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Camilla Adelle, Marc Pallemaerts and David Baldock

# Turning the EU Budget into an Instrument to Support the Fight against Climate Change



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#### **PREFACE**

On 12 September 2007 the European Commission launched a "broad consultation with interested parties at local, regional and national levels, as well as at the European level, to stimulate an open debate on EU finances". The Swedish Institute for European Policy Studies (SIEPS) has chosen to respond to the Commission's invitation by publishing reports that cover important issues related to the EU budget and by arranging seminars on the theme of the EU budget review.

The present report assesses to what extent the EU budget has contributed to achieving the EU's climate change objectives and sets out arguments on how and why the EU budget might support the fight against climate change in the future. The analysis shows that there has been little focus on these objectives so far and that this is also true for the current 2007-2013 Financial Perspective. The funding of efforts that aim to improve the environment has been undermined by spending on, for example, road building and other projects, which have in fact increased greenhouse gas emissions. By employing the three principles "European added value", "best policy instrument" and "sound financial management", the report concludes that there are strong arguments in favour of using the common budget to support the fight against climate change. However, major shifts in spending is required if the EU budget is to become a successful instrument in this ambition.

SIEPS conducts and promotes research and analysis of European policy issues within the disciplines of political science, law and economics. SIEPS strives to act as a link between the academic world and policymakers at various levels.

Jörgen Hettne Acting Director, SIEPS

#### **AUTHOR AND INSTITUTIONAL INFORMATION**

*IEEP* is a leading centre for the analysis and development of environmental policy in Europe and brings an independent analytical perspective to policy questions. The Institute's work focuses on EU environment policy, with programmes on climate change and energy, transport, industrial pollution and waste, agriculture, biodiversity, fisheries, and EU environmental governance. IEEP seeks to raise awareness of European environmental policy and to advance policy-making along sustainable paths. IEEP undertakes research and analysis and provides consultancy and information services, working both independently and on commissioned projects. Partners and audiences range from international and European institutions to local government, non-governmental organisations, industry and others who contribute to the policy debate.

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#### **LIST OF ABBREVIATIONS**

CAP Common Agricultural Policy CCS Carbon Capture and Storage

CEC Commission of the European Communities
CIP Competitiveness and Innovation Programme

DG Directorate General

EAFRD European Agricultural Fund for Rural Development EBRD European Bank for Reconstruction and Development

EC European Community

ECCP European Climate Change Programme

EIB European Investment Bank

EGF European Globalisation Adjustment Fund

EP European Parliament

ERDF European Regional Development Fund

ESF European Social Fund

ETAP Environmental Technology Action Plan

ETS Emissions Trading Scheme

EU European Union

EU15 Austria, Belgium, Denmark, Finland, France, Germany, Greece,

Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain,

Sweden, and the UK

EUSF EU Solidarity Fund

FOEE Friends of the Earth Europe FP6 Sixth Framework Programme FP7 Seventh Framework Programme

GHG Greenhouse Gas

GNI Gross National Income IEE Intelligent Energy Europe

IEEP Institute for European Environmental Policy

NGO Non Governmental Organisation RTD Research and Technical Development

RTD Research and Technical Development SEAs Strategic Environmental Assessments

SIEPS Swedish Institute for European Policy Studies

SMEs Small and Medium-Sized Enterprises

UK United Kingdom

UNFCCC United Nations Framework Convention on Climate Change

US United States
VAT Value Added Tax

#### **SVENSK SAMMANFATTNING AV RAPPORTEN**

Den heltäckande översyn av EU:s utgifter och intäkter som nu är på väg kan bana väg för en mer genomtänkt budgetplan efter 2013. När Europeiska kommissionen förra året lanserade sitt offentliga samråd inför översynen, som ska avslutas senast nästa år, betonade man att klimatförändringarna var en av de nya utmaningar som kan påverka vad unionen spenderar sina utgifter på i framtiden. Föreliggande rapport, författad av Institute for European Environmental Policy (IEEP), granskar i vilken utsträckning EU:s budget hittills har bidragit till att uppnå EU:s klimatmål och presenterar argumenten för hur och varför budgeten kan göras till ett instrument för att bemöta framtidens klimatförändringar.

EU:s budget är komplex och det är därför svårt att bedöma hur mycket pengar som för närvarande spenderas på att uppnå EU:s klimatmål. Rubrikerna i budgeten är breda och täcker en rad olika målsättningar och miljörelaterade utgifter är generellt sett integrerade i de instrument som står till EU:s förfogande. Vår översiktliga analys visar dock att klimatmålen inte har betonats i någon högre grad inom någon av de aktuella fonderna, det vill säga den gemensamma jordbrukspolitiken; forskning och utveckling; LIFE+ (den enda miljöfonden i EU); samt struktur- och sammanhållningsfonderna.

EU:s gemensamma jordbrukspolitik (GJP) svarar för nio procent av de totala utsläppen av växthusgaser i EU, men den nuvarande budgetplanen (2007-2013) kommer inte att utnyttja den möjlighet som ryms inom landsbygdsutvecklings- och jordbrukspolitiken för att nå EU:s klimatmål. Även om de tillgängliga utgifterna för forskning kring klimatförändringar och "grön" teknologi tycks ha ökat i det sjunde ramprogrammet, är andelen som allokeras till forskning kring hållbar energi (€ 2.3 miljarder) mindre än den andel som ägnas åt forskning kring kärnkraft (€ 4.8 miljarder) inom ramen för Euratom. I förra budgetplanen, 2000-2006, spenderades endast 13 procent av de tillgängliga medlen i struktur- och sammanhållningsfonderna på miljövänliga investeringar, som exempelvis förnybar energi och höghastighetsjärnvägar. Många av de andra projekten – som till exempel vägbyggen och utveckling av produktion och leverans av elektricitet, gas och fasta bränslen – bidrog istället till en ökning av växthusgasutsläppen. Det skadliga utgiftsmönstret i struktur- och sammanhållningsfonderna har upprepats i budgetplanen för 2007-2013 i de central- och östeuropeiska medlemsstaterna.

Rapporten använder tre principer som utgångspunkt för argumenten att använda den gemensamma budgeten som instrument för att uppnå EU:s klimatmål:

- 1. europeiskt mervärde: EU ska endast agera där det är tydligt att ytterligare vinster kan uppstå av gemensamma åtgärder;
- bästa policyinstrument: EU ska använda det instrument som är bäst lämpat för att leverera resultat inom ramen för de mål som har ställts upp; samt,
- 3. sund ekonomisk förvaltning: EU:s utgifter ska vara både effektiva och ändamålsenliga.

Enligt principen om mervärde kan subsidiaritetskonceptet motivera att gränsöverskridande problem som klimatförändringar hanteras gemensamt, eftersom medlemsstaternas egna åtgärder är otillräckliga. Mervärdesprincipen kan även motivera att resurser samlas på EU-nivån för att på så sätt maximera politikens genomslagskraft, som exempelvis forskningsinsatser för att utveckla förnybar energi. Det finns vidare skäl att omfördela resurser från rikare till fattigare länder för att ge stöd till investeringar i infrastruktur och teknologi som hjälper de fattigare länderna att uppfylla klimatrelaterade åtaganden. Det kan också vara ett alternativ att omfördela de kostnader som klimatförändringarna för med sig, genom kompensationsbetalningar till medlemsstater eller regioner som bidrar oproportionerligt mycket till uppfyllandet av EU:s gemensamma mål. Avslutningsvis kan utgifter på EU-nivån som ger stöd för den omställning som klimatförändringarna orsakar motiveras på basis av solidaritet mellan medlemsstater.

Även om EU har ett flertal verktyg i sin verktygslåda för att förverkliga gemensamma prioriteringar – inklusive lagstiftning, frivilliga överenskommelser, marknadsbaserade instrument och öppna samordningsmetoden – så erbjuder den gemensamma budgeten många fördelar eftersom den både kan finansiera investeringar och skapa incitament i ekonomin. Som exempel kan nämnas att lagstiftning ofta kräver finansiering och vissa medlemsstater kan därtill vara obenägna att fullt ut finansiera genomförandet av lagstiftningen. Gemensam finansiering kan också vara nödvändig för att stödja andra insatser, som till exempel datainsamling. Dessutom har vissa instrument (till exempel miljöskatter) visat sig vara svåra att utveckla på EU-nivån, medan andra instrument (som öppna samordningsmetoden) ännu inte har prövats eller hunnit leda till resultat. Det finns på den internationella nivån ett erkännande om att övergången till ett stabilt klimat kommer att kräva dramatiska omprioriteringar när det gäller investeringar och EU bör spela en roll i detta, i synnerhet inom områden där kostnaderna inte bärs av privata investerare eller där kostnaderna är betungande för de fattigare medlemsstaterna.

I rapporten betraktas flera alternativ för att med hjälp av medel från EU:s budget bidra till att nå unionens klimatmål. Det konstateras att investe-

ringsskiften är nödvändiga, i synnerhet i struktur- och sammanhållningsfonderna. Strukturfondssatsningar bör öronmärkas för att bekämpa klimatförändringar och riktas mot att assistera medlemsstaterna i genomförandet av viktig EU-lagstiftning. Som exempel på det senare kan bland annat nämnas direktivet om byggnaders energiprestanda, liksom skapandet av infrastruktur med låga kolhalter, så som nätverk för höghastighetståg i Europa. Dessutom krävs en större sammanhållning mellan användandet av dessa fonder å ena sidan och klimatmålen å den andra – det vill säga att hänsyn till klimatmålen bör tas även för investeringar som inte är direkt relaterade till uppfyllandet av dessa mål. Det är viktigt att EU inte låser sig vid en infrastruktur med höga kolhalter, i synnerhet i de central- och östeuropeiska medlemsstaterna, samtidigt som man investerar i hållbara energi- och transportprojekt på annat håll. Den allt viktigare frågan om territoriell sammanhållning skulle kunna erbjuda en möjlighet att bättre använda sammanhållningsfonden för att bekämpa klimatförändringar. Programmen skulle då fokusera på unika geografiska tillgångar i specifika typer av regioner och ha bredare mål än de prioriteringar som har ställts upp i Lissabonstrategin. Ett mål skulle till exempel kunna vara att ha bekämpning av klimatförändringar som organiserande princip för dessa program.

Fler investeringar krävs också i forskning och utveckling för att befria den europeiska ekonomin från kol. EU bör aldrig sträva efter isolerade satsningar utan snarare agera hävstång för offentliga och privata investeringar. Däremot tycks åsikterna gå isär när det gäller hur och vem som ska finansiera avskiljning av koldioxid och andra dyra "gröna" teknologier. EU har till exempel åtagit sig att utveckla 10-12 demonstrationsprojekt till 2015, men man håller fortfarande på att lägga sista handen vid detaljerna och dessa detaljer inkluderar frågan om finansiering.

De pengar som finns tillgängliga i GJP skulle kunna omdirigeras till att bekämpa klimatförändringar och att bemöta reduktionen av biologisk mångfald. Jordbrukspolitiken bör därför erbjuda ett ramverk med riktlinjer för klimatkänsliga former av hållbar markskötsel genom ekonomisk ersättning för ekosystemtjänster. Däremot bör inga incitament introduceras i produktionen av biobränslen. För att kunna åstadkomma detta skifte av fokus i jordbrukspolitiken är det nödvändigt att stärka instrumenten i landsbygdsutvecklingspolitiken med tillräckliga medel så att utmaningarna kan bemötas framgångsrikt. Vi argumenterar för att detta lägger extra vikt och angelägenhet vid förslag om ytterligare överföring av jordbruksstöd: från direktinkomststöd till lämpliga landsbygdsutvecklingsåtgärder. Om ingen omfördelning sker mellan jordbrukspolitikens första och andra pelare

kommer inte budgeten för landsbygdsutveckling att kunna hantera de nya utmaningarna.

Den utgiftsökning som krävs för att finansiera åtgärder inom ramen för EU:s klimat- och energipolitik kan hittas i struktur- och sammanhållningsfonderna samt i en mer miljöfokuserad andra pelare i GJP. Det skulle i teorin också vara möjligt att säkra finansieringen via EU:s system för handel med utsläppsrätter, men motståndet är sannolikt för starkt mot ett sådant steg i vissa medlemsstater. Ett alternativ skulle vara att skapa en separat klimatfond för att på så sätt undvika att medel till klimatarbetet integreras med medel till andra målsättningar, men det skulle samtidigt innebära att man inte åtgärdar problemet med bristande sammanhållning mellan olika mål – som till exempel de ovan nämnda problemen med struktur- och sammanhållningsfonderna – och detta skulle i sin tur underminera EU:s klimatmål.

Budgetöversynen sker inte isolerat från andra viktiga händelser. Val till Europaparlamentet och tillsättandet av en ny Europeisk kommission kommer att inträffa inom översynens tidsram. Dessutom ska två av EU:s största politikområden, sammanhållningspolitiken och GJP, ses över. Dessa händelser påverkar budgetöversynsprocessen och, sannolikt, vice versa. Utöver dessa händelser bör vi också komma ihåg att budgetförhandlingar till stor del handlar om kohandel bakom stängda dörrar, där överenskommelser träffas i förhandlingarnas sista skälvande minuter; allt tal om europeiskt mervärde och lämpliga policyinstrument till trots. De positioner som medlemsstaterna intar kommer därför att vara helt avgörande för det slutliga resultatet.

#### 1 EXECUTIVE SUMMARY

A wide ranging review of the pattern of European Union (EU) spending and its sources of income is underway which could pave the way to a significantly different and more forward looking Financial Perspective after 2013. In the launch of its public consultation on this budget review, which is to be concluded no later than next year, the Commission recognised that climate change is one of the new challenges which could have a significant impact on where the Union directs its effort in terms of expenditure in future. This report, written by the Institute for European Environmental Policy for the Swedish Institute for European Policy Studies, offers a preliminary assessment of the extent to which the EU budget has contributed to achieving climate change objectives so far and sets out arguments on how and why the EU budget could in future be turned into an instrument to support the fight against climate change.

The EU budget is complex and it is not easy to assess how much is currently being spent pursuing climate change objectives. The budget headings are broad and cover a range of aims and activities. Spending on environmental objectives in general is "mainstreamed" into various funding instruments rather than being concentrated in dedicated funds. However, our brief analysis shows that relatively little emphasis has been placed on achieving climate change objectives in any of the most relevant funds: the Common Agricultural Policy (CAP) funds; funding for Research and Technological Development (RTD); LIFE+ (the only dedicated environmental fund in the EU); and the Structural and Cohesion Funds.

Agriculture is responsible for nine per cent of total greenhouse gas (GHG) emissions in the EU, but the current Financial Perspective (2007-2013) failed to harness the potential for agriculture and rural development spending under the CAP to contribute to achieving EU climate change objectives, particularly since spending on rural development measures was cut back. While the current level of spending available to research on climate change, environment and "green" technology appears to have increased in the latest RTD Framework Programme (FP7), the funding allocated to nonnuclear energy research for the full duration of the Financial Perspective 2007-2013 (2.35 billion euros) is still less than the spending planned on nuclear research over a shorter period of time (2.75 billion euros from 2007 to 2011) under a separate Euratom Multi-Annual Framework Programme for Nuclear Research and Training. In the last Financial Perspective 2000-2006 only around 13 per cent of the Structural and Cohesion Funds were spent on climate friendly investments, such as renewable energy and high-speed rail networks. Many of the other projects, including road building and developing the production and delivery of electricity, gas and solid fuel, actually contributed to an increase in GHG emissions. This damaging pattern of spending is being repeated in the current Financial Perspective (2007-2013) in the new Member States.

In reviewing the potential future role of EU funding in addressing climate priorities and to distinguish this from national interventions three relatively restrictive principles were adopted focusing on: "added value". These were that – the EU should only act where there are clear additional benefits from collective European efforts; that expenditure would be deployed only where it is the "best policy instrument", that is to say the most suitable instrument for delivering the policy objective should be used; and that "sound financial management" would be required – expenditure should be effective and efficient.

Under the principle of "added value", the concept of subsidiarity can justify tackling cross-border problems such as climate change, which cannot be tackled effectively by individual Member States acting alone. This principle can also support the pooling of resources to maximise the impact of policy, such as for research efforts to develop new energy or mitigation technologies. There is also an argument based on the concept of assisting investment and other activities in poorer Member States to support them in meeting their climate change commitments. It may also be effective and efficient to redistribute the costs of climate change mitigation between Member States thus justifying compensatory payments for Member States or regions with disproportionate contributions to common EU climate policy goals. Considerations of solidarity, in terms of supporting adaptation to climate change across the Member States, could similarly justify spending on achieving climate change objectives at an EU level.

Expenditure directed in a strategic way within Europe is complementary to the use of other policy instruments to pursue climate goals, including regulation, voluntary agreements and market-based instruments. Furthermore, EU expenditure may be necessary to support other policy approaches for example through data collection or assistance for developing countries engaged in climate negotiations. It is widely noted internationally that the transition to a stable climate will require dramatic shifts in investment. The EU should play a role in this especially for areas where the costs are less likely to be borne by private investors or where the costs would fall most heavily on poorer Member States.

Several ways forward for increasing the EU budget's contribution to the Union's climate change related objectives are considered. A shift in invest-

ment, especially in the Structural and Cohesion Funds, is required. Some funding in the Structural Funds should be earmarked for combating climate change. Funding should be targeted at assisting certain Member States in implementing important EU legislation such as the Directive on Energy Performance of Buildings as well as the creation of low carbon infrastructure such as a high speed rail network in Europe. In addition, greater coherence is needed between the use of these funds in general and climate change policy objectives. It is important that the EU does not "lock in" a high-carbon infrastructure, especially in the new Member States, while at the same time investing in separate sustainable energy and transport projects. There are opportunities too to introduce a local carbon logic in the rising issue of "territorial cohesion", to encourage programmes to focus on the unique geographical assets of specific types of regions.

Substantially more investment is needed in research and development in order to decarbonise the European economy with EU funding levering additional public and private funding. This should include some funding of expensive carbon capture and storage (CCS) and other "green" technologies. The EU is committed to developing 10-12 CCS demonstration projects by 2015.

CAP funding could be diverted to respond to the contemporary challenges faced by the EU, including responding to climate change and biodiversity loss. In this sense, the CAP should provide a framework to guide a climate sensitive form of sustainable land management through remuneration of ecosystems services. It should not, however, directly incentivise the production of biofuel crops. To facilitate this refocusing of agricultural policy it will be necessary to strengthen rural development instruments so that they can address these challenges which will require further funding. We would argue that this adds weight and urgency to proposals for a further transfer of CAP funding from income support payments to appropriate rural development measures. Without a further re-balancing between Pillar I and Pillar II, financial limitations will leave the rural development budget unable to accommodate the significant new challenges.

The increased expenditure required to fund action in support of the EU's climate change policy objectives could come from the existing Structural and Cohesion Funds as well as a more environmentally focused Pillar II of the CAP. However, it may also be possible to raise additional funds to tackle climate change from part of the revenue acquired by Member States from auctioning emissions allowances under the EU Emissions Trading Scheme. However, it is likely that there would be resistance from Member States to this idea. A separate climate change fund could be created to

avoid some of the problems which would result from "mainstreaming" these resources. However, this would not address the issues of incoherence between aspects of the budget, for instance the Structural and Cohesion Funds, actually undermining the EU climate change objectives.

The budget review process is not occurring in isolation. Within the same time frame as the 2008/9 budget review there will be elections to the European Parliament as well as the appointment of a new Commission. Two other major policy reviews are also being undertaken which will have important implications for the budget (or vice versa): the CAP Health Check and a review of cohesion policy. In addition to these events, it should be remembered that despite logical arguments about value added and the most suitable policy instruments, budget negotiations tend to be highly charged affairs with the final outcomes based heavily on horse trading behind closed doors, often at the last minute. Therefore the positions adopted by Member States will be crucial in determining the eventual outcome.

#### 2 INTRODUCTION

A wide-ranging review of the pattern of European Union (EU) spending and its sources of revenue is being undertaken by the European Commission in 2008/9. Therefore, the stage has been set for an unprecedented opportunity to assess the EU's current and future budgetary priorities which could help to pave the way to an agreement on a more considered Financial Perspective<sup>1</sup> for the period after 2013. The majority of observers agree that the budget no longer reflects the main objectives and policy goals of the EU. The spending priorities have been described as a historical accident (Gros and Micossi 2005), built over years of political fighting and compromises between Member States often guided by the logic of juste retour - whether the net balance of a country's contributions and receipts from the budget is perceived as "fair". In particular, the budget's heavy support for the Common Agricultural Policy (CAP) is becoming increasingly unpopular with some Member States as well as large swathes of the European public. It is perhaps apt then that the Commission has promised a "no taboos" debate on the future direction of the budget (CEC 2007a).

Such an open debate is to be welcomed because, even as the Commission itself recognises, budget reforms tend to have "an inbuilt conservatism" (CEC 2007a, p. 5). While it is unrealistic to imagine that the Union could ever start from a completely blank page and adopt a zero-based budgeting, the budget is not immutable.<sup>2</sup> It can and has changed. Over the past 20 years there have been significant shifts (albeit incremental) in the pattern of EU spending, reflecting changing policy priorities (Baldock and Wilkinson 2006). For instance, spending on the CAP has declined from 60 per cent of the budget in 1988 to around 40 per cent of the budget today. Conversely, the Structural Funds have increased from 17 per cent to nearly 36 per cent of the budget in the same time frame. New funds and budget lines have also been added over the years, such as the Cohesion Fund created in 1993 for the benefit of the poorest Member States, or the European Globalisation Adjustment Fund (EGF) established in 2006 to help workers made redundant as a result of changing global trade patterns.

<sup>&</sup>lt;sup>1</sup> The EU's multi-annual "Financial Perspective" sets out the framework for the Community's budget priorities over a period of several years. It includes the maximum amounts (ceilings) of financial commitments for each year for different budget headings. The actual annual budget though is deteremined through an annual budget procedure. The EU is currently in the fourth FP (2007-2013). The budget review is looking forward towards the fifth FP after 2013.

<sup>&</sup>lt;sup>2</sup> Zero-based budgeting is built on the idea of the budgetary process starting from a clean slate with no expenditure sacred and every single investment and every programme has to be proposed, justified and compared with competing claims on its own merits (Tarschys 2007).

Change, though, is not easy and budgeting in the EU is marked by heated and prolonged battles between and within the EU institutions (Gros and Micossi 2005). The budget – as EU policy-making in general – is often confronted with seemingly conflicting objectives, not least of which is the tension between the Lisbon Agenda and the Sustainable Development Strategy.<sup>3</sup> While the present Financial Perspective (2007-2013) has undergone a so-called "Lisbonisation" to better promote competitiveness, growth and jobs, the renewed Sustainable Development Strategy of 2006 also states that "sustainable development objectives must be reflected in the use of the EU budget... and help to set the agenda for the full review of the EU's budget in 2008/2009" (EU Council 2006). These sustainable development objectives include limiting climate change and its cost and negative effects on society and the environment. In the launch of the public consultation on the budget review in September 2007 the Commission did indeed highlight that climate change is one of the new challenges which could have a significant impact on where the Union directs its efforts in terms of expenditure in future (CEC 2007a). This report written by the Institute for European Environmental Policy (IEEP) for the Swedish Institute for European Policy Studies (SIEPS) examines to what extent the EU budget is already contributing to meeting climate change policy objectives and sets out some of the arguments for increasing the level of dedicated spending in this area in future, as well as adopting a more integrated and coherent approach.

<sup>&</sup>lt;sup>3</sup> The Lisbon Strategy is the EU's long-term programme for enhancing competitiveness, growth and jobs established in 2000. The EU's first 2001 Sustainable Development Strategy was subsequently linked to the system of annual review at the Spring European Council for the Lisbon Strategy and the two strategies were declared to be complementary. However, from the beginning, commentators have argued that greater weight has been given to Lisbon's competitiveness agenda than to the environmental message of the Sustainable Development Strategy (Pallemaerts 2006). This tension has not been resolved by either the relaunch of the Lisbon Strategy in 2005 or the renewed Sustainable Development Strategy in 2006, which also "de-linked" the latter from the annual review process of the former.

#### 3 THE EU'S RESPONSE TO CLIMATE CHANGE

The EU is keen to depict itself as the world's leader in climate change policy. The European Council has "underline[d] the leading role of the EU in international climate protection" (European Council 2007a) and the Commission too likes to stress the EU's "international leadership on climate issues" (CEC 2007b). There is certainly evidence to support this assertion. The entry into force of the Kyoto Protocol in 2005 despite the US pull-out in 2001 was largely a result of the EU's leadership and cooperation with other countries within the multilateral framework set by the UN. The EU has also introduced the world's first carbon market through the Emissions Trading Scheme (ETS), established in 2003 (Directive 2003/87/EC). More recently, the EU has unilaterally set itself ambitious longer-term targets in relation to climate change which will be further strengthened if there is international agreement on a global climate change regime beyond the Kyoto Protocol's first commitment period ending in 2012 (CEC 2007a).

Ultimately the objectives of EU climate policy are to limit average global temperature increases to two degrees Celsius above pre-industrial levels (CEC 2005a). Towards this end, EU leaders agreed a series of ambitious targets at the Spring European Summit in 2007: to reduce GHG emissions by 20 per cent from 1990 levels (or 30 per cent if other industrialised countries join a post-Kyoto agreement); to increase the share of renewable energy in the overall energy supply to 20 per cent by 2020; and to increase the share of biofuels in energy consumed by transport to 10 per cent by 2020 (European Council 2007a). To implement these targets the Commission published in January 2008 its most comprehensive set of climaterelated proposals yet (CEC 2008a). This "Climate Change and Energy Package" contained proposals: to revise the EU ETS to include all major industrial emission sources; to establish individual GHG emission reduction targets for the ETS sector in each Member State; to share the effort of reaching the EU's overall 20 per cent reduction targets for GHGs in the non ETS sectors between the Member States in order to replace existing targets under the Kyoto Protocol which are due to expire in 2012; to establish differentiated national targets for the uptake of renewable energy; and to introduce new harmonised EU rules on Carbon Capture and Storage (CCS).4

<sup>&</sup>lt;sup>4</sup> The revised state aid guidelines on Member State financial support to environmental measures in industry, which were announced at the same time, are not a proposal but a decision taken by the Commission within its own competence under the EC Treaty.

Assuming these proposals are adopted, achieving these commitments will entail a concerted effort by all Member States to implement these measures. In particular, reaching the targets for the uptake of renewable energy and reduction of GHG emissions not covered by the ETS will involve considerable investment, as will delivering on other climate-related commitments such as developing 10-12 CCS demonstration projects by 2015. While this does not mean that the necessary financing should come from public finances let alone from the EU budget, Section Five of this report examines arguments for a greater role for EU expenditure in tackling climate change, alongside other sources of funding in an integrated approach. However, it is first necessary to consider to what extent the EU budget has contributed to the achievement of climate change policy objectives so far.

## 4 IS THE CURRENT EU BUDGET CONTRIBUTING TO THE MITIGATION OF CLIMATE CHANGE?

Over the current Financial Perspective (2007-2013) the EU budget will account for a significant amount of money, 864 billion euros or just over one per cent of the Member States' combined Gross National Income (GNI) (EU Council 2005). The EU budget is complex and it is not easy to assess how much is currently being spent pursuing specific objectives such as addressing climate change, let alone what is being delivered. After a failed attempt in the 1990s by the European Parliament to create a large environmental fund, most environmental spending is "mainstreamed" into the budget so locating what is actually spent on "mainstreaming" environmental issues is at best difficult (Wilkinson 2008). Part of this is due to the way in which spending is categorised (see Table 1). For example, the budget headings in the Financial Perspective include "competitiveness for growth and employment" which covers research, trans-European networks, education and training and some environmental measures such as the Environmental Technology Action Plan (ETAP). CAP expenditure falls under the heading "preservation and management of natural resources".

Table 1 The 2008 EU Budget

Budget Heading		Euros Billion (current Prices)	% of total
1.	Sustainable Growth	57.28	43.38
	1A Competitiveness for growth and employment	10.39	7.87
	1B Cohesion for growth and employment	46.89	35.51
2.	Preservation and management of natural resource	s 58.80	44.54
3.	Citizenship, freedom, security and justice	1.36	1.03
4.	The EU as a global player	7.00	5.30
	(excludes the extra-budgetary European Development	Fund of 23 billion euros)	
5.	Total administrative expenditure	7.38	5.59
Total		132.03*	100.00

<sup>\*</sup> This includes 2007 in compensations.

Source: CEC (2008b).

Even when looking at specific polices or funding instruments, it is often not easy to ascertain how spending is allocated between different priorities. For example, CAP spending of 49.67 billion euros in 2005 includes 6.8 billion euros allocated to rural development initiatives, which in turn covers agri-environmental and other environmental measures. This is further complicated by the variations between planned expenditure and actual spending

decisions that are highly decentralised and not transparent. Over 70 per cent of the EU's expenditure is not under the direct control of the European Commission. It is actually spent indirectly through the governments of Member States or by regional and local authorities and partnerships who make decisions on detailed programmes and projects.

A comprehensive survey would therefore be needed to determine how far the EU budget has contributed to climate change policy objectives, which has, as yet, not been conducted. However, there are a number of studies which explore some elements of the EU budget which are particularly relevant to climate change (Green Alliance 2007; FOEE and CEE Bankwatch Network 2007). Their analysis, as does ours, suggests that the overall impact of EU funds may well be to increase rather than decrease EU emissions.

#### 4.1 Structural and Cohesion Funds

The EU plans to spend 308 billion euros in the current Financial Perspective within the Structural Funds which are designed to promote development and reduce inequalities between different regions of the EU. These funds are mainly comprised of three separate funds: the European Regional Development Fund (ERDF), the European Social Fund (ESF); and the Cohesion Fund. The ERDF supports programmes addressing regional development, economic change, enhanced competitiveness and territorial cooperation throughout the EU, including environmental protection. The Cohesion Fund is specifically aimed at contributing to interventions in the field of the environment and trans-European transport networks in the EU's poorer areas (CEC 2008g). The ESF is primarily designed to fund investments in training and capacity-building activities, including some activities related to the development of skills relevant to environmental management.

The spending priorities of these funds were formulated before climate change moved to the top of the EU's political agenda and have increasingly been focused on supporting the Lisbon Strategy for "growth and jobs". This so-called "Lisbonisation" has further promoted the expansion of energy intensive industries and road transport networks. This is despite energy efficiency and renewable energy being emphasised as one of the 12 priority areas for Structural Fund investments by the Community Strategic Guidelines for Cohesion 2007-2013 (CEC 2005b).

<sup>&</sup>lt;sup>5</sup> A review of the climate change implications of Structural and Cohesion Fund projects is currently planned by DG REGIO.

The Commission has claimed that 30 per cent of cohesion funds in 2007-2013 will be beneficial to the environment (Green Alliance 2007). This spending would be broader than climate change objectives and include spending on basic environmental infrastructure to cope with waste management and water treatment requirements especially in the new Member States. However, the criteria for these funds are remarkably weak from an environmental perspective (Green Alliance 2007). While they do allow Member States to put forward spending proposals which include energy efficiency and renewable energy as well as environmentally friendly transport, the weak criteria coupled with the decentralisation of the management of the funds has resulted in much of the investments being spent on other projects (*ibid*). Many of these projects actually increase GHG emissions.

In the 2000-2006 Financial Perspective, spending on transport infrastructure made up around 17 per cent of total Structural Fund spending (CEC 2006). Of this share, almost 60 per cent was spent on the development of roads. Spending on more sustainable forms of transport infrastructure accounted for a small, if not marginal share of the total. Only 21 per cent was spent on rail networks and a tiny 0.2 per cent on cycle tracks. Spending on energy infrastructure in the same Financial Perspective made up just 0.67 per cent of overall structural fund spending. Of this, 56 per cent was spent on developing the production and delivery of electricity, gas, petrol and solid fuels and around 44 per cent was spent on developing renewable sources of energy (including solar, wind, hydroelectricity and biomass), energy efficiency, cogeneration and energy conservation.

Judging from these disappointing accounts in terms of investing in climate change, it is perhaps not surprising that the four Member States which have received the largest share of the spending of the Structural Funds in the last decade (Ireland, Spain, Portugal and Greece) have been at the top of the EU15 league table in terms of increased GHG emissions. Much of this increase has been due to increased demand for energy and transport growth (FOEE and CEE Bankwatch Network 2007). While there could be a number of factors to account for this, the role of these funds cannot be discounted and should act as a warning shot for future spending. However,

<sup>&</sup>lt;sup>6</sup> The latest official report on GHG emission trends in the EU published by the European Environment Agency (EEA) indicates that, in 2005, emission levels in Ireland, Spain, Portugal and Greece were respectively 25.4, 52.3, 40.4 and 25.4 per cent above their 1990 base year levels. According to the EEA, these four Member States, together with Austria, Italy and Denmark, are "currently not on track to meet their individual targets based on past trends, even when the planned use of carbon sinks and Kyoto mechanisms is taken into account" (EEA 2007).

a report on planned structural spending in the ten new Member States in central and eastern Europe published by FOEE and CEE Bankwatch Network revealed a worrying repetition and even entrenchment of these damaging spending patterns (FOEE and CEE Bankwatch Network 2007).

The draft Operating Programmes<sup>7</sup> submitted by the Central and Eastern Member States showed that energy efficiency and renewable energy have each been allocated only one per cent of all EU funds (1.8 billion euros). Similarly, these draft programmes revealed that 27 per cent (47 billion euros) of the total EU funding has been allocated to transport projects. Of this 53 per cent (25 billion euros) is to be spent on roads and motorways and 30 per cent (14 billion euros) has been allocated for railways and only 10 per cent (4.8 billion euros) for urban and regional public transport. The low level and narrow scope of the planned funding support for energy efficiency and renewable energy is in stark contrast to the increased prominence they receive within the stated goals of EU cohesion policy. The report warns that instead of helping these Central and Eastern Member States to embark on climate friendly development "EU funding threatens to lock them into high-emission infrastructure for many years" (FOEE and CEE Bankwatch Network 2007).

#### 4.2 Research and Technological Development

Investment in Research and Technological Development (RTD) has traditionally represented a far smaller share of the EU budget than funding for the CAP or the Structural Funds but this share is now rising and beginning to focus more on environmental issues. There are two main funding instruments in the EU budget: the Framework Programmes for RTD and the new, much smaller Competitiveness and Innovation Programme (CIP).

The current, and Seventh, RTD Framework Programme (FP7) provides 50.5 billion euros to finance selected research projects during the period 2007-2013. These funds are allocated to different thematic areas including: energy, and environment and climate change. However, the extent to which these funds support energy efficiency and renewable energy improvements and technological developments in these areas depends largely on the nature of the projects (Euractiv 2007). It is clear, however, that funding for research is increasing within the EU as funding for the last Framework Programme (FP6) was only around 17.9 billion euros (Cordis 2006).

<sup>&</sup>lt;sup>7</sup> Operational Programmes are the specific funding plans for the Structural and Cohesion Funds. They are drafted by the Member States and submitted to the European Commission, which has the final say on the plans and has the right to ask for modifications before approving them. In 2007 the Commission reviewed and approved nearly 450 Operational Programmes submitted by all Member States (FOEE and CEE Bankwatch Network 2007).

"Environment and climate change" has been allocated 1.8 billion euros and has the main objective of advancing knowledge of the interactions between climate, biosphere and ecosystems and human activities and to develop new technologies, tools and services for the sustainable development of the environment and its resources (Cordis 2007a). Therefore, its emphasis is wider than just climate change and includes research areas such as: pressures on the environment and climate; conservation and sustainable management of natural and man-made resources and biodiversity; management of marine environments; environmental technologies for observation, simulation, prevention, mitigation, adaptation, remediation and restoration of the natural and man-made environment; technology assessment, verification and testing. The "Energy" theme has been allocated 2.3 billion euros and is linked to delivering climate and natural environmental objectives (Cordis 2007b). Funding will focus on both research and development and technology demonstration of, for example: clean coal technologies; renewable electricity; renewable fuel production; carbon capture and storage (CCS – see below) and energy-efficient technologies.

There appears to be an increase of funding available for climate change related research compared to the previous Framework Programme (FP6) which only provided 2.3 billion euros for "Sustainable Global Change and Ecosystems" (Cordis 2006). This included sustainable energy and transport research and so there was no extra funding for energy related research as in the FP7. The FP7 has separate budget lines for energy (2.35 billion euros), environment (including climate change) (1.89 billion euros), and transport (including aeronautics) (4.16 billion euros). (Decision 2006/971/EC) However, the funding for non-nuclear energy RTD under the FP7 is less than the total funding for research into nuclear fusion, fission and safety under the Euratom RTD Programme (2.75 billion euros) (Decision 2006/970/Euratom), even though the latter programme covers a shorter time period running from 2007 to 2011 (EU Council 2006b).8 Furthermore, because nuclear research and development comes under the Euratom Treaty, there is no Parliamentary co-decision requirement, only consultation with actual decisions taken solely by the Council (FOEE 2006).

A separate Competitiveness and Innovation (CIP) programme run by DG Enterprise has an indicative budget for 2007-2013 of 3.6 billion euros

In fact, the Commission even proposes to spend an additional 1.64 billion euros on nuclear RTD in the two remaining years of the current Financial Perspective (2012 and 2013), but this funding still has to be authorised in 2011 through a new Euratom decision adopted under the consultation procedure, subject to budgetary approval (CEC 2005d). The budget allocation may yet be cut by the budgetary authority, as indeed was the amount initially proposed for Decision 2006/970/Euratom.

(CEC 2008d). This will be divided into three operational programmes: "Entrepreneurship and Innovation"; "Information Communication Technology Policy Support"; and "Intelligent Energy Europe". These will provide support for eco-innovation, particularly through measures to facilitate access to finance (risk capital support and capacity building in financial institutions) and co-financing of market replication projects (commercial-scale demonstration projects, which will test new "just proven" technologies). The "Intelligent Energy Europe" (IEE) component, in particular, will provide about 700 million euros to fund projects that help remove barriers to the market receptiveness and uptake of energy-efficient technologies (CEC 2008d). However, under the first CIP work programme (2007), only 49 million euros has been made available for eco-innovation, with the call for proposals postponed until 2008. This is a rate of spending considerably lower than would be required to meet the 700 million euros commitment.

#### 4.3 The Common Agricultural Policy

Agriculture will receive around 37 per cent of the total EU budget in the current Financial Perspective (2007-2013) which includes funding for both the CAP and rural development. Like other sectors, agriculture can contribute to reductions in GHG emissions; it is more exceptional in the extent to which it can contribute to mitigation of climate change through carbon sequestration, for example in soils and through measures other than improved energy efficiency (Cooper et al. 2008). It is also a possible source of renewable energy in the form of biofuels as well as potentially playing an important role in adaptation to climate change (*ibid*). However, CAP spending has been widely criticised for providing incentives for environmentally damaging farming practices (Green Alliance 2007). Agriculture is estimated to be responsible for nine per cent of total GHG emissions (CEC 2008c). The role of agriculture – both as a source of and as a sink for GHGs – varies significantly across Europe because of the different agricultural policies adopted and the different agricultural practices implemented. However, intensive agricultural practices which have developed in both subsidised and unsubsidised sectors are widely seen as a major driver for these emissions (Birdlife International 2007).

EU expenditure on the CAP has been changing over the years and, as discussed above, is declining. In addition, the emphasis on production has decreased in two respects. A substantial proportion of expenditure is now paid in the form of "decouple" payments irrespective of whether the farmer produces anything. In parallel, there has been a shift in emphasis away from direct support to farmers through Pillar I of the CAP to more diffuse funding of rural development through Pillar II. However, achieving

climate change objectives has not yet played a major part in the spending priorities of this policy. In the 2005 budget deal the Member States significantly reduced the Commission's proposed Pillar II spending on rural and environment projects. This in turn reduced the potential for agriculture and rural development to contribute to achieving EU climate change objectives either through mitigation or adaptation. Section Six of this report argues that farming and land use have an important role to play in both respects.

#### 4.4 Other Funds

LIFE+ is the only dedicated fund for the environment and has a budget of 2.14 billion euros for the period 2007-2013 (CEC 2008e). This followed on from the previous LIFE III fund which ran from 1992 to 2006 with a budget of 1.35 billion euros. LIFE+ is a funding instrument providing specific support for the development and implementation of EU environmental policy and legislation, in particular the objectives of the Sixth Environmental Action Programme (Decision 1600/2002/EC) and resulting thematic strategies. It comprises three components: "Nature and Biodiversity"; "Environmental Policy and Governance"; and "Information and Communication". At least 78 per cent of LIFE+ will be for the co-financing of project action grants, of which at least 50 per cent will be for nature and biodiversity projects. 10 The latter two components will be of most relevance to pursuing climate change policy objectives and include the development of innovative policy approaches, technologies, methods and instruments, but the extent to which they will effectively contribute to the achievement of those objectives will largely depend on the nature of the actual projects submitted and selected for funding.

The LIFE III programme included an "energy and climate" theme which provided funding for over 130 projects (CEC 2008f). These included a disparate array of projects ranging from the creation of a biomass market in Slovakia, through energy labeling schemes to a biofuel project to fuel public buses on used cooking oil. However, there is evidence that there is room for improvement in the kind of projects that are being funded by LIFE. In 2004 a review of 48 LIFE-supported projects in the UK concluded that most were judged as "leaving a lot to be desired" in terms of relevance, effectiveness, efficiency, and impact on sustainability (HTS Development 2004).

<sup>&</sup>lt;sup>9</sup> Agricultural policy measures recommended in 2001 by a working group established under the European Climate Change Programme (ECCP) and chaired by DG AGRI (CEC 2001) have remained largely unimplemented so far.

<sup>&</sup>lt;sup>10</sup> The European Commission will use the remaining sum for operational expenses.

## 5 WHY USE THE BUDGET FOR THE MITIGATION OF CLIMATE CHANGE?

#### 5.1 A Principled Approach

Three overall principles have been applied to guide the approach used in this study to review the budget from a climate change policy perspective and to consider which forms of expenditure are justified specifically at the EU level rather than at the national level. These are partly based on principles put forward by the UK Treasury in various papers and speeches (Balls 2007; Department of Trade and Industry 2003).

- The first principle, "added value", is that the EU should act only where there are clear additional benefits from collective efforts compared to action solely by individual Member States rather than "more EU" for the sake of it. This includes, but in important respects goes beyond, the subsidiarity principle as set out in Article 5 of the EC Treaty.
- The second principle, "best policy instrument", is that where EU-level action is appropriate, the policy instrument that is most suitable to delivering the policy objectives should be chosen. Expenditure is only one of a range of policy instruments. Other possible policy actions may offer direct alternatives to EU budget spending.
- The third principle, "sound financial management", is that expenditure must be efficient and effective. Spending programmes should be free of corruption, should achieve objectives and be evaluated and monitored systematically during and after implementation.

The first two principles relate to the need to ensure that the budget is spent on the right things and the third that the money spent is not wasted.

#### 5.2 Added Value

The EU can be regarded as providing "added value" in two main circumstances. First, where it accords with the principle of subsidiarity, broadly as set out in the EC Treaty. Second, where some redistribution of benefits or costs between the Member States is considered desirable. These circumstances broadly coincide with two of the main functions of public financing that is to say provision of public goods and redistribution. Public goods can be technically defined as those collective goods providing benefits for and/or imposing costs on European citizens (Jouen and Rubio 2007). European public goods, in contrast to national public goods, might

<sup>&</sup>lt;sup>11</sup> The third main function of public finance stabilisation is not discussed here as the EU budget is too small to play a stabilisation role.

be politically defined as those considered as such by EU citizens or their representatives. For example, a recent survey by the Eurobarometer revealed that two thirds of EU citizens preferred to act at an EU level on environmental matters rather than at a national level and that the general public's top environmental concern was climate change (CEC 2008h). However, European public goods could also be distinguished from merely national public goods on more technical grounds based on the principle of subsidiarity.

#### 5.2.1 Subsidiarity

Article 5 of the EC Treaty states that:

In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and insofar as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community.

This so-called "subsidiarity principle" is explained in more detail in Protocol 30 "On the application of the principles of subsidiarity and proportionality" annexed to the EC Treaty. Essentially, the subsidiarity principle justifies EU action where the objectives of a proposed action cannot be sufficiently achieved by the Member States acting independently, but then only to the extent necessary to meet EU objectives (the latter is known as the "proportionality principle").

A number of important points should be made about the subsidiarity principle as it is set out in the EC Treaty (based on Wilkinson *et al.* 2007). First, it applies only to areas where there is *shared* legal competence between the EU and Member States, not where the EU has *exclusive* competence such as the Common Commercial Policy, most aspects of the CAP, and the Common Fisheries Policy.

Second, the subsidiarity principle does not provide an objective template that establishes definitively when EU action is acceptable. It is a political rather than a technical concept. For example, Protocol 30 notes that subsidiarity is a *dynamic concept* which allows the expansion or contraction of EU action in response to new policy challenges – so subsidiarity may go up as well as down. Climate change is an example of a new issue requiring EU action. Moreover, there may be circumstances in which action by the Member States would be preferable to action by the EU – but for one reason or another, the Member States may be unable or unwilling to act. Protocol 30 justifies EU action where Member States cannot sufficiently achieve the same objectives "in the framework of their national constitu-

tional system" – for example, where devolved responsibilities make effective national action impossible. There are also some circumstances where it could be argued that the EU actually knows best. For example, as in relation to setting higher environmental standards than some "laggard" Member States might choose for themselves.

Finally, the concept of subsidiarity has also become blurred by the increasingly prominent concepts of "multi-level governance" and "shared responsibility". This means that policy responsibilities between levels of government should not be shared out on the basis of substantive policy areas (for example, energy, land-use planning, agriculture etc), but according to the appropriate intensity of intervention by different levels of government in any particular policy domain. According to this view, all tiers of government may legitimately make some contribution to any substantive area of government activity. However, in some areas this will be restricted to softer, non-legislative forms of intervention.

Despite the issues raised here with the principle of subsidiarity, there are several respects in which it justifies EU action on climate change. Tackling cross-border, Europe-wide or global problems where national action alone would not be effective is one such example (Wilkinson et al. 2007). Climate change is the classic transboundary problem which requires a collective effort to address. It cannot effectively be tackled without the commitment of all of the major global economies. The need for a collective and concerted effort has always been a fundamental argument for EU environmental action. It has provided the justification for EU measures on environmental product standards, transboundary air pollution, cross-border river basin management, and the protection of migratory birds. In addition, the Commission's 2006 Maritime Policy Green Paper also uses this argument to propose EU-level initiatives on marine spatial planning, and joint exploitation of offshore renewable energy and grid connections. The implicit justification here is that individual Member States are unable to act alone beyond the limits of their jurisdiction and/or that their separate actions need coordinating. Climate change was also included in the Berlin Declaration, marking the 50 year anniversary of the signature of the Treaties of Rome in March 2007, as one of the major challenges facing the EU which does not stop at national borders (German Presidency 2007).

A second example where subsidiarity justifies EU action on climate change is in pooling resources to maximise the impact of policy (Wilkinson *et al.* 2007). The collective action by the Member States is sometimes necessary to take advantage of economies of scale, for example in relation to pooling research efforts (such as in successive RTD Framework Pro-

grammes), and support the development and deployment of environmental technologies (through such programmes as ETAP and CIP). Tackling climate change will require investment in specific cleaner energy technologies (such as, for example, CCS) which take considerable investment to get them up and running and viable for effective deployment. In all these areas significant benefits would accrue to all EU citizens.

#### 5.2.2 Redistribution

Redistribution does not formally form part of the subsidiarity principle as set out in the EC Treaty, but it is still an example of EU added value. Besides, there are other Treaty provisions lending explicit support to cohesion policy, which is a form of redistribution. The EU has a legitimate role in redistributing benefits and/or costs between the Member States, in the same way that national governments do in relation to their poorer regions. Some commentators argue that, from an ideological perspective, redistribution should be considered as an "inherent component of the project of European integration, preserving an element of solidarity is essential to ensuring that the project of European integration goes beyond the construction of a common economic area" (Jouen and Rubio 2007, p. 12). From an instrumental perspective promoting cohesion is economically efficient since cohesion and competitiveness are mutually reinforcing goals.

Redistribution also has some important "leverage effects". This is especially true for cohesion policy which has been described as "a redistributive system with strings attached, where the strings are just as interesting, if not more interesting, than the basic principle of redistribution" (Jouen and Rubio 2007, p. 14). Thus, redistribution can provide recipient territories multiple benefits beyond just those of the co-financed projects. For example, it can improve the policy-making process at a national and regional level, increase institutional capacity and provide impetus for national and regional investments (financial leverage).

There is clearly room for argument over how far the redistribution argument can be pushed (Wilkinson *et al.* 2007). How far should redistribution go, and what should financial transfers from richer to poorer Member States be spent on? The new Cohesion Fund Regulation (1084/2006) extends the areas of eligible spending from transport and basic environmental infrastructure to other "areas related to sustainable development which clearly present environmental benefits, namely energy efficiency, and renewable energy". However, it is not clear, for example, whether this might extend as far as EU finance for energy efficiency improvements to social housing in the new Member States, though from a climate policy perspec-

tive there are good arguments to be made that it should. (Housing has traditionally been a no-go area for the EU).

#### 5.2.3 Other EU "Added Value" Roles

The redistribution argument can be extended beyond the redistribution of benefits, in terms of money or in kind, to include attempts to balance unequal costs imposed on Member States in seeking to meet Community objectives (Wilkinson et al. 2007). That is to say, redistribution can be used to justify compensatory payments for disproportionate contributions to common EU goals. This has already been recognised through the establishment of the Cohesion Fund. Article 175(5) of the EC Treaty specifically authorises the Council to lay down appropriate provisions in the form of financial support from the Cohesion Fund if an environmental policy measure "involves costs deemed disproportionate for the public authorities of a Member State". This provision has already been applied, for example, to contribute to the costs in the poorer Member States of meeting the requirements of EU water treatment and waste management legislation. Other examples of redistributive measures in environmental policy include the "burden sharing" mechanism for meeting the EU's Kyoto targets; and Article 9 of the Habitats Directive providing for the possibility of compensation for disproportionate costs of managing Natura 2000 sites. This approach was recently confirmed by the European Council when it called for EU action on climate change to be "on the basis of the principle of common, but differentiated responsibilities and respective capabilities". (European Council 2007b – our italics) In doing so, EU leaders recognised that a principle, which was first enunciated in the framework of the UN to differentiate commitments between developed and developing countries, may also be relevant for purposes of similar differentiation between richer and poorer EU Member States.

The most cost-effective means for the EU to meet collective European environmental targets may well impose disproportionate burdens on some Member States. For example, maintaining forest cover in the new Member States for the purpose of providing carbon sinks would be a more effective way of reducing emissions than deforestation accompanied by the planting of fuel crops — and would secure additional biodiversity gains at the same time. However, the (substantial) income foregone may need to be offset by compensatory payments from the rest of the EU, in order to establish an incentive. Similarly, the best sites in Europe for establishing renewable energy infrastructures (for example offshore wind farms or tidal barrages) are unlikely always to be located in Member States that can afford to construct them. This, too, might be an occasion for compensatory payments.

Also closely related to the issue of redistribution, the provision of emergency relief to individual regions or Member States in the event of major natural disasters is a distinct type of EU action. Following major floods in 2002 in Germany, Austria, France and the Czech Republic, the EU set up a Solidarity Fund (EUSF) which is triggered when the cost of damage exceeds a certain threshold. The EUSF is given stronger legal backing n the EU's Reform Treaty in which a new Article 188r to be introduced in the Treaty sets out a "Solidarity Clause". This states that "the Union and its Member States shall act jointly if a Member State is the object of a terrorist attack, or the victim of a natural or man-made disaster".

Ensuring solidarity is not usually explicitly considered as one of the three main functions of public spending (that is to say: public goods, redistribution or stabilisation) but it is a further example of where the EU may provide value-added – and it could have considerable implications in the context of Member States' adaptation to climate change. Article 2 of the EUSF Regulation (2012/2002) states that the fund should be mobilised "when a natural disaster with serious repercussions on living conditions, the natural environment, or the economy in one or more regions or one or more countries occurs". Eligible actions include "the immediate cleaning-up of disaster-stricken areas, including natural zones".

This would justify collective EU action to protect or re-instate affected sites threatened by a major emergency in a particular Member State. What is less clear, however, is whether the EUSF could be used to address some of the longer-term consequences of climate change. The European Parliament has pressed for the definition of "natural disaster" to be extended beyond sudden catastrophic events like floods, to include more protracted threats such as droughts, desertification, or the development of urban "hot spots" where the elderly and the very young are particularly vulnerable (EP 2006). And the Commission's Green Paper on adaptation to climate change raises the possibility of "innovative financing arrangements dedicated to adaptation, to support the implementation of co-ordinated adaptation strategies, especially in the most vulnerable regions and sections of society in Europe" (CEC 2007c).

#### 5.3 Best Policy Instrument

Where EU-level action is appropriate, expenditure is only one of a range of policy instruments available. In addition to the provision of financial support, the EU can also employ other instruments such as:

- direct regulation through EU legislation using the "Community method"; intergovernmental cooperation, through mechanisms such as the "Open Method of Coordination";
- market-based instruments such as the EU's Emission Trading Scheme and environmental taxes;
- · voluntary agreements;
- · information and awareness campaigns.

In some cases policy objectives may be secured equally effectively through more than one of these instruments (Baldock and Wilkinson 2006). Indeed, some commentators criticise the idea of the EU budget being the only instrument able to provide EU public goods. It is argued that many EU goods can be adequately provided through traditional instruments such as legislation which require little investment at the EU level (but subsequently may impose significant costs, to the Member States or to business, for example, to implement them). However, there are numerous circumstances where neither "hard regulation" nor "soft law" is enough and financial incentives are required to induce Member States to adjust their policies to EU priorities (Jouen and Rubio 2007):

- First, alternative policy instruments themselves normally require funding, for the appointment of staff, training and capacity-building, the establishment of institutions, the engagement of professional specialists.
- Member States may simply not care enough about some areas of legislation, which they have not voted in favour of (such as, for instance, the Energy Performance in Buildings Directive (2002/91/EC)), to ensure implementation within their borders. Financial incentives would help the leaders in EU climate change policy bring with them the laggards more effectively and efficiently than enforcement through the European Court of Justice.
- EU spending may also be a necessary condition to support other policy approaches by collecting data and research, or providing leverage through which to secure the engagement of other actors, such as industry (for example RTD funding).
- Where the principal purpose of an intervention is to redistribute wealth or other benefits, there are no alternatives to expenditure programmes, or the direct provision of services (on which there are of course practical limitations at the EU level).
- The Open Method of Coordination between Member States has had only limited success. The Commission's March 2005 review of the Lisbon Strategy, which is particularly reliant on this method, drew particular

- attention to the fact that many Member States were not doing what they had previously signed up to (CEC 2005c).
- In practice, the use of environmental taxes at the EU level is difficult
  because of the requirement for unanimous agreement in the Council.
  Many Member States are reluctant to allow the EU to exercise powers
  over taxation.

EU spending can have important benefits that other policy instruments do not possess. For instance, the availability of EU co-financing may catalyze Member States into spending that they otherwise might not have undertaken. It can also provide leverage over the behaviour of Member States, as discussed above.

Therefore, investment remains an important tool for pursuing policy objectives and it has been widely noted that the transition to a stable climate will require dramatic shifts in global investment flows, both public and private (Green Alliance 2007). The recent UNFCCC report on investment and financial flows needed to address climate change found that 200-210 billion US dollars would be required to finance climate change mitigation (UNFCCC 2007). Likewise, the Stern report points to the likely high returns of doubling investments in research and development in order to assist the rapid development and deployment of technology to around 20 billion US dollars per year globally (Stern 2006). While by no means all of this money will be public investment, this will have to play a role, especially in areas which are perhaps less attractive to private funding. For example, the costs of adaptation are much less likely to be borne by the private sector and will probably fall most heavily on poorer countries within and beyond Europe (Green Alliance 2007).

#### **5.4 Sound Financial Management**

Where public expenditure is to be used as a policy tool it must be used effectively and efficiently if it is not to be wasted. EU actions which appear to offer value-added and ostensibly use the appropriate policy instrument are a waste of resources if they do not meet the objectives set for them. As discussed above, EU spending on environment-related policies, such as climate change, has been "mainstreamed" through other existing EU programmes. This has important implications for efficiency and effectiveness (Wilkinson *et al.* 2007). As stated above, mainstreaming makes these funds difficult to calculate and monitor. It also increases the risk of weak implementation as decentralised funding decisions in Member States may mean that priority is not given to the actual EU spending priorities. Third, there may be spending gaps and overlaps as it is difficult to

coordinate across the different funding instruments. Finally, the principle of mainstreaming has not yet been reflected in the way these funds are distributed between Member States and regions, as available funds are normally allocated according to the primary objective of the funding instrument in question.

# 6 WAYS FORWARD – MAKING THE EU BUDGET SUPPORT THE MITIGATION OF CLIMATE CHANGE

#### 6.1 Structural and Cohesion Funds

### 6.1.1 Existing Funds

Section Four demonstrated that the EU Structural and Cohesion Funds have not only failed to contribute in any significant way to achieving the EU's climate change commitments, but have played a significant role in locking in high-carbon patterns of energy generation and transport. The EU will need to address this if it is to meet its ambitious climate commitments. The Stern report noted that a properly functioning carbon market is essential to giving the price signals necessary to achieve the transformation to a low carbon economy, but this will not be sufficient because during the transition period of the next 10-20 years "it is critical that governments consider how to avoid the risks of locking into a high-carbon infrastructure" (Stern 2006). The EU ETS is the primary instrument designed to create a properly functioning carbon market, but as Stern noted, this does not preclude the need for further public and private investment to avoid the risks of high-carbon infrastructure.

Therefore, a shift in investment, especially in the Structural and Cohesion Funds, is required if the EU is to meet its agreed collective GHG emissions reduction target of 20 per cent by 2020 (or 30 per cent if other developed countries join in). This is especially true in the new Member States which may require more investment but have limited funds and perhaps do not place the same priority on climate change as some other Member States. Just as in the so-called "Lisbonisation" of cohesion policy, (60 per cent of funds under the "convergence" objective and 75 per cent under the "regional competitiveness and employment" objective are earmarked for the new Lisbon agenda investments) a percentage of funds should be earmarked for low carbon investments (FOEE and CEE Bankwatch Network 2007). Moreover, financed projects would have to demonstrate how they will contribute to Member States' national emissions targets and the Commission should have the power to reject all programmes not consistent with these targets (Green Alliance 2007).

Energy efficiency is essential for meeting the EU's climate objectives, specifically its 20 per cent emission reduction target. But energy efficiency improvements can require large up-front investments that only pay off after many years and the issue of who provides funding and how best to implement it remains the subject of a complex and far-reaching debate (Euractiv 2007). The EU has a role to play in providing funds for improving energy efficiency, especially in multifamily and social housing in new Member

States. For instance, the Directive on Energy Performance of Buildings, which aims to make public, commercial and private buildings in all Member States more energy efficient, is an example where there is a risk of noncompliance with the legislation if no funding is provided to assist those Member States who will require the greater action to reach compliance but are least able to shoulder the cost. The building sector accounts for 40 per cent of the EU's energy requirements and offers the largest single potential for improved energy efficiency. Research shows that more than one-fifth of the present energy consumption and up to 30-45 million tonnes of CO<sub>2</sub> per year could be saved by 2010 by applying more ambitious standards to new and refurbished buildings (CEC 2008i). Therefore, it would be wise to expand the priority areas of the Structural Funds and to earmark a percentage of funds to include projects which help implement EU legislation leading to a low carbon economy such as energy efficiency in housing.

This is not to say that the EU should act alone in this area, as the best solution is an "integrated approach" that combines policy and fiscal incentives with technological advances, more favourable financing conditions and changes in consumer behaviour (Euractiv 2007). The EU could focus its spending on the facilitation of public-private partnerships with the private banking sector, the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD) and other international financial institutions to attract more funding to cover debt financing, guarantee instruments, and venture capital applications for investment in energy-efficient technologies within the EU, particularly in the new Member States and Small and Medium-Sized Enterprises (SMEs). Shifting the Eastern European electricity generating sector to low(er) carbon technologies would be a particularly useful area of focus as the EU ETS and EU targets for renewables will help drive this shift, but their effect may not materialise fast enough.

Similarly, a shift in spending is needed in the transport field. Specifically, away from new roads and aviation and into three areas: creation of new low-carbon infrastructure, innovations that reduce the carbon intensity of existing infrastructure, and solutions that reduce the need to travel. The report published by FOEE and CEE Bankwatch Network (2007) suggests that at least 75 per cent of EU transport funding be allocated or earmarked for environmentally more friendly transport investments. Funding could be allocated to new infrastructure spending so as to accelerate the creation of a high-speed rail network in Europe for freight and personal travel. It could, as Green Alliance (2007) suggest, also improve the carbon intensity of existing infrastructure through measures such as car sharing or to

reduce the need to travel by rolling out broadband communication. Investment could also be made in bicycle lanes and public transport (including improving its rolling stock, frequency, quality, safety and environmental performance).

To ensure that the programmes funded by these instruments match up to the official commitments to energy efficiency, renewables and clean transport in the EU's policies, greater scrutiny of the Strategic Environmental Assessments (SEAs) for the Operational Programmes under the Structural Funds should be enforced. Climate change should be considered through SEAs which are to be carried out for each Operational Programme. However, most of the SEAs so far have been conducted in a hurry and at too late a stage to influence the shape of these programmes. For instance, while most of the SEA reports for transport Operational Programmes do mention the risk of GHG emission increases from road transport, they do not demand any significant changes in the programmes to prevent this risk, such as reallocating the funds towards environmentally friendly modes (FOEE and CEE Bankwatch 2007).

#### 6.1.2 Territorial Cohesion?

Whilst European regional policy discriminates territorially, as it supports economic and social development in selected lagging areas only, it is essentially a policy for economic and social development (Polverari and Gross 2005). However, since at least the end of the 1990s, there have been trends towards a broader understanding of regional policy, an understanding that integrates the traditional economic and social goals with specific spatial or territorial objectives leading to the concept of "territorial cohesion" (*ibid*).

The Commission brought forward this new concept first in 2001 in its Second Report on Economic and Social Cohesion and then further developed it in 2004 in its subsequent reports. The concept is continuing to evolve and increase in status pushed forward by the firm support of DG REGIO and the Regional Affairs Commissioner Danuta Hübner. Most recently, the Treaty of Lisbon includes a new reference to "territorial cohesion" as one of the EU's objectives. Similarly, the heading of Title XVII of the Treaty is amended to include "territorial cohesion" alongside economic and social cohesion. The Community Strategic Guidelines on Cohesion (CEC 2005b) also include a major section entitled "Territorial Dimension of Cohesion Policy".

Commissioner Hübner has emphasised the key importance of these references. She told an informal meeting of EU spatial planning ministers

meeting in the Azores on 23 November 2007 that "[t]hese changes will of course have an impact on both European cohesion policy and on the territorial agenda implemented in Member States. But it will also have an impact on other Community policies, in particular on the way they interact among themselves on the Union's territories" (Hübner 2007). More recently, the Commissioner has specifically linked the concept of territorial cohesion with new challenges of the 21st century, including pressures on territories related to climate change. She has stated that "already now some preliminary results suggest that their [new challenges, including climate change] impacts will not be evenly distributed across the Union but will be more concentrated in particular regions, thus widening socio-economic disparities" (Hübner 2008). In addition, a recent Eurobarometer survey showed that a large majority of Europeans (85 per cent) support the Commissioner in her wish to widen the scope of this policy in future to include climate change (CEC 2008h).

A major problem in discussing territorial cohesion is that the phrase encompasses a number of dimensions, and certainly means different things to different Member States (Wilkinson 2008). Perhaps the clearest description is presented in the EU's Cohesion Guidelines, section two of which states:

One of the features of cohesion policy – in contrast to sectoral policies – lies in its capacity to adapt to the particular needs and characteristics of specific geographical challenges and opportunities. Under cohesion policy, geography matters. Accordingly, when developing their programmes and concentrating resources on key priorities, Member States and regions should pay particular attention to these specific geographical circumstances. Taking on board the territorial dimension will help to develop sustainable communities and to prevent uneven regional development from reducing overall growth potential (CEC 2005b).

Geographical areas with specific opportunities or problems require their own tailored development programmes which are integrated both horizontally across sectors and vertically between different levels of government (Wilkinson 2008). Such areas could include cities, rural areas, the interface between urban and rural regions, cross-border areas, areas in industrial decline, coastal zones, islands, and areas which are remote, mountainous, or have sparse populations. The Cohesion Guidelines give a number of examples. In declining industrial areas, a territorial approach might seek to rehabilitate the physical environment, redevelop brown field sites and preserve the historical and cultural heritage. The primary objective of such a programme would be environmental and social but with spin-offs in the form of increased tourism and job creation.

The territorial approach therefore seeks to capitalise on the unique geographical assets of specific types of region. So in some areas integrated programmes might aim as a priority to develop indigenous renewable energy resources (such as wind or tidal power in some coastal zones). In heavily forested areas integrated programmes might capitalise on the potential opportunities provided in relation to carbon sequestration.

The "territorialisation" of cohesion policy provides both threats and opportunities for climate change policy (Wilkinson 2008). One key point is that not all programmes would have as their primary objective the generation of growth and jobs, as currently under the Lisbon Strategy. On the contrary, some programmes might have, for example, climate change as their main organising principle, with economic and social benefits as secondary spin-offs. In this case, addressing climate change would no longer need to be horizontally mainstreamed through programmes and projects with predominantly economic objectives, because addressing climate change would already be recognised as a vertical priority. On the other hand, territorial cohesion might also be invoked to justify organising the development of some regions around the establishment of major European gateways in the form of ports or airports, with associated increases in GHG emissions. This indicates that important political choices are to be made in the near future with a major impact both on the future of cohesion policy and the achievement of the EU's climate-related objectives.

# 6.2 Research and Development

A great deal more investment is needed in research and development in order to decarbonise the European economy. The Green Alliance suggest 7.5-8.5 billion euros per year (Green Alliance 2007). As discussed in Section Five, this is not to say that EU spending should occur in isolation but to lever additional national public and private funding to fast track low-carbon technologies. It should also be linked to other policy measures that help create markets for new technologies. However, there appear to be sharp differences about how and by whom expensive CCS and other "green" technologies should be financed (Euractiv 2008).

In particular, the Commission has been keen to make plain the lack of current finance available for CCS projects (*ibid*). This is considered a crucial technology for the prevention of CO<sub>2</sub> emissions during the production of electricity in coal-fired power plants. While energy efficiency and renewables are expected to deliver in the long term, some fossil energy will be needed in the medium term to meet the EU's energy needs. Also, coal is an important source of energy globally in countries such as China and India,

which have vast coal reserves to exploit. We must rapidly develop the means to enable these countries to stabilise their GHG emissions with near-zero carbon solutions (Green Alliance 2007). The EU has recognised this and has made a commitment to the development of 10-12 demonstration projects by 2015, but not necessarily to their funding (CEC 2007a). Who should fund these projects and how is yet to be decided. The EU is currently consulting on ways in which to deliver this target, including options to meet the incremental costs of the demonstration plants. However, the technology is highly expensive, and both public authorities and the private sector have so far been reluctant to offer the financing necessary to jump start the uptake of CCS on a commercial scale (Euractiv 2008).

Besides CCS, key areas for increased Research and Development in climate change mitigation funding include:

- development and deployment of measurement methodologies and testing procedures to underpin and promote the development of energy performance standards and labelling for an ever-increasing range of products;
- continued focus of RTD on energy-efficient technologies, in particular to facilitate the move to zero-carbon buildings;
- renewable energy generation and systems, particularly smart distribution and decentralisation control systems. Emphasis needs to be placed on better utilisation of all renewable energy sources. Wind power has been explored and is starting to make a difference. However, RTD on wave and tidal technology is required because this is not yet fully understood or utilised.
- In general there should be a greater emphasis on and investment in nonnuclear energy options in contrast to the current preponderance of research on nuclear options in EU funding.
- Non CO<sub>2</sub> gases RTD on reducing emissions from agriculture and the use of biological sequestration.

Funding can also be deployed for the adaptation to climate change, an area which is particularly poorly served by the private sector, for example through:

- Improved monitoring and prediction of climate change impacts, including identification of "urban hot spots" (often affecting social housing);
- Better modelling of regional impacts, and development and deployment of drought and flood resistant crops.

## **6.3 Common Agricultural Policy**

The budget review opens the way for considerable scrutiny of the rationale for all EU expenditure, not least the amount allocated to the CAP and the value for money it provides. While in the early days of this policy it may have made good political sense to spend the EU's cash on farmers (Baldwin 2005), this is now more debatable. State support for a declining industry is becoming unpopular with the governments of some (mainly non-agricultural) Member States, such as Sweden and the UK. In addition, the work of NGOs, facilitated by freedom of information legislation in various Member States, has allowed citizens to see that relatively few large rich farmers in the EU15 receive vast payments while smaller farmers receive relatively little. Thus the CAP is perceived by some as a mechanism simply to tax some EU citizens and to transfer the proceeds to other EU citizens (mostly rich EU farmers). Gros and Micossi (2005) argue that the high level of spending on the CAP leaves insufficient room to accommodate the competing demands for structural funds (ibid). This is especially true if, as this report argues, the EU budget must find sufficient resources to pursue new challenges such as climate change.

A lively debate is now unfolding, stimulated in part by the CAP Health Check, on the role of the CAP in supporting the provision of public goods. Indeed, calls are mounting to predicate the provision of financial support in the future on the provision of public goods and benefits. However, a number of critics argue that the CAP, in its present form, is not optimising the benefits it brings to the EU. For example, a recent report for the European Parliament's Committee on Budgetary Control called for CAP payments to be restricted in order to provide greater added value, specifically by better targeting payments to low-income farmers (Núñez Ferrer and Kaditi 2008). Others outside the EU institutions (and some inside, for example parts of the UK Government) are calling for the significant reduction of the CAP budget and even the abolition of Pillar I.

The abolition of the CAP is an unlikely prospect. However, it is clear that, at the very least, during the debate pressure will be exerted to significantly decrease direct aid to farmers post 2013. The subsequent redistribution of the money currently allocated to direct aids is less certain. It is unlikely that all this money will simply be siphoned to rural development expenditure, implying that a large proportion could leave the rural domain. The money could simply exit the EU budget altogether rather than being spent on structural and cohesion funding as part of a general drive to decrease overall EU expenditure and the contributions of individual Member States.

Instead of reducing the overall level of CAP spending, money within the CAP could be diverted to respond to the contemporary challenges faced by the EU, including dealing with the threat of climate change and biodiversity loss. In this sense, it has been argued that CAP support needs to be directed towards the maintenance of a sustainable form of land management (Cooper et al. 2008), to maintain or, wherever possible, enhance ecosystem services or functions, particularly those relating to climate change mitigation and adaptation. By encouraging the right balance of crops, activities and land use practices, farming in the EU should be able to reduce its emissions of GHGs as well as being more resilient and better able to adapt to climate change. In this sense, the CAP should provide a framework to guide a climate sensitive form of sustainable land management. It should not, however, directly incentivise the production of biofuel crops given that there are currently sufficient drivers for the production of these outside of the CAP, including, for instance, meeting the existing target of 5.75 per cent share of biofuels in energy content of petrol and diesel placed on the market under Directive 2003/30/EC and the incentives for energy suppliers to purchase a proportion of power from renewable sources, including biomass, introduced by Member States under Directive 2001/77/EC.

Rural development measures could play a larger role in the mitigation of and adaptation to climate change through land management and the preservation and maintenance of ecosystem services. Indeed, there is a clear instruction to the Member States in the European Agricultural Fund for Rural Development (EAFRD) Strategic Guidelines that their rural development programmes should address Community priorities, one of which is climate change. A range of measures under Pillar II offer one channel for incentivising possible mitigation options. Some of the most interesting are those which yield multiple benefits, above and beyond reducing emissions. For example, there are opportunities both to reduce nitrous oxide emissions and at the same time to reduce water pollution by improved management of slurry and other livestock wastes. The re-flooding of oxidised peat soils in selected locations could contribute to climate and nature conservation goals.

To strengthen rural development instruments so that they can address these challenges further funding will be required. Some green groups such as Green Alliance are calling for a radical reform of the CAP, especially Pillar I in order to yield sufficient savings. We would argue that this adds weight and urgency to proposals for a further transfer of CAP funding from income support payments to appropriate rural development measures. Without a further re-balancing between Pillar I and Pillar II, financial limita-

tions would leave the rural development budget unable to accommodate the significant new challenges identified in the Health Check Communication, such as responding to climate change.

#### 6.4 Other Funds

The small amount of funds allocated to successive LIFE programmes and the issues with their efficiency and effectiveness, as discussed above, mean that it is unlikely that this fund will be able to develop into a funding instrument that can adequately support the EU's climate change objectives. The increased expenditure required is more likely to continue to be "mainstreamed" and so funded from the Structural and Cohesion Funds and perhaps from a more environmentally focused, Pillar II heavy CAP, as demonstrated above. However, it may also be possible to raise additional funds to tackle climate change, which could be used to increase resources of existing funds or be channelled through a separate and new climate change fund.

Since "mainstreaming" has been shown to be less than effective in meeting the Union's climate change objectives, there are strong arguments for considering an alternative approach, in particular, the establishment of a dedicated EU Climate Change Fund. This could bring together most of the EU's climate-related spending currently scattered through EU programmes as well as additional funds. However, there are various reasons to be cautious, though not dismissive of this approach. First, as Section Four demonstrates, if climate change objectives are not mainstreamed into the major EU spending programmes, then these funds can undermine the EU's climate change objectives and encourage the increase of GHG emissions. The coherence of the EU budget with climate change policy objectives is as important as the direct funding for the objectives themselves. Second, the lessons learnt from LIFE in terms of its effectiveness and efficiency of spending is not particularly encouraging for the creation of an extra environmental type fund managed by DG Environment.

Raising additional funds for the EU budget to tackle climate change or any other policy objective has always been a difficult subject of discussion at the EU level. The EU's revenue, known as "own resources", is the result of successive modifications of the original system introduced in 1970. At present, the EU's annual revenue, which is currently limited to 1.24 per cent of the EU Member States' combined Gross National Income (GNI), is derived from three sources:

 Traditional Own Resources – customs duties arising from the proceeds of the EU's Common Customs Tariff, together with duties on agricultural imports and sugar levies;

- A resource based on value-added tax (VAT) levied on a notional VAT base harmonised across Member States, which is calculated on the basis of national VAT receipts; and
- A resource reflecting the Gross National Income (GNI) of each Member State – a residual, variable resource used to "top up" the budget to cover annual expenditure needs. The income derived from GNI contributions is in practice subject to a ceiling, to ensure that the total amount of all own resources does not exceed the 1.24 per cent threshold.

Contributions from the first two income sources have declined in recent years and, as a result, the direct contributions by Member States based on their respective GNIs had to increase to almost 75 per cent of total EU income by 2005. This has increased the tendency of Member States to judge the desirability of EU policies against the criterion of what they get back in payments (Gros and Micossi 2005). The Commission has stated that it will present new proposals for new sources of "own resources", mainly through changes to the current VAT resource to turn it into a genuine, tax-based VAT own resource. However, there would also be merit in linking Member States' contributions to the EU budget to environmental criteria such as GHG emissions. This would both ensure that richer Member States contributed a larger share of resources (at least at first) than smaller economies and also have the effect of encouraging and rewarding those that reduced their emissions.

Environmental taxation (rather than a broad-based consumption tax) to be applied within Member States could potentially be a new source of revenue for the EU which would also address climate change objectives. This type of taxation would have a double dividend because it would not only raise revenue but also increase the relative price of the good being taxed in order to discourage its consumption (Le Cacheux 2007). An EU excise duty on motor fuels or fossil fuels or on aircraft fuels (that presently are not taxed) would combine reliable yield, at least in the short run, a relatively low administration cost and price incentive to induce a general reduction in the taxed consumption or activity. However, opposition from Member States to EU control of fiscal policy means that this instrument is not readily available to the institutions. In Indeed, Green Alliance (2007) discount the possibility of a carbon tax altogether as "unlikely to overcome longstanding political objections".

Any new assignment of a resource to the EU budget does not only have to be decided unanimously in the Council, but, as an amendment to the Treaty, also needs to be ratified by all Member States' parliaments.

There is good reason for this pessimism. In 1992, 1997 and again in 2005 the Commission suggested different forms of energy-based taxes. The latter was an proposal for harmonised car taxation based on the consumption of motor fuel and associated CO<sub>2</sub> emissions. Little or no progress has been made on most of these proposals so far. Only the 1997 proposal eventually led to the adoption of an Energy Products Taxation Directive (2003/96/EC), in a seriously watered down form. None of these proposals actually provided for any revenue to feed directly into the EU budget. Yet, according to the Commission, an EU rate of motor fuel taxation below half the minimum rates in the Energy Products Taxation Directive would be sufficient to cover half the EU budget, and could be introduced relatively easily because of the existence of EU-wide minimum rates. The Commission has also raised the possibility of an (additional) EU levy on aviation fuel or related emissions. (CEC 2004) The aviation tax proposal has now effectively been superseded by the proposal to include aviation in the ETS, which is currently being examined by Council and Parliament. While not a tax, this would introduce another market-based instrument.

A separate source of additional revenue, though not presently proposed for inclusion in the EU budget, is the revenue that will be raised from the auctioning of allowances from the third phase of the EU ETS starting in 2013. Although under current proposals, the money is to be collected and spent by the Member States, the idea of siphoning off a certain percentage of the proceeds obtained in order to transfer the monies towards a fund for clean technologies has been mooted. However, there is evidence of a clear division between those Member States supporting the ring-fencing of this revenue from allowance auctioning for energy efficiency and climate change mitigation activities, and those who see any specification of how funds are to be used as politically totally unacceptable, for example the UK and Finland (EU Council 2008a; EU Council 2008b). One of the arguments invoked by opponents of ring-fencing is the budgetary principle of "universality", which means that total revenue must cover total payment appropriations. Opponents scored a major point when Finance and Economy Ministers unanimously agreed at the ECOFIN Council meeting of 12 February 2008 that "revenues from auctioning should be used in line with sound budgetary principles and, specifically, not be subject to mandatory earmarking or hypothecation at EU level." Advocates had to settle for a rather vague recommendation that "[t]he use of such revenues by Member States should not be inconsistent with EU efforts to tackle climate change." (EU Council 2008c)

Another key area where opinion is divided is the use of ten per cent of revenues generated at auction to support newer Member States in meeting the costs of emissions reduction (EU Council 2008a; EU Council 2008b). This is designed to aid convergence between older, generally wealthier Member States and newer entrants to the EU. Several of the newer Member States have expressed significant concern at the costs associated with meeting the emission reduction targets proposed and consider that the ten per cent proposal is insufficient to support the level of investment needed. Meanwhile others, particularly the UK, comment that the EU ETS is not the appropriate mechanism to bring about European convergence and that there are other, more suitable approaches.

#### 7 THE REVIEW PROCESS AND ITS CONTEXT

In 2006, as part of the political agreement between the European Parliament, the Council and the Commission on the Financial Perspective 2007-2013, the Commission was given a mandate to undertake a "full, wide ranging review" of the EU budget and to report on the results of this review in 2008/9. The Commission was invited to review "all aspects of EU spending", as well as the Union's resources. The budget review process launched by the Commission in 2007 pursuant to this mandate provides an opportunity for a reconsideration of established budgetary practice and a critical assessment of the allocation of EU expenditure as well as sources of income against the background of the Union's evolving political priorities in a changing global environment.

This review process, of course, is not occurring in isolation. It is useful to keep in mind the overall institutional and political context when reflecting on the budget review and future prospects for budget reform. Within the same time frame as the 2008/9 budget review, there will be elections to the European Parliament as well as the appointment of a new Commission. Two other major policy reviews are also being undertaken which will have important implications for the budget (or vice versa): the CAP Health Check and a review of Cohesion policy. In addition to such links between different events on the EU political agenda, it should be remembered that despite logical arguments about value added and the most suitable policy instruments, budget negotiations always tend to be highly charged affairs with the final outcomes based heavily on horse trading behind closed doors, often at the last minute. Therefore the current and future positions taken by Member States throughout the process will be crucial in determining the eventual outcome.

The mid-term review of the CAP, the so-called CAP Health Check, was formally launched by the Commission (with DG Agriculture in the lead) in November 2007 and will be concluded over the course of 2008. The proposals have not yet been published but their contents have been drip fed to audiences across the continent. Although this is not meant to be a full policy review the ramifications for the budget review make it likely that a more comprehensive discussion is unfolding. The comments of Budget Commissioner Dalia Grybauskaite, at the launch of the consultation regarding the EU Budget Review on 12 September 2007, that the provision of traditional agricultural support should not be taken for granted, suggest that a strong case will need to be made for the rationale underpinning European expenditure on agriculture. The likelihood that the Health Check will act as a trigger for a much broader debate about the intrinsic rationale for the CAP,

its objectives, and the appropriateness and effectiveness of its measures, is manifest in the way in which key stakeholders are beginning to engage with both processes (Cooper *et al.* 2008).

DG REGIO is also undertaking a major review of cohesion policy and will publish a Green Paper on Territorial Cohesion in September 2008. Commissioner Danuta Hübner has indicated that this has the explicit support of President Barroso. The Green Paper will launch a consultation on a range of questions, including the need for a new multi-level governance system, and an integrated policy approach between territories and between policies. The Green Paper will appear shortly before, and could well influence, the Commission's eventual proposals for the reform of the EU budget, due in early 2009. In the meantime, the Slovenian and French Presidencies are taking this issue forward by announcing an Action Programme on Territorial Cohesion. The application of a territorial approach to cohesion policy could have important implications for funding climate change policy as well as the CAP and preferably both together (Wilkinson 2008).

In practice, of course, budget negotiations in the EU are marked by fierce and prolonged battles within and between the institutions. Baldwin (2005) warns us away from the "Father Christmas" view of the EU budget in which spending is based on "high-minded principles" such as solidarity and redistribution. He argues that power politics plays a significant (if not the most significant) role in the EU budget that it is important not to lose sight of. Thus the positions of individual Member States will play a vital role in how events turn out. France, the Czech Republic and Sweden will be the three countries holding the EU Presidency during the most critical period from July 2008 to end 2009. This is an interesting mix given France's protectionist leanings, the Czech Republic's support for free trade and budget efficiency and Sweden's stance in favour of more liberalisation. More specifically Sweden has already started to be very supportive of the UK Treasury position to cut the overall expenditure on agriculture. The UK is also pushing for financial support only for the poorest Member States and some cross-border initiatives (Department for Trade and Industry 2003).

#### 8 CONCLUSIONS

Under the current Financial Perspective, as this report has shown, only a minor share of the EU budget is specifically dedicated to funding programmes which directly support the objectives of the Union's policy to address climate change. Some existing budget lines can partly be used to fund policy measures which contribute to the mitigation of climate change - as well as, to a lesser extent, to the necessary adaptation to its effects especially in the area of RTD and innovation policy as well as cohesion policy. However, the extent to which these EU funds are effectively used for this purpose is not transparent due to the "mainstreaming" of environmental policy objectives in non-environmental funding instruments. Most of the actual project-level funding decisions are made by national and regional authorities in the Member States, and these seem to be far less committed to EU climate policy objectives than the EU institutions themselves ostensibly are. While such national and regional spending programmes are subject to Commission approval, there is little evidence so far that the Commission is attempting to use this power to ensure that a larger share of the funds is actually used in direct support of the Union's policy to fight climate change and adapt to its effects.

The present budget review process, which is to be completed no later than 2009, therefore provides an important opportunity for those who are advocating a comprehensive budget reform that would, inter alia, ensure that the allocation of the EU's financial resources is more directly geared towards meeting its current stated major policy objectives, such as the struggle against climate change. It is hoped that the distance between the current debate on the review of the EU budget and the actual negotiations on the next Financial Perspective, which will come much nearer the end of this current one (that is to say, from 2010 onwards), will enable Member States to further consider the need for fundamental reform and better overcome their temptation to continue to resort to the logic of juste retour. The current review and forthcoming policy debate on budget reform, in theory, provide a platform open enough for the EU institutions and stakeholders to engage in a far-reaching consideration of the need to better direct future EU spending towards the new challenges facing the EU, such as climate change.

This report argues that turning the EU budget into an instrument to support the fight against climate change is worthy of significant attention in this debate, all the more so since this may also contribute to achieving other policy objectives in the context of the Sustainable Development Strategy and Lisbon Strategy. If the EU is to meet its ambitious climate

targets agreed by political leaders at the highest level in 2007 and implement the proposals set out earlier this year by the Commission in its "Climate and Energy Package", then it must put into action a broader and more coherent deployment of all policy instruments and approaches at its disposal, which will, necessarily, include the EU budget.

#### **BIBLIOGRAPHY**

Baldock, D. and Wilkinson, D. (2006) Green Spending in the EU Budget. IEEP. London. (Unpublished Report).

Baldwin, R. (2005) The Real Budget Battle: Une crise peut en cacher une autre. CEPS Policy Brief No. 75/June 2005. Centre for European Policy Studies. Brussels.

Balls, E. (2007) Britain and Europe: A City minister's perspective. Centre for European Reform Essays. Centre for European Reform. London.

Birdlife International (2007) New challenges, new CAP: Birdlife International's vision for the future of the EU Common Agricultural Policy. Birdlife International. Brussels.

Le Cacheux, J. (2007) Funding the EU Budget with a Genuine Own Resource: The case for a European Tax. Notre Europe. Paris.

Commission of the European Communities (CEC) (2001) Mitigation potential of Greenhouse Gases in the Agricultural Sector. Final Report. European Climate Change Programme Working Group 7. CEC, Agriculture Directorate-General, Brussels.

http://ec.europa.eu/environment/climat/pdf/agriculture\_report.pdf. Accessed 06/04/08.

CEC (2004) Financing the European Union: Commission Report on the operation of the own resources system. (COM (2004) 505). CEC. Brussels.

CEC (2005a) Winning the Battle Against Global Climate Change. COM (2005) 35). CEC. Brussels.

CEC (2005b) Cohesion Policy in Support of Growth and Jobs: Community Strategic Guidelines, 2007-2013. (COM (2005) 0299). CEC. Brussels.

CEC (2005c) Working Together for Growth and Jobs: A new start for the Lisbon Strategy. (COM (2005) 24). CEC. Brussels.

CEC (2005d) Building the Europe of Knowledge. Proposal for a Council Decision Concerning the Seventh Framework Programme of the European Atomic Energy Community (Euratom) for Nuclear Research and Training Activities (2007 to 2011). (COM (2005) 119) CEC. Brussels.

CEC (2006) Annual Report of the Structural Funds- 2006. CEC. Brussels.

CEC (2007a) Reforming the Budget, Changing Europe: A public consultation paper in view of the 2008/2009 budget review. (SEC (2007) 1188). CEC. Brussels.

CEC (2007b) Limiting Global Climate Change to 2 degrees Celsius. The way ahead for 2020 and beyond. (COM (2007) 2). CEC. Brussels.

CEC (2007c) Adapting to climate change in Europe – options for EU action. (COM (2007) 354).

CEC (2008a) 20 20 by 2020: Europe's Climate Change Opportunity. (COM (2008) 30). CEC. Brussels.

CEC (2008b) A Financial Framework for the Enlarged Union (2007-2013). http://ec.europa.eu/budget/prior\_future/fin\_framework\_en.htm Accessed 25/03/08.

CEC (2008c) Agriculture and Climate Change. Commission of the European Union.

http://ec.europa.eu/agriculture/envir/report/en/clima\_en/report\_en.htm Accessed 25/03/08.

CEC (2008d) CIP. http://ec.europa.eu/cip/questions.htm#7 Accessed 25/03/08.

CEC (2008e) LIFE+ (2007-2013).

http://ec.europa.eu/environment/life/funding/lifeplus.htm#First Accessed 25/03/08.

CEC (2008f) Welcome to Life http://ec.europa.eu/environment/life/Accessed 25/03/08.

CEC (2008g) Regional Policy: Cohesion fund.

http://ec.europa.eu/regional\_policy/funds/cf/index\_en.htm Accessed 14/03/08.

CEC (2008h) Citizens' Perceptions of EU Regional Policy Analytical Report. CEC. Brussels.

http://ec.europa.eu/public\_opinion/flash/fl\_234\_en.pdf Accessed 25/03/08.

CEC (2008i) Energy Efficiency in Buildings.

http://ec.europa.eu/energy/demand/legislation/buildings\_en.htm Accessed 25/03/08.

Cooper, T, Baldock, D., and Farmer, M. (2007) Towards the CAP Health Check and the European Budget Review. Report written by IEEP for the German Marshall Fund of the United States. Washington.

Cooper, T, Baldock, D, Hart, K., and Eaton, R. (2008) Analytical Paper to Inform the LUPG Vision for a Future CAP. IEEP. London. (Unpublished Report).

Cordis (2006) Sixth Framework Programme. http://cordis.europa.eu/fp6/budget.htm Accessed 25/03/08.

Cordis (2007a) Seventh Research Framework Programme – Environment (including climate change) http://cordis.europa.eu/fp7/cooperation/environment\_en.html Accessed 25/03/08.

Cordis (2007b) Seventh Framework Programme – Energy http://cordis.europa.eu/fp7/cooperation/energy\_en.html Accessed 25/03/08.

Department of Trade and Industry (2003) A Modern Regional Policy for the United Kingdom. The Stationary Office. London.

Euractiv (2007) Funding Energy Efficiency in the EU. http://www.euractiv.com/en/energy/funding-energy-efficiency-eu/article-165378 Accessed 13/05/08.

Euractiv (2008) Financing Woes Plague EU Climate Technologies. http://www.euractiv.com/en/climate-change/financing-woes-plague-eu-climate-technologies/article-170573 Accessed 25/03/08.

European Council (2007a) Presidency Conclusions of the European Council meeting 8 and 9 March 2007. http://europa.eu/rapid/pressReleasesAction.do?reference=DOC/07/1&format=HTML&aged=0&language=EN&guiLanguage=en Accessed 25/03/08.

European Council (2007b) Presidency Conclusions of the European Council meeting 21 and 22 June 2007. http://www.consilium.europa.eu/ue-Docs/cms\_Data/docs/pressData/en/ec/94932.pdf
Accessed 25/03/08.

EU Council (2005) Financial Perspective 2007-2013. 15915/05. Submitted to European Council. 19 December 2005. http://ue.eu.int/ueDocs/cms\_Data/docs/pressdata/en/misc/87677.pdf Accessed 25/03/08.

EU Council (2006) Review of the EU Sustainable Development Strategy (EU SDS)? Renewed Strategy. 10917/06. Council of the European Union. Brussels.

EU Council (2006b) Council Decision of 18 December 2006. Concerning the Seventh Framework Programme of the European Atomic Energy Community (Euratom) for Nuclear Research and Training Activities (2007 to 2011). 2006/970/Euratom. (OJ L400/60, 30.12.2006).

EU Council (2008a) Written Contributions from Delegations. Package of implementation measures for the EU's objectives on climate change and renewable energy. Council of the European Union. Brussels. http://register.consilium.europa.eu/pdf/en/08/st07/st07025-ad01.en08.pdf Accessed 25/03/08.

EU Council (2008b) Written Contributions from Delegations. Package of implementation measures for the EU's objectives on climate change and renewable energy. Council of the European Union. Brussels. http://register.consilium.europa.eu/pdf/en/08/st07/st07025.en08.pdf Accessed 25/03/08.

EU Council (2008c) Press Release 6187/08, 2847th Council meeting, Economic and Financial Affairs. Council of the European Union. Brussels, 12 February 2008.

http://www.consilium.europa.eu/ueDocs/cms\_Data/docs/pressData/en/ecofin/98717.pdf Accessed 06/04/08.

European Environment Agency (EEA) (2007) Greenhouse gas emission trends and projections in Europe 2007. EEA Report No. 5/2007. Copenhagen.

European Parliament (EP) (2006) European Parliament Resolution on Natural Disasters (fires, droughts and floods) – environmental aspects. P6\_TA(2006)0224. EP. Strasbourg.

Núñez Ferrer, J. and Kaditi, E.A. (2008). The EU Added Value of Agriculture Expediture – from market to multifunctionality – gathering criticism and success stories of the CAP. Report prepared by the Centre for European Policy Studies for the European Parliament. CEPs. Brussels.

FOEE (2006) Safer Energy For Europe – One Million Europeans against Nuclear: Friends of the Earth Europe background paper. http://www.foeeurope.org/publications/2006/paper\_on\_FP7\_13March2006.pdf Accessed 25/03/08.

FOEE and CEE Bankwatch Network (2007) EU Cash in Climate Clash: How the EU funding plans are shaping up to fuel climate change. Friends of the Earth Europe and CEE Bankwatch Network.

Gros, D. and Micossi, S. (2005) A Better Budget for the European Union: More value for money. CEPS Policy Brief No 66/February 2005. CEPS. Brussels.

Green Alliance (2007) Investing in Our Future: a European Budget for Climate Security. Green Alliance. London.

German Presidency (2007) Declaration on the occasion of the fiftieth anniversary of the signature of the Treaties of Rome. http://www.eu2007.de/de/News/download\_docs/Maerz/0324-RAA/English.pdf Accessed 25/03/08.

Hübner, D. (2007) Territorial Cohesion: towards a clear and common understanding of the concept. Speech given by Danuta Hübner European Commissioner Responsible for Regional Policy at an Informal Ministerial Meeting on Territorial Cohesion and Regional Policy Ponta Delgada, Azores, Portugal, 23 November 2007.

Hübner, D. (2008) Role of Local, Regional Authorities Crucial in Facing Challenges of Globalisation. Press Release IP/08/59. Brussels, 18 January 2008.

http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/59&format=HTML&aged=0&language=EN&guiLanguage=en Accessed 25/03/08.

HTS Development (2004) Life Environment UK review 2004. Report written for DEFRA. HTS Development Ltd. Hemel Hempsted.

Jouen, M. and Rubio, E. (2007) Synthesis Paper. Seminar "The EU Budget: What for?", 19 April 2007, Brussels.

Pallemaerts, M. (2006) The EU and Sustainable Development: An Ambiguous Relationship. In: The European Union and Sustainable Development: Internal and External Dimensions. Eds. Marc Pallemaerts and Albena Azmanova. VUB Press. Brussels.

Polverari, Q. and Novotny, G. (2005) Territorial Cohesion and Structural Funds Programmes: Urban Development and Territorial Cooperation. IQNet Thematic Paper 16 (2). European Policies Research Centre. Brussels.

Stern, N, (2006) The Stern Review on the Economics of Climate Change. HM Treasury. London.

Tarschys, D. (2007) Agenda 2014: A Zero-Based Approach. European Policy Analysis. October Issue 5-2007. Swedish Institute for European Policy Studies. Stockholm.

UNFCCC (2007) Investment and Financial Flows Relevant to the Development of an Effective and Appropriate International Response to Climate Change. UNFCCC.

Wilkinson, D., Baldock, D., Farmer, M. (2007) HM Treasury Principles for the EU Budget Review 2008-9: Implications for Environmental and Land Management Policies. IEEP. London.(Unpublished Report).

Wilkinson, D. (2008) An Assessment of the Effectiveness of Environmental Mainstreaming in EU Funding Instruments. IEEP. London. (Unpublished Report).

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