €1.2bn) of the overall package. However, most of this expenditure has already been foreseen in the budget, the only change being that measures will be carried out earlier than planned. One contradiction in the package is the abolition of the airline ticket tax which will lead to more carbon emissions rather than their reduction (De Volkskrant 2009). In January 2009 the trade union confederation FNV, in cooperation with the Nature and Environment foundation, presented an anti-crisis plan entitled ‘Social and Green Investment Agenda’. The plan calls on the government to invest in a sustainable economy and new employment opportunities. Anti-crisis measures should contribute to the restructuring of the economy and future growth should be sustainable and go hand in hand with the development of decent work and quality jobs. In the framework of the EU agreement on the recovery policies, FNV demands that the Dutch government earmark at least €3bn for climate-friendly initiatives such as wind energy, credit guarantees for investment in sustainable energy, sustainable cities and improvement of the regional public transport infrastructure, electric cars, etc.

In Luxembourg the green anti-crisis measures consist of the introduction of two new subsidies – a car-scraping scheme and the promotion of energy-efficient refrigerators. Other existing measures in this field have been broadened and adapted. The main trade unions in Luxembourg demand that the green subsidies announced by the government be made more social and income-related so that the poorest households can benefit proportionally more. They also insist on the creation of a Low-carbon Adjustment Fund.

The Scandinavian countries

In Denmark the government launched a tax reform to focus on ‘growth, climate and lower taxes’ in March 2009. The climate-friendly part of the reform has been devised on the basis of the ‘polluter-pays principle’: the more energy households or companies use, and thus the more they pollute, the more taxes they have to pay. The biggest Danish trade union confederation LO is highly critical of this reform as these taxes will place a disproportionate burden on the poorest households.

The Norwegian stimulus package allocates around €457m for climate-friendly measures such as energy efficiency in buildings, renewable energy development, further development of the railway network, infrastructure for electric and hybrid cars, etc., representing around 21% of the total stimulus of €2.2bn6. LO Norway supports the stimulus package, insofar as it contains all its proposals, but opinions among the member organisations are divided with regard to the green measures.

The Swedish stimulus package adopted in September 2008 contains around 10% of climate-friendly investments such as support for green energy technologies, climate and energy-efficiency measures, renewable energy development, etc. However, the main Swedish trade union confederations are quite critical of the policy package as a whole as it does not contribute to improving the situation on the labour market. While the trade unions see the green measures contained in the package as a step in the right direction, they argue that the government has failed to take up the opportunity for more extensive action, for example in relation to the creation of new green jobs.

---

6 According to updated estimates of the HSBC report published in May 2009, the Green Fund in the total recovery programme of Norway amounts to almost 30% but it is not clear what measures have been included in the calculations.
Conclusion

Before concluding, some limitations relating to the nature of the stimulus packages and the available data should be pointed out. Not all governments have provided sufficient information about the extent and nature of the measures announced. Another problem when comparing stimulus packages is the different timing of the measures and the overall packages. In many of the fiscal-stimulus packages some of the announced measures (including the green ones) were included in previous governmental commitments and foreseen in the budget before the economic crisis became apparent. The question of whether or not any given measure implies ‘new money’ leaves considerable scope for interpretation and can thus affect assessment of the green component of the recovery plans.

As has become clear from the varying assessments of what percentage of the total stimulus is actually allocated to climate-friendly measures in the different European countries, there is only limited agreement as to what is actually a ‘good’ green investment. Although the green elements of the stimulus packages vary considerably from one country to another, some of the measures can be found in almost all plans, in particular energy-efficiency measures with a focus on buildings which represents around one third of all investments (EurActiv 2009). This is part of the good news on the European green fiscal stimulus as this investment area has been assessed as the most effective in the current economic crisis (see above). It is an area in which new jobs are easily and swiftly created. Energy-efficiency measures are also useful for strengthening energy security and reducing fuel poverty. The widespread criticism that the EU and its member states are underinvesting in renewable sources of energy must be seen against the fact that in Europe, in comparison to the US or Asia, the foundations for renewable sources of energy are already in place to some extent. As a result, Germany for instance is now the world’s biggest user of wind power and the largest producer of photovoltaic solar power.

Nevertheless, given that the recovery policies represent a huge ‘window of opportunity’ for meeting Europe’s climate targets for the years to come, it is quite obvious that the current initiatives in the framework of these policies are insufficiently ambitious to lay the foundations for a low-carbon economy, falling far short of the recommendations by various experts discussed earlier. Comparison of the European green stimulus with those of other countries does not place Europe in a good light. The less than 10% combined green share for the EU and its member states taken together is considerably smaller than those of South Korea (80%), Australia (40%), China (34%), Japan (15%), the US (12%) and even the world average which is approximately 15% (numbers based on HSBC 2009b). What is more, short-term objectives such as intensified investment in road infrastructure and new car purchasing without the necessary condition of fuel efficiency at a certain high level can lock in non-sustainable technologies and practices. In most cases the car-scrapping scheme cannot be considered climate-friendly as it is not linked to the purchase of an efficient vehicle. Policymakers are tempted to protect existing industries as they existed before the crisis. Not only will such ‘non-sustainable’ investments contribute to the further deterioration of the environment and the acceleration of climate change but they also serve to neutralise or even overshadow current green efforts.

Although there are good arguments that the current crisis represents a ‘window of opportunity’ for embarking on the transition to a low-carbon economy, it can also be a factor
of serious delay to progress on environmental policies. For example, the European Council made some modifications to key environmental policies in December 2008 such as delaying the auctioning of CO2 certificates in the EU ETS. What is more, the price of carbon allowances in the carbon markets has been reduced as a result of falling demand.

Altogether the message is quite blurred – on the one hand policymakers tend to agree on the need to include green measures in the anti-crisis packages but, on the other hand, the share of these measures which are supposed to create opportunities for low-carbon economic development is significantly lower than is widely considered necessary. In addition, not all measures which are claimed to be green will effectively contribute to a more sustainable economy, while the effects of positive measures are frequently offset by carbon-intensive policies.

There is still some hope for the United Nations Climate Change Conference – which is to take place in December 2009 in Copenhagen, charged with developing a framework for climate-change mitigation beyond 2012 – that further political commitments will be made in order to cope with global warming. But, if Lord Giddens is to be believed, ‘no amount of discussion at an international level will be of any consequence if the countries mainly responsible for causing climate change do not make effective and radical responses to it... it is at the national level in the developed countries that real progress first has to be made.’ (2008)

References


OECD (2009a) First interim report on the OECD’s strategic response to the financial and economic crisis (Note by Secretary-General), 25 March 2009

OECD (2009b) Informal roundtable on environmental dimensions of economic stimulus packages: Written contributions by member countries, 26 February 2009


