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“How to finance the EU low carbon strategy within the framework of equity, solidarity and participation”

Background paper

The potential of EU financial instruments to foster a low carbon strategy

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The EU financial instruments through the EU budget and EIB have the potential to play a central role in driving the process to a low carbon economy. To do so the EU needs to integrate energy and climate change objectives across budget interventions in a coherent and integrated manner. While reinforcing R&D and demonstration support through the Strategic Energy Technology (SET) Plan is important, it is by far not the only or even the main instrument. The Trans-European and pan-European (low-carbon) energy transport links, as well as the appropriate national, regional and local infrastructures can be assisted and coordinated through a coherent use of a number of EU funds. For member states and regions eligible for EU Cohesion and Convergence Funds, appropriate funding strategies can assist developing a low-carbon economy *and* boost sustainable growth and employment. Those can be coordinated also with SET Plan and TEN-T and TEN-E (Trans European Network for Transport and Energy) funding. However, the coordinated use of funds and the development of integrated coherent multiannual strategies is far from simple and not only requires appropriate EU funding regulations, but also a strong commitment of member states, a substantial reengineering of the EU budget and the appropriate level of resources. Finally, the EU will need to find a way to coordinate the financing of climate change obligations with developing countries if it wants to have a strong voice in the mechanisms ruling climate funding.

1. Introduction

We are perhaps at a turning point in the structure of the EU financial mechanisms. In the next three years one of the most important reforms of the EU budget may and should take place. The present budget is simply not sufficiently in line with EU objectives while fiscal pressures across Europe makes it imperative for the budget to justify its expenditures. The EU 2020 strategy¹ published by the European Commission has little resemblance to the budget structure, despite the wide scope of interventions presented.

The discourse on the reform during the last years has changed dramatically. When the Council and the Parliament requested the European Commission to present a complete review of the EU budget by the end of 2009 in May 2006 the role of the budget in on climate change issues was hardly addressed. Complex other challenges, such as the financial crisis and the global food shortages were also not considered. These new factors might explain the existing delay in producing the budget review.

It is also only recently that the EU budget and other financial instruments such as the EIB (European Investment bank) are being looked at as tools to finance the decarbonisation of Europe. Recently, CEPS has published a comprehensive report on the role of the EU budget in climate change². This background paper draws heavily from this report and some other publications co-authored by the author³.

2. Can the EU financial instruments play a central role?

Yes, they can and they should. The EU financial instruments, be it through the EU budget or the EIB, can have a much larger impact than they are credited for. Promoting a low carbon economy has a large number of future implications for the EU economy because many synergies can be found between climate and energy policies, growth, employment and green jobs, environment and international competitiveness and trade. The EU should play a central role to guide, and assist financially, the achievement of those goals. In fact, the EU budget through its leverage mechanism, its importance in many regions and the rules governing it (such as procurement procedures), has the potential to exert a strong influence over investment decisions by governments and individuals. This potential influence has

¹ 'Consultation on the Future "EU 2020" strategy', COM (2009) 647 final, Brussels, 24.11.2009

² Núñez Ferrer, J., Behrens A. and Egenhofer C. (2009), 'For a sustainable, competitive and greener EU budget - Integrating the Climate Change objectives of the EU', Task Force Report, CEPS.

³ Núñez Ferrer, J. (2010), 'Internal and external EU climate objectives and the future of the EU budget', European Policy Analysis, Swedish Institute for European Policy Studies (SIEPS) March, Issue 2010:1 epa

Altmann M. , P. Schmidt, Mr. W. Weindorf, Z. Matra, A. Brenninkmeijer, J.-C. Lanoix, O. van den Kerckhove, C. Egenhofer, A. Behrens, J. Núñez Ferrer, R. Bleischwitz, A. Crisan, "Assessment of Potential and Promotion of New Generation of Renewable Technologies", report for the European Parliament - Economic and Scientific Policy, ITRE Committee, ED 528/15232(2009), forthcoming.

never been properly exploited and has often been undermined through badly targeted policies and wrong incentives.

This short background paper presents the three main roles the EU budget should play to finance a low carbon strategy:

- 1) Reinforce R&D in renewable technologies and their deployment
- 2) Co-finance the development of low carbon zones
- 3) Assist in the development of an integrated energy market in Europe

2.1. Role in R&D financing

The present investment in R&D (public and private) for the SET Plan group of technologies is estimated at approximately €3 billion annually. The Commission calls for an increase in the combined resources to €8 billion a year or €50 billion over the next 10 years. The sources of this funding still need to be decided, and should be based on a mix of EU, national, public and private sources.

The rationale for funding R&D is clear. Apart from the need of developing better technologies to achieve large reduction in emissions, reaching over 80% in 2050, the EU does not operate in isolation and we are facing a technological race. Without the EU developing technological solutions to climate change, Europe may lose the leading edge and important economic opportunities.

The Commission estimates that the additional resources needed over the next decade should be of €50 billion, or in excess of €8 billion a year given the present estimated €3 billion spent in R&D in the SET-Plan energy technology areas. The missing €5 billion funding need still to be found and approved by the member states, based on a mix of EU, national, public and private sources.

Finding €5 billion will not be easy and will likely require a proportionally higher financial effort by the EU, as states fight their fiscal deficits and private companies suffer from the recession. This means increasing the EU budget's share of funding and/or reinforcing the role of the EIB. For example, the European Commission and EIB offers through its risk sharing financial facility (RSFF) loans for advanced but untested technologies. The RSFF facility allows for up to €10 billion in loans thanks to a combined European Commission and EIB €2 billion guarantee fund. Given the 1/5 leverage effect through the loans for risky undertakings, the EU can radically expand funding in this area, especially for demonstration plants.

Another source of funding for the SET plan could be originating from the ETS revenues. It makes sense that the ETS revenues are earmarked to finance new technologies to reduce carbon emissions, as well as other investments related to mitigation and adaptation.

2.2. Financing the development of low carbon zones

The previous section on leading the technological race is clearly aimed at reducing emission, combining it with the need to be at the top of new developments in global innovation.

However, the wider EU budget's role in fostering a reduction in emissions is very important. The EU's Cohesion Policy consisting in the Cohesion Funds and Regional Funds for member states and regions with a low GDP per capita relative to the EU average, can potentially drive low carbon strategies. Even the Common Agricultural Policy and Rural Development Policy can have important roles to play, if properly devised.

First of all, there is climate proofing, all actions should avoid clashing with EU climate objectives, and some mechanism for offsetting new emissions created through EU financed programmes should be integrated. Second, there should be a stronger emphasis for public transport and rail connections, rather than the strong focus on roads and motorways, preferred by governments for their fast development and their large absorption of funds.

However, climate proofing is just a basic requirement. Through the combined use of funds from the Cohesion policy and the EIB, it is possible to envisage large scale low carbon zones at regional and in some cases at nationwide scale, with a large role as technology demonstration areas for SET Plan priority technologies. For some poorer member states and regions, the opportunity costs are very low while potential benefits are tremendous.

It is important to point out that the EIB has instruments which can be used to finance energy projects which are using existing technologies. The EIB can give bank guarantees for infrastructure projects such as it is done for the RSFF. As those are much less risky than RSFF operations the leverage effect is much higher, up to 1/20. The EIB also offers already loan guarantees through the European Investment Fund (EIF) and has created a new financial instrument, the Transport Investment Facility (TIF). This consists in loans with maturity up to 35 years and covering up to 75% of cost. Those instruments need expanding⁴.

The Rural Development Funds would also need revisiting, shifting more of the focus of support toward small scale energy generation, in particular using biomass, wind or solar in rural areas and farms.

The creation of low carbon zones, however, requires a different culture of planning and intervention at national and EU level. The strategies required need a real integrated approach to energy and development which for the moment does not exist, with serious monitoring of objectives. It also needs to integrate effectively funding from different sources much more coherently than has been done in general.

2.3. Assist in the development of an integrated energy market in Europe

For the EU to achieve its full potential with large scale renewable energy sources, it is important to build the infrastructure that would counteract the fluctuations of energy intensity arising from those sources. It is important that HVDC (High Voltage Direct Current) connections link member states to large renewable energy sources. This requires an integration of the energy market, a long standing objective of the EU, the TEN-E (Trans-European Networks for Energy). This allows long distance energy transfer with low levels of energy loss, minimising the need for backup energy and linking the best renewable energy locations – sun from the south, and wind and hydro from the north.

While there is a large role for the energy companies and transmission operators in financing their own infrastructure, the EU budget has the potential to intervene in crucial aspects of these objectives through a number of policies. Particularly important is the completion of the interconnectors among member states. The TEN

⁴ European Investment Bank (2005), 'Evaluation of PPP projects financed by the EIB', March 2005, EIB, Luxembourg.

European Investment Bank (2006a), 'EIB financing of the Trans-European Networks', September 2006.

plans were not developed to address today's energy concerns as the Second Energy Review by the European Commission in 2008 clearly stated and we need to further develop a coherent policy for an integrated grid.

The EU budget, through its TEN-E budget, the Cohesion Fund (for TEN-E investments in poorer member states) and financial mechanism offered through the EIB can assist in the network development. The EIB already offers the LGTT (Loan Guarantee instrument for Trans-European transport network projects). LGTT is financed with a capital contribution of €1 billion (€500 million each from the Commission under the TEN-T budget and the EIB) which is intended to support up to €20 billion of senior loans. The amount of guarantee never exceed more than a 200 million €, while the EIB is expected to offer loans for 50 billion € over the next decade⁵.

3. Conclusions and additional requirements

The EU budget is an important EU instrument, because it can, through its leverage mechanism, influence investment decisions across the EU and create economies of scale through pan-European collaboration.

The EU budget is an important instrument and a beacon of European ambitions. Its functioning and impact should reflect the objectives of the EU. This is not only an image issue, it is also because the EU budget has a strong potential through its leverage instruments which have never been fully exploited due to a lack of coherence, effective strategic planning and monitoring. We have a new opportunity to generate large economies of scale and mobilise the EU's research and business potential with well targeted and still relatively limited levels of funding through the EU in many central areas, energy is one of them. This can be used to change the energy landscape of Europe. It would be another important blunder of the EU to fail to do so, a blunder it can hardly afford.

The reforms do not require a revolution in the budget and the creation of new and complex headings, but requires a revolution on how the interventions are planned, implemented and monitored. It is also important that the mechanisms and structures being built to support this decarbonisation programme match are functional. The present financial regulations, intellectual property rules and many administrative structures are unfit for the challenges ahead⁶. If we do not get the EU financial instruments and interventions right for the period after 2014, Europe would lose a very important opportunity and will have little chances to lead the climate change agenda and the technological drive.

⁵ European Investment Bank (2008), 'The Loan Guarantee Instrument for Trans-European Transport Network Projects', Fact-Sheet, 2008-005-EN, 11 October 2008

⁶ Altmann M. , P. Schmidt, Mr. W. Weindorf, Z. Matra, A. Brenninkmeijer, J.-C. Lanoix, O. van den Kerckhove, C. Egenhofer, A. Behrens, J. Núñez Ferrer, R. Bleischwitz, A. Crisan, "Assessment of Potential and Promotion of New Generation of Renewable Technologies", report for the European Parliament - Economic and Scientific Policy, ITRE Committee, ED 528/15232(2009), forthcoming.