Taking Advantage of the Crisis

Synergies between Environmental Policies and Social Inclusion

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1 Introduction

In the autumn of 2008, it became clear that the world had entered a **deep financial and economic crisis**. The IMF estimated in April 2009 that economic activity will decline by 1.3 % globally in 2009, a substantial downward revision from the January projections.[1] Many EU Member States have been hit even harder than the global average, with expected contractions of up to 6 % in Germany or even more in Ireland. Fiscal deficits are expected to rise sharply. With unemployment in Europe hitting a 10-year high of 8.6 % in April 2009 and amid forecasts predicting that job losses will hit double-digit figures by the end of the year, **social exclusion is likely to exacerbate**. In the current crisis, people with low skills are likely to be particularly affected. Only very recently, new reports indicate that the recession might come to an end before the end of this year but many uncertainties remain.

The largest economic crisis since the Great Depression also coincides with the **greatest environmental crisis** in human history: the threat of catastrophic climate change, the menace of a global water crisis and an unprecedented decline in biodiversity. If measures are not taken to prevent climate change, water shortage or biodiversity loss, the resulting effects would exceed the impacts of the current economic crisis by far. In the context of the environmental crisis, time is of essence, leaving only little time to achieve the necessary turnaround. Global greenhouse gas emissions, for example, must peak in 2015 and be reduced by 25-40% within the next 10 years.[2] Loss of biodiversity is often irreversible.

In response to the economic crisis, governments around the world have passed **stimulus plans totalling approximately US$ 3 trillion**. The public funds that have been deployed through the national stimulus plans provide – in principle – a unique opportunity to dramatically increase investment levels for the transition to a greener economy, and to help building a more inclusive society. The question is, however, to what extent existing stimulus packages have delivered on this potential, and have brought us closer to the long-term objectives of sustainable development? To what extent have they created synergies between protecting the environment and addressing social exclusion? Reflecting on these issues, this papers analyses in brief the stimulus packages of Germany, France and the UK[3] and

[1] IMF World Economic Outlook, April 2009: http://www.imf.org/external/pubs/ft/weo/2009/01/pdf/exesum.pdf

[2] Intergovernmental Panel on Climate Change: Climate Change 2007 Synthesis Report, p. 50; http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf

[3] Within the scope of this paper only a small number of countries could be analyzed; for a more comprehensive analysis refer to OECD: Strategies for aligning stimulus measures with long term growth, 2009

identifies possible lessons. The paper serves as background information for an expert workshop organized by the European Commission in September 2009.

2 Illustrating case studies: Analysis of Selected Stimulus Packages

2.1 Germany

Germany passed **two stimulus packages** in the winter of 2008/2009. Both were financed entirely through new debt. The first package consisted of measures expected to range between € 32 and € 40 billion in value over the course of 2009 and 2010. Expenditures in the second stimulus package equal € 50 billion over the same time period. Both packages include tax breaks, publicly funded investment and direct aid to some economic sectors. In a response to the crisis, other measures worth hundreds of billions were also passed, primarily aimed at stabilising financial institutions to enable a resumption of credit lending. Table 1 provides a breakdown of the expenditures.

Table 1: Germany's stimulus packages – breakdown of estimated expenditures

	Package I	Package II
Tax breaks for individuals and firms	€ 21 billion (including €600 million in tax breaks on car tax and biodiesel taxes)	€ 10.5 billion
Other relief measures for individuals and firms	€ 7.6 billion	€ 11.5 billion, including €1.5 billion to auto buyers who retire an old car upon new-car purchase (*Abwrackprämie*) – given the overwhelming response, the car scrapping scheme was later increased to a total of €5 billion.
Investment subsidies (not including transport)	• Additional € 3.0 billion for CO_2-reduction measures in buildings (*Gebäudesanierungsprogramm*) • €200 million for energy-efficient buildings (*Energieeffizientes Bauen*)	€ 13.3 billion to German states and communities (*Zukunftsinvestitionen der Kommunen und Länder*); main investments are in educational infrastructure, whereby energy efficiency and renewables are important components)
Investments in transport	Total: € 2 billion	Total: € 2 billion

	• Roads: €950 million • Rail: €620 million • Water ways: €430 million	• Roads: € 850 million • Rail: € 700 million • Waterways: € 350 million • Research on innovative propulsion: € 500 million • Multimodal: € 100 million

Source: Estimates compiled by Ecologic Institute.

From an **environmental perspective**, Germany's packages contain several positive elements that promote a sustainable economy and limit resource consumption. An increase of € 3 billion for the KfW Building Refurbishment Program makes a notable enhancement to a successful program, bringing the total volume to € 15 billion. The German federal government assumes that the investments supported by the scheme are easily refinanced through reduced energy costs.[4] In addition, retrofitting secures up to 25,000 jobs in the manufacturing and construction sector. However, there are also a **number of environmentally problematic measures and missed opportunities,** such as:

- **Car scrapping scheme:** The car scrapping scheme is a great success in boosting short term demand in car sales, but does not provide incentives for developing environmentally friendly vehicles; eligibility is not tied to rigorous environmental criteria, and there is no long term means for encouraging the purchase of particularly environmentally-friendly cars. In terms of social impacts, the car scrapping scheme tends to benefit those households that have the available resources to buy a new car, even with a crisis looming – i.e. households above the median income.

- **Transportation infrastructure:** Under the first economic stimulus package, nearly as much money has flowed into road construction as for rail and water transport combined. Half of the money for road transportation (€ 456 million) has been given out for new projects while only € 220 million has been allocated for maintenance projects. This includes expenditures for parking spaces primarily for trucks. The second economic stimulus package also allots more money to new projects than maintenance measures.

Regarding **social policies and labour market**, Germany's packages contain a number of measures target directly on low income groups. The packages reduce income tax of the first bracket from 15 to 14 % and increases tax free income from € 7,834 in 2009 to € 8,004 in

[4] BMVBW (2008): Arbeitsplatzprogramm Bau und Verkehr

2010. Contribution to health care are also reduced by 0.6 % (from 15,5 to 14.9 %). Families receive a one-time payment of € 100 per child and welfare benefits for children are increased. € 2.3 billion are slotted for the expansion of subsidises of short-time work for limited periods of time (*Kurzarbeit*). Next to these measures, the packages foresee a range of support measures for business, such as loans and guarantees. In addition, substantial investments are planned for new university buildings and thermal retrofitting of school and university buildings. In sum, the packages include a large number of measures designed to assist low income households, notably the subsidies of short-time employment, the reduction of health care contributions and reduced income tax.

2.2 France

The French government has so far passed **two stimulus packages** worth almost € 33 billion in total. The first package of € 26 billion announced by President Sarkozy in December 2008 has a more general approach,[5] while the second package only addresses the needs of the automobile industry. The core of the "Pacte automobile" which was announced in February 2009 is direct financial aid to auto-makers amounting to € 6.5 billion in total.

Of the first, more general stimulus package 45% will be spent on **tax-related measures**, the lion's share of which is aimed at improving liquidity of companies through business tax rebates, early repayment of tax credits and prepayments (€ 10.5 billion). A smaller sum will finance income tax rebates for low-income households (€ 1.1 billion). The other half of the stimulus package provides for additional **public investment** by government, state enterprises and municipalities. A total sum of € 14.4 billion will be spent over the course of 2009 and 2010.

The **public spending targets several areas**, including investments in the fields of defence and security (€ 2 billion), social housing and urban development (€ 1.2 billion) and research (€ 731 million). Furthermore, € 4 billion will be handed out to the public companies EDF (€2.5 billion), La Poste (€ 600 million), RATP (€ 450 million), GDF (€ 200 million) and the French railway SNCF (€ 300 million) for the renewal and expansion of the infrastructure operated by the state-owned enterprises.

From an **environmental point of view**, the stimulus package contains both positive and negative elements. The investment in sustainable infrastructure in the context of the long-

[5] Ministère de l'Économie, de l'industrie et de l'emploi (MINEFE): Plan de relance de l'économie en 2009. Conseil des Ministres du 19 décembre – Plan de Relance, available online at: http://www.minefe.gouv.fr/actus/08/0812.php; MINEFE: Projet de loi de finances rectificative pour 2009. Press Release 4 March 2009, available online at: http://www.minefe.gouv.fr/discours-presse/discours-communiques_finances.php?type=communique&id=2603&rub=1.

term Grenelle plan, the promotion of renewable energies by EDF, and the extensive investment in new rail and subsidies for building refurbishment can all clearly count as "green" investment (see overview in table below). On the negative side, France directly subsidises the automobile industry independent of its environmental performance and supports the purchase of new vehicles with a lump sum payment of € 1000. Unlike in Germany, the grant is conditional on the car emitting less than 160g of CO_2 per kilometre, but this value merely represents the current average consumption of new cars. Therefore, the push for progressive low-carbon technology resulting from the incentive scheme is poised to be fairly limited. Overall, around 8 % of the French stimulus programme can be considered "green investment", while 3.5 % of current spending will strengthen climate-damaging structures. In calculating the "green" component of the French stimulus programme, HSBC likewise determined a share of 8 %, while the Financial Times France calculated that the share of environmentally friendly investment was as high as 20 %.[6] This shows the difficulty in evaluating the stimulus programmes. For example, the € 2 billion in support for municipalities is not earmarked. Consequently, its effect on the environment cannot be assessed at the moment. Likewise, it is unclear what EDF is planning to do with its remaining € 2.2 billion not earmarked for renewable energy investment.

Concerning **social inclusion** the French stimulus effort also specifically targets low-income groups and unemployed workers – unlike many other recovery programmes[7]. With the participation of the trade unions, the government designed a so-called "Social Investment Fund" that encompasses improvement of unemployment benefits as well as funding for training and part-time work during the time of economic contraction. In addition, the households in the lowest income tiers will enjoy a reduction of income taxes worth € 200 per household on average, according to government calculations[8] and the 3 million poorest families with school-aged children receive an additional benefit. Finally, the government support mortgage finance for low- and middle-income households. In a limited fashion, the package also seeks to generate synergies between social and environmental objectives, for example by providing finance for energy efficiency improvements in building or financing research in low-carbon vehicles.

In terms of financial commitment, however, the environmental and social aspects remain of minor importance. The total of approximately € 4 billion reserved for these two issues (12 %

[6] Cf.: HSBC (2009). The green rebound. Clean Energy to become an important component of global recovery plans. 19 Januar 2009; Harvey, Fiona, "Stimulus plans threaten green gains," *Financial Times*, 3 March 2009.

[7] Watt (2009), p. 25.

[8] MINEFE: Projet de loi de finances rectificative pour 2009. Press Release 4 March 2009.

of overall spending) is dwarfed by the sum of about € 7.4 billion going to the auto industry alone (22 %), and 17.4 € billion for private business as a whole (52 %).

Table: The French stimulus programmes

Measures (italics indicates environmental or social relevance)	**Expenditure 2009/10 (€ million)**
Improvement of companies' liquidity	10.500
Public investment programme	4.000
environmentally-friendly infrastructure (rail, rivers, dams, agriculture)	*500*
investment in roads	*400*
Support for business and employment	2.600
investment fund for car industry	*300*
bonus for purchase of new car (€1000)	*220*
programme „Etat exemplaire" (inter alia grants for energy efficiency measures in buildings)	*200*
Investment in public housing and solidarity measures	1.900
"Social Investment Fund", including support for the unemployed, energy efficiency measures in buildings and low-interest mortgage finance	*800*
income tax reduction for low-income households	*1.100*
Clearing of defence industry debts	500
Investment of public companies (EDF, GDF, SNCF, RATP, Post)	4.000
EDF investment in renewable energies	*300*
SNCF investment in rail infrastructure	*350*
RATP investment in mass transit	*450*
Co-financing of municipal investment programmes	2.500
Financial aid for auto industry ("Pacte Automobile")	6.900
R&D funding for low-carbon vehicles	*150*
Total	**32.900**

Source: Presidential Speech and documentation by the French Ministry for Economics

2.3 UK

The UK economy was hit hard by the economic crisis early on. In response, the government committed enormous sums to prevent further meltdown of the financial sector. According to an estimate published by the Guardian in February 2009, public expenditures for loan guarantees to support the weakened banks amounted to £ 1.3 trillion in total, not including the capital invested for saving banks.[9] In comparison, the **first stimulus package of £ 20 billion** agreed upon in November 2008 appears relatively modest. The programme mainly contains **tax cuts** (worth £ 15.4 billion) and public investment (amounting to £ 3 billion to be spent in 2009 and 2010). The core of the package is a temporary reduction of the VAT rate

[9] Guardian 17 February 2009: Freeing up the lending flow, available online at: http://www.guardian.co.uk/politics/2009/feb/17/economic-rescue-plan.

from 17.5 to 15 % until the end of 2010, which will cost £ 12.4 billion and is aimed at enhancing consumer spending.

Out of the £ 3 billion **investment programme**, one sixth (£ 535 million) can be considered "green" investment, providing funds for energy efficiency improvements in buildings, rail infrastructure and climate adaptation measures. The green component contrasts with a £ 400 million investment in motorways likely to generate detrimental effects for greenhouse gas emissions and the local environment (see also overview in table below).

Mainly aimed at supporting families and small business in the crisis, the stimulus package also contains a set of **social measures**, including investment in social housing (£ 775m), hospitals (£ 100m) schools and universities (£ 800m), as well as tax reliefs for families with children. Employment-related measures have been neglected almost totally, with the exception being training opportunities and work placements for young people who are out of work for more than 1 year. Seniors are supported through additional payments to cover energy bills worth £ 50-100 per household. Although not a social measure per se, the VAT tax cut will also advantage low-income households over the well-off, since poorer households tend to spend a larger share of their income on consumption.

Synergies between climate mitigation and social objectives will be exploited within the upgrade of the Decent Home (£ 60 million) and the Warm Front Programme (£ 150 million). Both programmes finance building refurbishments to foster energy efficiency. They specifically target low-income households and social housing, thereby aiming at decreasing fuel poverty which, according to new estimates for 2008, threatens around 5 million households in the UK.[10] At the same time, spending on energy-efficient building has the potential to create labour market impulses in the building industry. Given the comparably low sums, however, effects are bound to be fairly limited in this case.

In January 2009, the UK Treasury announced that it would establish a **car scrapping scheme** in addition to the existing stimulus package. The scheme resembles its counterparts in Germany and France: Consumers get a grant of £ 2000 if they replace their old car aged ten years or older with a new vehicle. The subsidy is planned to expire in March 2010 unless the £600 million fund – half of which is financed by the car industry – runs out beforehand. In contrast to the French version, the UK car scrapping scheme has no regulations governing the required fuel efficiency or type of vehicle that will qualify for the subsidy. Thus no incentive to purchase low-carbon vehicles will result.

Finally, the UK government announced a third, much larger **low-carbon investment programme** as part of its 2009 Budget. It provides over £ 1.4 billion of support to low-carbon

[10] Research by B. Boardman, ECI, University of Oxford: http://www.eci.ox.ac.uk/news/articles/090706breakthrough.php.

investors. According to the Treasury, the package, together with the expenditures announced in November 2008, is expected to enable an additional £ 10.4 billion of low-carbon sector and energy investment over three years.[11] While the first stimulus package focused on energy efficiency, the second programme includes both energy efficiency grants and financial support for renewable energy, mainly for offshore wind and small-scale technologies owned by households and small businesses (microgeneration).[12]

Overall, the UK stimulus measures address both environmental and social concerns but clearly, there are not in the centre of attention. A mixed picture emerges regarding “green” spending. In the transport sector, most of the funds go to motorists and no money has been reserved for public transport. The effort in the area of renewable energy is fairly substantial on paper but it remains to be seen if the multitude of programmes can be implemented so as to effectively alter the way energy is produced and consumed. Social measures address concerns of vulnerable groups such as families, old people and those suffering from fuel poverty. By contrast, labour-related measures to support the unemployed are almost completely absent from the programme. In total, around 17% of the recovery effort is earmarked for environmentally-friendly investments and mitigation of the crisis’ social woes, with “green” items dominating.

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[11] HM Treasury (2009). Building Britain's future. Press notice 1 published on 22 April 2009, available online at: http://www.hm-treasury.gov.uk/bud_bud09_press01.htm.

[12] Linklaters (2009). Carbon matters. Green New Deal? Prospects for low-carbon economy in the UK.

Table: UK Stimulus Programmes

Social and "green" spending items	Stimulus packages Nov. 2008 and Jan. 2009 (£)	Budget 2009, April 2009 (£)
Energy and Climate Adaptation	60m Decent Home Programme 150m Warm Front Programme 20m climate adaptation measures	525m additional support for offshore wind 405m Low-Carbon Inv. Fund 70m for microgeneration 375m energy efficiency support
Transport	300m rail infrastructure 5m British Waterways negative: 300m car subsidy and 400m for roads	increase in fuel duty changes in company tax regime to incentivise low-carbon cars
Social Measures	60m Decent Home Programme 150m Warm Front Programme 775m social housing 100m hospitals 800m schools and universities	
Total	**2.210 bn**	**1.465 bn**

Source: UK Treasury 2008, 2009. Note that items that belong to more than one category area have been included twice.

3 Conclusions and Questions for Discussion

To some extent, stimulus packages have contributed to environmental protection and social inclusion. Designed to support an ailing economy and boost short-term economic activity, synergies between these primary objectives and environmental protection as well as social exclusion have occurred, but often by coincidence rather than deliberately. Some of these synergies include:

- **Income equality:** Depending on their specific design, the analysed stimulus measures vary in their impact on income distribution in society. Income tax reductions may be designed to favour middle income groups, or target low income earners – like in Germany or France. For corporate taxes, a nuanced picture emerges: middle to high income groups clearly benefit most from corporate reductions in money terms, yet employees will also benefit if lower corporate taxes can lower the incidence of bankruptcies. Taxes levied on consumption, such as VAT, tend to have a regressive effect – in turn, lowering VAT rates will particularly benefit low income groups – the UK being a case in point.

  Questions for discussion: To what extent have stimulus packages been designed to address income equality? Have stimulus package helped to reduce income inequalities (in the short or mid-term), or at least to limit the further spread of incomes? What is the risk that financing the stimulus packages will exacerbate existing income equality?

- **Labour market:** Public expenditures of stimulus packages have had positive impacts on employment, in particular for the construction and automobile sector. In addition, many stimulus packages provide for short time working or partial unemployment, in an effort to allow business to retain (skilled) workers. Some countries have worked successfully with these schemes and have kept unemployment relatively low – at least until now. However, with the exception of France, no funds have been allocated for training workers, although phases of unemployment represent an excellent opportunity to increase the skill level and to prepare the work force for new challenges. Training deserves particular attention in the future as it is already obvious today that the necessary restructuring towards a low-carbon economy will dramatically change the structure of the labour market. Fields such as health care, social services, renewable energies, energy efficiency in buildings and R&D will gain in importance, while many traditional blue collar jobs in industry will be lost. Future public spending efforts should be targeted to prepare the labour force for this transition.

Questions for discussion: To what extent have stimulus packages helped to limit, or even prevent, a surge in unemployment (in the short or mid-term)? With regard to possible synergies between job creation and environmental protection, have stimulus packages contributed to creating "green" jobs, and to train employees for such jobs?

- **Green investment:** There are a considerable number of studies on the "green" potential of stimulus packages.[13] These studies struggle with the fundamental problem that there is no standard definition of what constitutes *sustainable* or *green* investment. Most studies also operate on the (simplifying and potentially misleading) assumption that any green investment would produce similar benefits for sustainable development.[14] Regardless of these limitations, there is broad consensus that measures to increase energy efficiency are particularly well suited to addressing the twin challenge of stimulating the economy in the short term, while contributing to long term sustainable development objectives. Unlike major infrastructure investments, buildings can be retrofitted in a rather short timeframe as relevant procurement rules are in general less stringent and long court procedures unlikely. In addition, measures to improve the energy efficiency in buildings create an environmental, economic and social dividend: energy savings benefit low income groups, for whom the cost of energy represents a larger share of their income. As a consequence, investments in the energy efficiency of buildings are a key contribution of stimulus packages to sustainable development.

[13] See references.

[14] Höhne, Niklas: Economic / climate recovery scorecards, April 2009

Questions for discussion: To what extent have stimulus packages delivered benefits for the environment (in the short or mid-term), or can be expected to do so?

While the packages differ greatly in detail, they have one thing in common: stimulus measures are designed **to prevent or mitigate a short-term contraction of economic activity**. They are designed to produce immediate results – usually within weeks or months – and therefore typically contain measures that boost consumer spending in the short term target, such as tax breaks, or target “shovel-ready” investment projects that are in a mature planning stage and can be swiftly implemented. Because of this rationale, stimulus packages have **significant limits** when it comes to addressing the underlying, deeply rooted structural issues of sustainable development.

In addition to these inherent shortcomings, there are number **challenging issues which could considerably undermine the long term potential** of stimulus packages.

- **Public finances:** Sustainability of public finances has received a dramatic blow through the economic crisis and – as a consequence – stimulus packages. Tax revenue, which is already in decline due to the economic slowdown, will be reduced further by the foreseen tax breaks. At the same time, stimulus packages have drastically increased government spending.[15] As a consequence, public finances of many EU Member States are not or will not be in line with EU law, violating notably the Maastricht criterion that new public debt may not exceed 3 % of GDP. To consolidate public finances, it seems only a matter of time that governments will cut public expenditures. As expenditures for social security make up the lion share of many Member States’ budgets, cuts in social expenditures are an obvious candidate for consolidating public finances – with possibly significant consequences for social inclusion.

- **Spending all the money – a true challenge:** It is true that sufficient funding is a key requirement for environmental protection and social inclusion. However, even if necessary funds were available, experience has shown that spending billions of dollars or Euros in an efficient way is a great challenge. In the case of Germany, for example, the *Bundesländer* – largely responsible for implementation of stimulus packages – have only requested € 200 Million of the € 10 billion available under the stimulus packages for infrastructure improvements (as of July 2009).[16] It is therefore

[15] There are only a few exceptions, in which the stimulus measures supported may save public funds after an initial amortization period, such as measures to increase energy efficiency in public buildings or – in the long term – research or education.

[16] http://www.spiegel.de/wirtschaft/0,1518,641398,00.html

far from certain that those funds in the stimulus packages earmarked for green or social policies will actually contribute to sustainable development.

- **Stimulus packages also fund projects harmful to environmental policies:** Many stimulus packages contain measures that will not move the economy towards sustainable production patterns, but rather consolidate existing, unsustainable structures. For instances, all the packages analysed here contain infrastructure investments, which are often dominated by road infrastructure development. Scrapping bonuses or tax rebates support the purchase of new cars, in the case of Germany or the UK without any environmental conditionality or lax conditionality as in France.

In sum, it must be acknowledged that stimulus packages are limited to short-term effects, and are not intended and designed to resolve underlying structural issues, such as sustainable development and social cohesion; this must be borne in mind when judging their contribution to sustainable development. Still, important challenges remain:

- Many of the underlying structures that shape our economy and way of life, such as the transport or the energy system, are **path-dependent**: they evolve over time, changing only incrementally, with radical change only possible at high cost. And yet, path dependency also includes the option of setting the economy onto a new, greener trajectory. In principle, such changes are easier to implement in times of crisis, when the need for change and reform is widely acknowledged, and when strategic guidance by the state is accepted (or even appreciated) by business.

- As the adopted stimulus packages are already in place and European economies are inching towards recovery, the question emerges how the **transition from short-term stimulus to medium-term policy frameworks** can be facilitated. While crisis management has rightly dominated the policy agenda in recent months, the long-term challenges of achieving sustainable development, a more inclusive society and preventing dangerous degradation of ecosystems all remain on the agenda. As the already-adopted stimulus packages typically run out at the end of 2009 or in 2010, the question emerges whether follow-up measures should be implemented, possibly geared towards a more long-term transition. Obviously, such measures would need to reflect the realities of a gradually recovering economy, and at the same time massively indebted public households that need to be brought back into balance.

Questions for discussion: Have stimulus packages helped to accelerate the transition to a low-carbon economy, or have they slowed down this process by consolidating existing, unsustainable production and consumption patterns? As stimulus packages are running out, how can they be combined with / followed by other instruments that are better equipped to address long term challenges, such as fiscal incentives or regulation?

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