European Investment Bank

The EIB Climate Strategy in External Mandate Countries

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Background

As the EU Bank, the EIB is committed to promoting EU policy in the fight against climate change, and to establish itself as a leading multilateral provider of climate finance, supporting low carbon and climate resilient growth inside as well as outside the Union.

Urgent action is required for low-carbon and climate resilient growth. Although the Intergovernmental Panel on Climate Change (IPCC's) flagship global climate report, the Fifth Assessment Report, will not be finalised until 2014, its findings are expected to point towards clearer, faster and stronger impacts of climate change. The main goal for the EU is to deliver on the commitments made at the UN climate convention Conference of the Parties in Durban, South Africa, and to act as a matter of urgency to safeguard our chances to stay below 2°C temperature increase. Notably, in Durban, all countries noted with grave concern the gap in mitigation ambition, and agreed to enhance mitigation efforts to close the pre-2020 mitigation gap in all regions. All parties agreed to work towards a new climate regime applicable to all by 2020.

Climate action is an EIB horizontal public policy goal, backed by a substantial portfolio of projects in climate-relevant sectors. A formal overall lending target for climate action was introduced in 2010 at 20% of total signatures, and has been increased to 25% for the period 2012 to 2014. A consistent set of definitions and standards serves to determine which projects, or components of projects, are recorded as contributing to climate action. The target has been met, as the Bank's support to climate action projects inside and outside Europe has expanded considerably over recent years, almost doubling between 2008 and 2010, and amounting to €65 billion in total over the four-year period 2008 to 2011. Beyond the specific climate action volume, the EIB has sought to integrate more effectively climate-related considerations into the processes used to assess, monitor and evaluate all projects[1].

Article 6(4) of the revised EIB External Lending Mandate states that: "In line with Union and international climate change objectives, the EIB shall, in cooperation with the Commission, present by 31 December 2012 a strategy on how to gradually and steadily increase under its external mandate the percentage of projects promoting the reduction of CO2 emissions and phase out financing projects detrimental to the achievements of Union climate objectives."

This paper responds to this request. It sets out a strategic vision to reinforce the Bank's support to climate action outside the EU and more specifically in the Mandate region, grounded in its experience with low carbon and climate resilient technologies and expertise in Europe. It is accompanied by a more detailed background paper.

Taking stock of EIB climate action activities

In the Mandate regions, the Bank has delivered an upward trend of lending[2] to climate action projects over the period covered by the current External Lending Mandate: lending for climate action increased from approximately 20% over the first half of the period (2007 to 2009) to 27% in the second (to end November 2012).

[1] For instance, the carbon footprint of investment projects above a threshold is now systematically estimated and reported upon, and the cost of carbon is included where appropriate in the economic appraisal of projects.
[2] These figures refer to Bank lending at own risk (Facilities) and under Mandate. Figures are further broken down between these headings in section 3 of the accompanying background paper.

At the core of the Bank's current business model in Mandate regions is the EU guarantee, which allows the Bank to support projects that it otherwise could not support without hampering its financial health. In addition to lending under the Mandate, the EIB has established own-risk Facilities (such as the Energy Sustainability Facility (ESF)) through which it provides significant support particularly to investment grade clients in emerging economies. This is complemented by (i) the ACP-EU Cotonou Partnership Agreement and the Investment Facility, as well as (ii) multi-donor Trust Funds (e.g. the Facility for Euro-Mediterranean Investment Partnership (FEMIP), and the Eastern Partnership Technical Assistance Trust Fund (EPTAF)) and (iii) access to grant finance via EU Regional Blending Facilities.

The additional €2bn Climate Mandate envelope has been an essential driver to increase climate action lending outside the EU and widen the regional spread. Following its activation in late 2011, the project pipeline ramped up sharply during 2012. In addition to increasing volume, the specific Climate Mandate envelope has been an effective means to ensure a balanced distribution of climate action across regions, also including low income countries. For example, between 2007 and 2010, climate action was concentrated on large-scale climate action projects in Pre-Accession countries and Asia and Latin America. The share of other regions amounted only to 16% of overall climate lending under mandate. By contrast, in the period 2011-2012, other regions (that is, Mediterranean Region, Eastern Neighbourhood and South Africa) are expected to amount to over 28% of lending, i.e. almost double the percentage proportion. For the year 2012, based on current predictions, the Bank will provide support[3] to a total 17 countries.

The Bank is supporting all regions covered by the Climate Mandate, even if with a slightly different mix of climate action projects, and these trends will continue in 2013.

The recently established Technical Regional Operational Guidelines[4] will further support a strategic prioritisation on a regional level and ensure complementarity to corresponding EU assistance policies, programmes and instruments. They will contribute to a stronger alignment of EIB climate action in Mandate countries with EU external policies and actions, and will be accompanied by a reinforced cooperation with all policy makers including the EC / EEAS, the European Parliament and the EU Council.

Need for short term action

Much groundwork has been put in place in the Bank over the last years through developing and applying appropriate standards and financial instruments. Nevertheless, more needs to be done to address the gap in mitigation efforts, as well as to improve the climate resilience of some of the world's poorest communities to climate change. Therefore, in order to increase support to climate action projects **in the short term**, the Bank will:

- Maximise the use of resources available under the EUR 2bn Climate Mandate envelope. The current pipeline is expected to translate into higher climate action figures in relative and absolute terms for the remaining period of the Mandate
- Report separately on emissions from operations in the Mandate regions building on its existing methodology, thus allowing formal tracking of the growing proportion of low-carbon projects. This complements the Bank's use of sector-specific safeguards across a range of carbon-intensive sectors, in line with EU Best Available Technology benchmarks.
- Anchor climate change adaptation more comprehensively into the Bank's activity (i.e. through projects or project components that improve resilience of communities, cities, essential infrastructure and businesses). Together with EU Financial Institutions and Multilateral Development Banks (MDBs) the EIB is working to identify and put in place methods and

[3] Countries with (realized and expected) signatures in 2012 comprise: Albania, Armenia, Brazil, Egypt, Ecuador, Georgia, India, Israel, Lebanon, Montenegro, Morocco, Russia, South Africa, Sri Lanka, Turkey, Ukraine and Vietnam
[4] Commission Staff Working Document, SWD (2012) 357 Final, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SWD:2012:0357:FIN:EN:PDF

indicators to track climate resilience improvements of its portfolio, particularly for most vulnerable countries and sectors.

Looking beyond 2013

Taking a longer view beyond 2013, there is significant potential for climate action projects across all countries covered by the External Mandate. On the mitigation side, costs for some renewable energy technologies continue to fall whilst conventional energy costs rise. In addition, in some regions, significant potential exists to reduce carbon emissions through switching from liquid/solid fossil fuels toward lower carbon-intensive natural gas as a transition fuel. This potential, however, needs to be realised within a regulatory environment that is often challenging, including the lack of a stable investment framework, and subsidies for energy.

The Bank's commitment to further reinforce its support to EU climate action in the Mandate regions, together with the Commission and EEAS, will be supported by six strategic interventions.

- More proactive approach in supporting innovative mitigation projects promoting low carbon, green growth, including in less developed countries. Several countries have or are developing Nationally Appropriate Mitigation Actions (NAMAs) and national Low Emission Development (LED) strategies. A key challenge remains to distil these plans into concrete projects which are bankable and which the private sector can support. With its experience in financing low carbon technologies within Europe and in the regions concerned, the Bank provides a unique value-added. This can be complemented by a more up-stream dialogue involving the EC. Technical assistance, concessional financing and risk-bearing capital can leverage the impact of projects substantially, especially in a more challenging environment. In this context, the EU Regional Blending Facilities - or other existing or potential sources of grant finance - play a crucial role.

- Improving climate resilience in most vulnerable countries. Many Mandate region countries are especially vulnerable to climate change. This vulnerability is exacerbated in some regions by poverty and lack of capacity. Together with other MDBs, EU finance institutions and the Commission, the EIB is working hard to speed up the transition in the developing (and developed) world to one in which communities, economic systems and ecosystems are made cost-effectively resilient to climate variability and future climate impacts. The Bank plans to increase support to this transition in coming years. This will be done through improved project screening, increased financing of high quality demonstration adaptation projects, supporting country needs identified in National Adaptation Programmes of Action (NAPAs), and technical assistance targeted for adaptation, including training and support for financial intermediaries. The success of such action needs to be measured more broadly than in volume of lending only. Reductions in the vulnerability of communities and infrastructure need to be monitored closely in order to measure the success in improving the portfolio's resilience.

- Continued collaboration with EU and Member States. Both of the areas identified above – supporting the move to low emission development strategies and more effective adaptation – would much benefit from a more structured alignment between the Bank and the Commission, the European External Action Service, the pre-programming exercises of EU delegations, and the resulting country operational programmes. This therefore entails more comprehensive engagement with the Commission's strategic activities within countries.

- Collaboration with other Financial Institutions. The Bank will continue to collaborate with other European bilateral institutions, International Financial Institutions (IFIs) and Multilateral Development Banks (MDBs) at various levels ranging from upstream sharing of best practices and lending-policy development, to specific project co-financing on the ground (including in the context of the various EU blending facilities).

- Emissions monitoring and reporting. In order to understand the impact of projects on the climate, the Bank has implemented carbon footprinting systematically across its operations for all projects where emissions are significant and data is available. Aggregate results are reported annually. Work continues to examine how the footprint can best be integrated into the strategic planning of the Bank, as well as at sector, sub-sector and project level. Increasingly the Bank will involve promoters with its work on footprints. The Bank will continue to report each year on the absolute and relative emissions from projects above a significance threshold. In certain sectors, footprinting may assist in screening projects from a climate perspective.

- Tracking climate action financial flows. The Bank will continue to work closely with the European Commission, Bilateral and Multilateral Financial Institutions, Governments and other major organisations to contribute to the development of robust international reporting standards for climate finance.

The impact the Bank can achieve in these intervention areas also depends on the design of the future External Mandate, whose size and scope is still under discussion. However, the strategic intervention areas identified above demonstrate the substantial potential for the Bank to increase its contribution in the area of climate action. This climate strategy should therefore be reviewed at the end of the current Mandate period.

The additional Climate Mandate envelope has proven a very successful tool to promote climate action across the Mandate regions. Its attractive features have stimulated demand. Moreover, its thematic rather than regional setup represents a flexible tool for the Bank to supply a diversity of innovative and ambitious climate action operations outside the EU.

The EIB is ready to act as the EU Bank and to support the EU position on the international climate commitments with its expertise and financing strength.

As the performance over the past years shows, the EIB delivers. It considers the development of a climate strategy as an evolving process. The Bank works in close consultation with EU policy makers and key stakeholders and it takes into account comments from public consultations on its sector lending policies. As the EU Bank, it complements other EU assistance policies, programmes and instruments for the joint support of the EU goals of low-carbon and climate-resilient growth, outside as well as inside the Union, and of EU commitments under the UN Framework Convention on Climate Change, in a cost-effective way.

Background Paper: Reinforcing EIB support to Climate Action under the External Lending Mandate

December 2012

Section 1: Introduction – the challenge of meeting the 2 degree target

1. In accordance with Article 6(4) of the revised EIB External Lending Mandate[5], the Bank, in cooperation with the Commission, has presented a strategy to reinforce support to climate action (''the strategy''). This background paper aims to do three things. Firstly, it explains how the Bank has sought to address climate action across the range of its operation in recent years. Secondly it provides a detailed description of support by the Bank to climate action projects across the Mandate regions during this financial period. Finally, it identifies opportunities for the Bank to further reinforce European climate policy goals, namely to meet the 2°C target, without prejudice to discussions around the multi-annual financial framework.

2. Climate change is one of the greatest challenges of our time. The overwhelming body of scientific evidence is pointing towards the need to take robust action as soon as possible. Although the IPCC's flagship global climate report, the Fifth Assessment Report will not be finalised until 2014, its findings are expected to point towards clearer, faster and stronger impacts of climate change, adding to the urgency that was already apparent in the Fourth Assessment Report of 2007.

3. The EU has always been at the forefront of concrete action against climate change. The main goal for the EU is to deliver on all aspects of the Durban decisions and to act as a matter of urgency to safeguard our chances to stay below 2°C temperature increase. Notably, in Durban, all countries noted with grave concern the gap in mitigation ambition, and agreed to enhance mitigation efforts to close the pre-2020 mitigation gap in all regions. All parties agreed to work towards a new climate regime applicable to all by 2020.

4. Moving to a low-emission development path requires significant long term capital investment. Under the Copenhagen accord, in the context of meaningful mitigation actions and transparency on implementation, developed countries committed themselves to a goal of jointly mobilizing US$100 billion a year by 2020 to address the needs of developing countries. This funding will come from a variety of sources, public and private, bilateral and multilateral, including the European Investment Bank.

5. This paper is structured as follows. It begins in section 2 by outlining the approach developed by the Bank over recent years to integrate climate action across its activities – both inside and outside the Union. In part, this focuses on increasing volumes of support towards projects that reduce carbon emissions (mitigation) as well as projects that reduce vulnerability to future climate change (adaptation). Equally importantly, however, has been the more consistent integration of climate impacts across the range of projects the Bank appraises for support. As explained in section 2, this general approach has been reinforced through a series of sector-based lending policies which place more stringent requirements on potentially carbon-intensive projects.

6. Having explained the approach of the Bank in general, section 3 turns more specifically to present the climate action projects financed by the Bank outside the Union, differentiating clearly between those supported under own risk and utilising the Mandate, as well as Regional Blending Facilities. Although subject to change in market conditions, this section also presents a tentative pipeline of projects out to 2013. Section 4 turns to the future. After a concise analysis of general

[5] Decision No 1080/2011/EU granting an EU guarantee to the European Investment Bank against losses under loans and loan guarantees for projects outside the Union and repealing Decision No 633/2009/EC.

drivers and trends in climate action markets, it highlights six areas in which the Bank, together with the Commission, can reinforce support to climate action. It does so, however, without prejudice to current discussions on the multiannual financial framework.

Section 2: Integrating climate action into EIB projects

7. Climate action is a transversal public policy goal of the EIB, as confirmed by the Board of Governors – the EU-27 Finance Ministers. It is transversal in the sense that climate action needs to be integrated fully across the wider public policy goals of the Bank: increasing growth and employment potential, promoting economic and social cohesion and supporting environmental sustainability more generally.

8. This section explains how such a transversal goal is implemented in practice by the Bank. It addresses mitigation issues, explaining how the Bank has both increased support to low-carbon projects and reinforced its approach towards potentially carbon-intensive sectors. It also addresses adaptation: highlighting how the Bank has approached the promotion of measures which can reduce the vulnerability of projects to anticipated climate change.

9. This section begins by setting out the overall approach of the Bank towards climate action. This covers all operations – both inside and outside the EU. After examining the volume of lending towards low carbon projects, it turns to explain how the Bank has integrated climate impacts systematically across all the projects it finances. Finally, it stresses the role of a series of sector-based lending policies in adopting more stringent requirements on potentially carbon-intensive projects.

Promoting Climate Action

10. In 2010, the Bank introduced a formal lending target for climate action projects within its overall Corporate Operational Plan[6]. Climate action is recorded as a percentage[7] of the loan signed under a finance contract against a recognised list of sectors, such as renewable energy, sustainable transport, forestry etc. This list of sectors is presented in Annex 1. The Bank's climate action target has risen from 20% in 2010 to 25% for the current three-year planning period 2012 to 2014.

11. The EIB lending target is a powerful tool to support investment in climate action markets. As shown in Figure 1, over the four-year period 2008 to 2011, the Bank's support to climate action has expanded significantly. Lending approximately doubled over the first three years, before falling marginally in 2011. Cumulative climate action lending amounts to €65bn. When measured as a proportion of its overall lending, Bank support to climate action increased steadily throughout the period, rising from 17% in 2008, to 21%, 28% and 30% respectively through to 2011. As shown in Figure 1, the Bank's climate action lending is dominated by support to renewable energy and sustainable transport.

12. This volume of lending has been supported, in part, by a programme of dedicated Climate Action Bonds. First issued in 2007, the proceeds from the Climate Action Bond issues are ring-fenced from the EIB's general funding portfolio and are used exclusively to finance projects supporting climate protection. Since 2007, EIB has raised over EUR 1.6bn through Climate Awareness Bonds in a variety of currencies[8].

[6] The Bank's current Corporate Operational Plan 2012 to 2014 is available at: http://www.eib.org/infocentre/publications/all/operational-plan-2012-2014.htm

[7] In many cases, the entire finance contract volume is recorded as climate action (e.g. windfarm). However, in some cases, less than 100% is recorded. For instance, energy efficiency measures may comprise only one element of a broader industrial rehabilitation project; or adaptation expenditure may be only one component of a transport infrastructure project. In this sense, the Bank tracking system is more granular than the OECD Rio Markers system. Where required, however, clearly the information can be aggregated consistently into the Rio Marker system.

[8] Following the inaugural 2007 bond denominated in EUR, the Bank issued its next CAB in Swedish Krona in 2009. In 2010, the Bank launched new CABs for a total value of EUR 543m. The funds were raised through several transactions over the year and in 4 currencies: synthetic Brazilian Real (payable in Japanese yen), South African Rand, Australian Dollar and Turkish Lira. CAB issuance

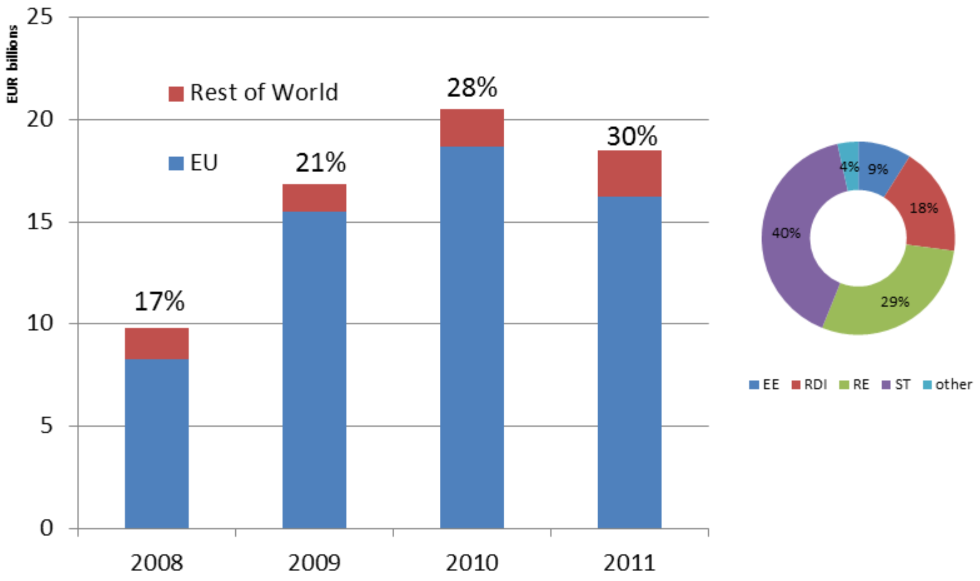

Figure 1 EIB climate action lending 2008 to 2011

The figure on the left shows the volume of EIB lending for projects supporting a recognised list of climate action sectors (see Annex 1). The figure above each bar refers to the percentage of climate action in overall EIB lending. The chart on the right disaggregates lending over this period by sector (EE = energy efficiency, RDI = research development and innovation, RE = renewable energy, ST = sustainable transport).

13. The volume of climate action lending has also grown outside the Union. In the mandate regions[9], lending grew from an average of approximately €1.1bn per year over the first three years of the Mandate to €1.6bn in 2010 and €2.1bn in 2011. In percentage terms, lending for climate action in the region increased from approximately 20% in the first half of the period to 27% in the second (to end November 2012).

14. The Bank has become a significant market player across climate action markets, notably in Europe. However, as we now turn to, this quantity of lending to climate action projects is only one dimension of the Bank's contribution to climate action.

Integration Of Climate Impacts Into Project Appraisal

15. In addition to lending to low carbon projects, the Bank has sought to integrate climate action considerations more broadly across all the projects that it supports. A range of techniques are employed to develop a better understanding of the potential impact of the project on the climate (mitigation) and of the changing climate on the project (adaptation). The results of this assessment are reported upon when seeking approval for a particular operation.

16. Before turning to explain these techniques in more detail, it is useful to outline the standard appraisal process that any operation seeking support from the Bank undergoes. As a public institution, the EIB must ensure that the projects it finances are technically, economically and financially viable. Each investment loan is therefore subject to a formal appraisal by Bank staff covering these three aspects. In addition, all projects are checked for compliance with the Bank's

resumed in 2012 with 3 SEK-denominated transactions for a total of SEK 2.3bn (EUR 263m equivalent).

[9] These aggregate figures refer to Bank lending at own risk (Facilities) and under Mandate. Figures are further broken down in section 3 below.

Guide to Procurement and Statement of Environmental and Social Principles and Standards[10]. In some cases, in particular where access to funds is available, the Bank can support the Promoter to assess and potentially improve the climate performance of the project (e.g. improved energy efficiency or reduce the vulnerability of the project to anticipated climate change).

17. Since 2009, the Bank has examined methods to estimate the volume of greenhouse gas emissions (GHG) from significant investment projects[11] in line with international best practice. A detailed description of the current methodology applied by the Bank is available on the website[12]. Two GHG measures are currently estimated for a typical year of operation of a project: the absolute emissions and relative emissions, i.e. the change in emissions resulting from project when compared to a baseline scenario without the project. Methodological and data limitations, however, imply that carbon footprint measures may not capture all mitigation aspects of a project.

18. Based on data from relevant operations – recall footnote 7 - financed during the three-year period 2009 to 2011, the Bank estimates a total absolute footprint of 86 million tonnes of CO2-equivalent per year of operation. These projects are estimated to have reduced emissions by 31 million tonnes compared with the baseline scenario – i.e. delivering an approximately 25% reduction in emissions. Figure 2 provides a breakdown of aggregate results by sector. As explained in more detail in the footprint methodology paper, several methodological and data-related caveats should be stressed, however, before placing too much weight on the quantitative footprint results. Nevertheless, the findings provide useful information at sector level and, taken in aggregate, provide some degree of support that the Bank's overall lending portfolio is aiding European climate policy objectives.

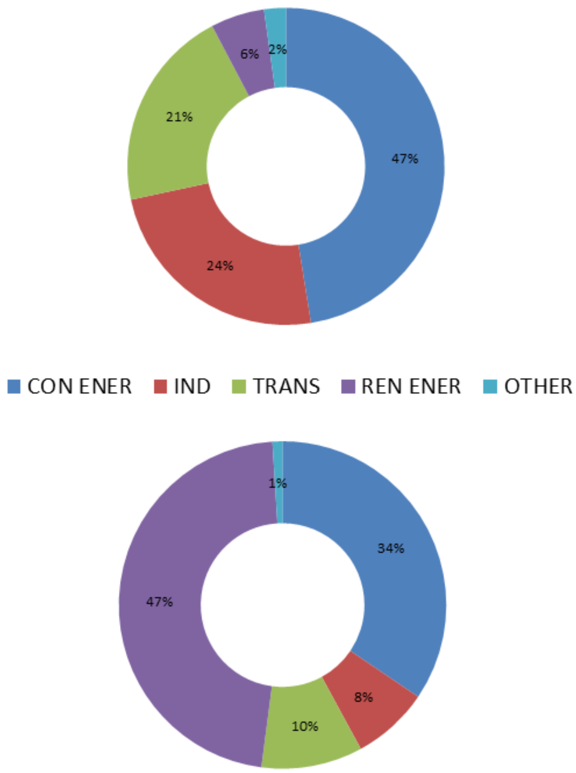

Figure 2 Greenhouse gas emissions

Based on significant investment loans over the period 2009 to 2011, the two charts break down emissions by sector. The upper chart is based on absolute emissions. The lower chart is based on relative emissions – i.e. the savings relative to a baseline without the project. CON ENER = conventional energy; IND = industry; TRANS = transport; REN ENER = renewable energy. Nearly one half of emissions are due to conventional energy projects, with one quarter from industry. Nearly one half of savings in emissions are due to renewable energy projects.

[10] Both documents are available on the Bank's website. Paragraphs 75 to 82 of the Statement refer to climate action.

[11] The aggregate emissions for projects with absolute emissions of more than 100,000 tons of CO2-equivalent or relative emissions of more than 20,000 tonnes are published. Based on internal tests, applying these thresholds is thought to capture in excess of 95 per cent of total investment loan emissions.

[12] See http://www.eib.org/about/documents/footprint-methodologies.htm

19. The footprint of a project is clearly an important metric in its own right. However, it is also a valuable input into the overall economic assessment of a project which emits greenhouse gases – i.e. an assessment whether the benefits of the project outweigh the cost, including to the climate. Where possible, the Bank undertakes its own economic appraisal of the project, applying methods drawn from international best practice (cost benefit analysis, cost-effectiveness analysis, multi-criteria analysis). This may rely on material provided by the promoter, such as feasibility studies.

20. In order to integrate climate considerations (measured in tonnes of carbon equivalent) into the economic appraisal (with costs and benefits measured in euros), it is necessary to adopt an economic cost of carbon. In line with best practice, the Bank has adopted a rising value of carbon, currently set under a central scenario[13] at €27 (for an emission of one tonne of CO2-equivalent in 2012, measured in 2006 prices), with annual adders of approximately €1 thereafter. These values were established on the basis of a review of the available scientific evidence, and have been periodically reviewed thereafter.

21. All projects financed by the Bank are required to demonstrate an adequate economic rate of return. The integration of a value for carbon within the economic appraisal of a project can have a significant impact on outcome, particularly for carbon-intensive technologies. In principle, projects for which climate costs outweigh other net economic benefits can be identified and screened out. Nevertheless, in some carbon intensive sectors, additional restrictions beyond this standard economic test have been introduced by the Bank. These are discussed next.

<u>Screening Out Carbon-Intensive Activities</u>

22. In recent years, the Bank has adopted a series of sector lending policies which help guide the Bank's project selection within the set of potentially eligible projects. Several criteria have been adopted to help ensure better alignment with European climate policy. Examples are given below.

23. **Energy**: In recognition of European greenhouse gas emission reduction targets, the 2007 Clean Energy for Europe policy introduces screening criteria to be met by coal and lignite power generation plants. The Bank's energy lending policy is currently under review[14], and a public consultation process was launched in October 2012.

24. Transport: The Bank's Transport Lending Policy (TLP)[15], introduced in 2007 and updated in 2011, places additional requirements on carbon-intensive transport modes to ensure that mobility benefits outweigh any residual climate change cost. For instance, both road and civil aviation projects needs to demonstrate high forecast economic returns (TLP, para 71 and 107) taking into account the value of carbon emissions into the cost benefit analysis. In the case of airports in markets where the Emissions Trading Scheme is not applicable, traffic projections are adjusted to reflect the effect that would be expected from the introduction of the scheme (para 107).

25. **Water:** The Bank's 2008 Water Sector Lending Policy[16] focuses on water efficiency, demand-side management (DSM) and leakage reduction which reduces the need for carbon-intensive water treatment and pumping. In the case of new water supply, the Policy requires promoters to demonstrate that water efficiency and DSM have been adequately considered and implemented. For desalination, this needs to be coupled with a demonstration that there is a pressing water scarcity, security or adaptation issues, that water efficiency and DSM measures are insufficient to

[13] In addition to a central scenario, the Bank also applies a high and low scenario. Under a high scenario, the value rises to €42 per tonne in 2012, with annual adders of €2 thereafter. Under a low scenario, the value falls to €12 per tonne in 2012, with annual adders of €0.5 thereafter. All prices are in 2006 euros.

[14] See http://www.eib.org/about/partners/cso/consultations/item/public-consultation-on-eibs-energy-lending-policy.htm for more details, including the issues paper.

[15] Available at: http://www.eib.org/infocentre/publications/all/eib-transport-lending-policy.htm

[16] Available at: http://www.eib.org/infocentre/publications/all/eib-s-water-sector-lending-policy.htm

meet the demand-supply gap, and that desalination is the least cost option. EIB also requires the use of energy efficient desalination technologies and encourages promoters to source a substantial part of the project's energy requirements from renewable energy.

26. **Industry**: When considering heavy industry projects, the Bank aims to support best practice, resulting in emission limit values and energy consumption in line with the requirements of EU Directive concerning integrated pollution prevention and control (the IPPC Directive, Directive 96/61/EC, as amended by 2008/1/EC).

27. **Sustainable land use**: When considering land use projects, including agro-food and forestry, the Bank applies strict standards to minimize the risk of adverse indirect land use effects, and to promote desired land use changes. There is a preference for logistics and production processes that minimize carbon footprint by optimally utilizing virgin raw materials, as well as reducing, re-using, re-cycling, and recovering the materials to energy processes. The Bank has very prudent and restrictive screening criteria for projects located in tropical areas. Only land tenure arrangements and management practices that are certified by accredited international certification systems can be considered eligible.

Focus On Adaptation

28. Mandate regions are vulnerable to current climate variability and to future climate change. This vulnerability is exacerbated in some regions by poverty and lack of capacity. As a public institution, the Bank has worked over recent years to assess how to integrate better climate resilience into projects, including supporting technical assistance, "soft" planning measures, and "hard" adaptation investments. In conjunction with other multilateral development banks, the EIB is currently producing guidelines which will help track and report financial flows that support climate change adaptation. In recent years, the Bank has signed a number of operations that are partially or wholly dedicated to adaptation objectives, such as the Seychelles water and sanitation adaptation project or working through regional development banks such as the Caribbean Development Bank (CDB).

29. Regarding reporting on adaptation lending, the Bank has decided to avoid double-counting of mitigation and adaptation financing. As a result there may be some under reporting of adaptation investment. Some mitigation investments, for example in forestry, may be recorded entirely as mitigation operations, although they in fact also contribute to climate resilience.

Monitoring

30. From the beginning of this year, the Bank has reinforced its approach to measuring the results of the Bank's operation outside the Union. Although project monitoring in the external mandate regions has always taken place during implementation and at completion (normally after one full year of operation), the new Results Measurement (REM) framework aims to improve the ex-ante assessment of expected project results and develop monitoring and ex-post evaluation of these results. This approach will also include the main drivers of the climate-related performance of the project. A more detailed report on this approach will be published in 2013, following the first full year of operation.

Conclusions Of This Section

31. This section has provided an overview of the approach taken by the Bank to integrate climate action across all of its activities – inside or outside the Union.

32. The first conclusion is that Bank support to climate action projects has expanded considerably in recent years; almost doubling between 2008 and 2010. This represents considerable volume of support, equal to €65 billion over the period 2008 to 2011. A formal lending target for climate action was introduction in 2010 at 20%; and has been increased to 25% for the current three-year planning horizon 2012 to 2014. To implement such a target, a consistent set of definitions has

been developed by the Bank to determine which projects, or components of projects, are recorded as contributing to climate action. This covers both mitigation projects – to reduce GHG emissions – and adaptation projects – to reduce vulnerability to future climate change.

33. The second conclusion is that volume of lending to low carbon projects is only one dimension of EIB support to climate action. Equally importantly, the Bank has integrated analysis of the impact of a project on the climate into standard appraisal techniques applied to assess the technical, economic and financial aspects of any project. For instance, the carbon footprint of all investment projects above a certain threshold is systematically estimated and reported upon. Where relevant, carbon emissions are integrated into the economic analysis of projects. Moreover, sector lending policies have been used to overlay additional safeguards for potentially carbon-intensive projects.

Section 3: Overview of EIB climate action operations outside Europe (2007 to 2013)

34. This section provides an overview of the climate action operations supported by the Bank under the existing mandate (2007-2013), as revised in 2011 (under Decision 1080/2011/EU). It describes operations already signed, as well as giving an indication of the pipeline to the end of the mandate period. It begins by presenting general results, before turning to a focus by region.

35. The EIB undertakes operations outside the EU in support of EU external cooperation policies, either based on a mandate from the EU (referred to as the external mandate), or at its own risk using dedicated regional or sectoral facilities. The facilities and mandate together make up around 10% of the Bank's total lending activities.

36. The existing EIB mandate was revised in 2011. The revisions include activating an optional €2bn Mandate for Climate Change, and replacement of the previous system of regional objectives for operations under EU guarantee, with three horizontal high-level objectives. These are:

    - **Local private sector development**, particularly supporting Small and Medium-sized Enterprises (SMEs);
    - **Development of social and economic infrastructure** (including transport, energy, water, environmental infrastructure and information and communication technology); and
    - **Climate change mitigation and adaptation**.

37. The revised mandate also states that projects in developing countries shall contribute indirectly to development objectives such as reducing poverty through inclusive growth and sustainable economic and social development. The revised mandate thus highlights both climate action and development impacts.

38. As well as the mandate, the EIB has established a Facility for Energy Sustainability and Security of Supply (ESF), and Neighbourhood Partnership Facilities, covering the southern Mediterranean and Eastern European neighbours. The former is a €4.5bn facility aiming to reinforce the EIB's contribution to climate change mitigation and energy security of supply in developing countries, the latter comprises €3.5bn of funding for various objectives. There is also a Pre-Accession Facility. The facilities are used essentially when the Bank does not need the support of the EC guarantee (mandate) to mitigate sovereign or political risk to protect its own credit standing. Thus, it is used in investment-grade countries or where appropriate security can be provided. In contrast, the resources under the external lending mandate are used when the support of the Community guarantee is needed to mitigate sovereign or political risks (mostly in lower investment-rated countries).

39. Operations within Africa, Caribbean and Pacific (ACP) countries are not carried out under the general mandate, but under the separate Cotonou Agreement, using European Development Fund resources, or Member State's guarantees. Nevertheless, to provide a complete picture of EIB activity outside the EU27, relevant climate work of the Bank within these countries is discussed in this section.

40. Technical regional operational guidelines have been produced by the EIB and EC, covering each of the above three objectives, for pre-accession countries, neighbourhood, Asia, Latin America, and South Africa. In terms of climate action, each region has a slightly different emphasis, on energy efficiency, promotion of renewables, sustainable transport, forestry and research and development. In all regions there is growing emphasis on ensuring projects are more resilient to anticipated climate change as well as identifying opportunities to promote overall adaptation capacity, for example in water and natural resource management.

41. Since the beginning of this financial period, the Bank has financed €8.3bn of climate action projects, with just over sixty per cent supported under the Mandate. Table 1 provides a detailed overview of EIB signatures for climate action by Mandate region and year. Figure 3 presents the cumulative total lending, split between the Mandate and own-risk Facilities. Figure 4 provides a further breakdown over the period 2008 to 2011 by sector and region. Table 2 shows the current pipeline for climate action projects. Caution is required in drawing trends, given the relatively

small number of projects involved. However, despite some fluctuation within year and between regions, the overall picture is of solid lending record for climate action, under mandate and own-risk facilities. Under the mandate only, the percentage of EIB lending to climate action rose from 19% on average (2007 to 2010) to 29% in 2011 and is forecast at 32% for 2012. As discussed next, this reflects in large part the impact of activating the optional €2bn mandate in 2011.

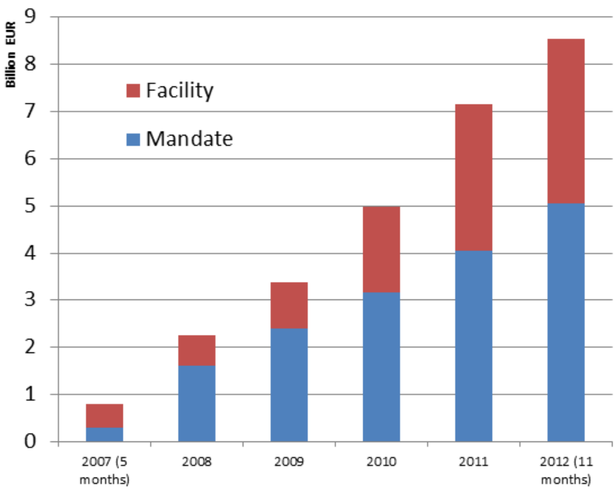

Figure 3 Cumulative EIB lending for Climate Action (mid 2007 to Nov 2011) in mandate regions

Note: Facility refers to EIB own-risk lending.

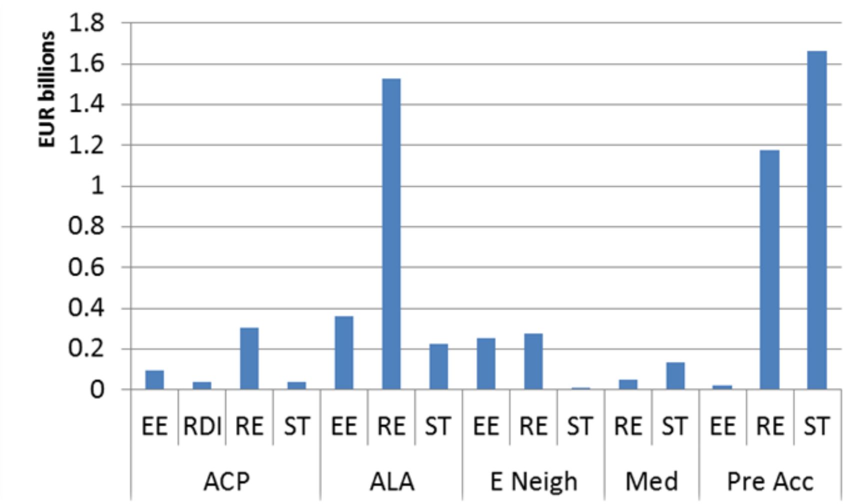

Figure 4: EIB climate action lending outside Europe 2008 to 2011 broken down by major sector

Note: EE= energy efficiency, RDI = research, development and innovation; RE = renewable energy, ST =sustainable transport. ACP = Africa, Caribbean and Pacific, ALA = Asia and Latin America, E Neigh = Eastern Neighbourhood, Med = Mediterranean, Pre Acc = Pre-Accession. Lending to adaptation is not shown.

42. **Allocations to the €2bn specific mandate.** Following its activation in late 2011, the climate action project pipeline ramped up sharply during 2012, and is therefore expected to translate into higher climate action figures in relative and absolute terms for the remaining period of the Mandate. Sovereign and sub-sovereign operations in energy efficiency and renewable energy

tend to require support from the Climate Change Mandate (although not in the case of China and Brazil); sustainable transport operations are also increasingly requiring support from the mandate. Relevant private sector energy operations, where the promoter has an investment grade credit rating, can be supported from the EIB's Energy Sustainability Facility. Four projects have been signed to date against the climate mandate: a €150m afforestation and erosion control project in Turkey, a €150m climate framework loan in Vietnam, a €100m loan for a concentrated solar power project in Morocco, and a €200m loan for a metro project in Cairo, Egypt (with another €400m approved, but to be signed). Two further projects are approved, but still to be signed: €152m for completing a metro line in Dnipropetrovsk, Ukraine and €50m for supporting small-scale investments in energy efficiency and renewable energies in Lebanon. At present, approximately €1.8bn of additional finance has been provisionally allocated for projects under development (i.e. in the project pipeline) under the climate mandate, although this is subject to considerable change depending upon evolving market conditions. However, it is anticipated that more than three-quarters of the climate mandate will be utilised by the end of 2013. Clearly, the specific climate mandate has reinforced the importance of the climate action dimension to Bank lending facilitating both an increase in the volume of lending for climate action and widening the regional spread of projects.

43. **Blending with EU grants**. As emphasized further below, some low carbon technologies, or investments to reduce vulnerability to climate change, are characterized by low or risky revenue streams which, on their own, typically do not adequately service debt. Access to grant finance is therefore often key to delivering such projects. Table 3 provides an overview of how EIB, in the field of climate action, has sought to blend its lending resources with grants from EU regional blending facilities. It shows the EIB's active involvement, particularly within the Neighbourhood Investment Facilities (NIF), with 60% of these projects supporting climate action, for example, a wind farm and a solar power plant in Egypt and Morocco, and hydropower rehabilitation in Georgia and Ukraine. Since 2011, the NIF has put in place a 'Climate Change Window' guaranteeing better tracking and visibility of NIF support to actions fighting against climate change. The EC recently assigned €17m towards the Climate Change Windows to be shared between NIF and LAIF. The Bank is also active in the Western Balkans Investment Framework, with nearly half of those projects involving the Bank, and an increasing number supporting climate action.

44. This section has thus far focused entirely on volumes of lending for climate action projects. However, as presented in the section 2, based on the Bank's carbon footprint methodology, the impact on emissions of relevant operations[17] outside the Union can also be estimated. Based on a total of 37 projects financed outside the Union over the period 2009 to 2011, absolute emissions of carbon equivalent per year are estimated at 23 million tonnes, equal to 610 thousand tonnes per project on average. This set of projects is estimated to reduce emissions, compared to a baseline without the projects, by 7 million tonnes per year or 190 thousand tonnes per year on average – i.e. equivalent to a saving of over 20%. Figure 5 presents the results by region. However, given the small sample size, as well as methodological and data limitations, it is prudent to avoid drawing any strong conclusions from this analysis at present. In particular, results tend to simply reflect the sectors supported within the region – see discussion in Section 2 above – rather than regional differences per se.

[17] Recall footnote 7 on emissions thresholds.

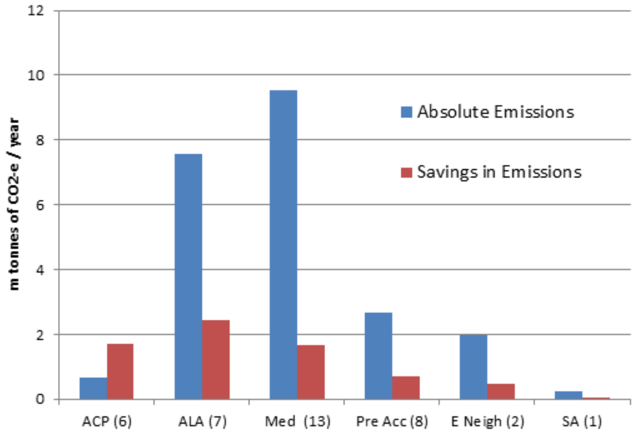

Figure 5: Greenhouse gas emissions from EIB projects outside Europe

Note: Given the small sample size, it is prudent to avoid drawing strong quantitative conclusions at this stage. ACP refers to Africa/Caribbean/Pacific; ALA refers to Asia and Latin America; Med refers to Mediterranean Countries; Pre Acc refers to Pre Accession countries; E Neigh refers to Eastern Neighbourhood; SA to South Africa. The number shown in brackets refers to the number of projects with emissions over the threshold in the period 2009 to 2011 e.g. six in ACP. The blue column reports the absolute emissions taken across all EIB projects in the region that were above the thresholds of the footprint exercise. The red column shows the savings in emissions compared with a baseline without the project – i.e. the negative relative emissions.

Focus By Region And Instruments

Pre-accession countries

45. Existing volumes: Over the past 3 years, around 20% of the Bank's operations signed in Pre-Accession countries have been in favour of climate change related investments. The main sectors supported include €1.3bn to renewable energy (mainly hydro and wind) and € 650m to the rail sector. Renewable energy includes both direct financing of larger-scale hydropower and on-shore windfarms, but increasingly also dedicated renewable energy facilities with local financial intermediaries. The latter approach enables the Bank to widen its reach. This includes supporting smaller investment schemes, and, through its co-operation with local banks, reinforcement of local due diligence and financing capacity. Projects financed in the rail sector – covering both passenger and freight - will contribute to rebalancing the current high dependence on road.

46. The Bank is also stepping up its support in favour of projects which are tackling vulnerability to climate change. Turkey is among the most erosion-prone countries in the world due to its topography, climate, vulnerability of soil type and the tendency towards overexploitation of range lands. The first project under the climate change mandate supports a large-scale reforestation programme in Turkey. Recent floods in Turkey and Western Balkans have resulted in major human and economic losses and required urgent remedial action with regard to flood prevention. The Bank is currently analysing new public investment programmes aiming at mitigating the impact of these natural disasters. Whilst most renewable energy projects were implemented by the private sector and therefore typically supported by the Bank under its Pre-Accession Facility at its own risk, the public sector investments in infrastructure are financed under the Pre-Accession Mandate. The Bank also subscribed to a private equity fund targeting renewable energy investments in the region.

47. Pipeline until end 2013: The Bank will continue its action in favour of Climate Change projects in the Pre-Accession region, both in support of private sector initiatives and public investments. New projects envisaged under the Climate Change Facility include a Flood Prevention scheme for a loan amount of some €70m and an additional contribution of the order of €300m to the financing of the Bosphorus tunnel in Istanbul. The Bosphorus Tunnel will establish a railway link crossing the Bosphorus Straits, as well as a major mass transport connection for the metropolitan area of Istanbul. The Bank is also considering a long term energy efficiency investment programme for public buildings in Turkey. Given the complexity and the timeline of this investment programme, it is however unlikely that such facility will be signed before the end of 2013. Further support to Turkey's afforestation programme is also under consideration. The Western Balkans Investment Framework is supporting several Technical Assistance activities for Climate Change projects for which EIB has been identified as the lead International Financial Institution (in particular renewable energy in Bosnia and Herzegovina, and railways in Serbia). It is however unlikely that these projects will reach signature before end-2013.

Eastern Neighbourhood

48. Existing volumes: The EU's Eastern neighbourhood is a region which is strategically important for the EU, both in terms of oil and gas imports from and through some of the countries, as well as overall trade, and political relations. The Bank has supported transition from coal to gas (both in terms of transit to EU and energy efficient local generation).The sectoral distribution of climate investments to the end of 2011 reflects this significant interest, with projects in transport and energy accounting for 72% of the Bank lending in the Eastern Neighbourhood and Russia e.g. modernisation of power and industrial plants in Russia, and high voltage transmission lines in Ukraine and Georgia. In addition, five out of the eight (or 83% of the total trust fund) approved operations under the Eastern Partnership Technical Assistance Trust Fund are climate related, including support for flood protection in Moldova, and sustainable transport in Ukraine.

49. Pipeline until end 2013: From 2010 onwards, a diversification beyond the transport and energy sectors has started to take place, spanning both the public and private sectors, with projects under development for renewable energy (mostly hydro; biomass; solid waste management);

some small scale industrial projects that will contribute to energy efficiency (district heating; industrial renovation) forestry and sustainable agriculture. This trend is likely to increase, in part due to the additional Climate Change mandate.

Mediterranean Countries

50. Existing volumes: The EIB has been providing finance in the Mediterranean region for 33 years, and now operates within the framework of the Facility for Euro-Mediterranean Investment and Partnership (FEMIP), which has become the leading source of external financing through infrastructure and private sector investments. The Mediterranean economies are characterised by high levels of unemployment and an unequal distribution of wealth, and so investments have tended to focus on inclusive sustainable economic and social development, including marine and rail transport, and environmental infrastructure (water supply, waste management, and de-pollution of the Mediterranean Sea). Six specific climate action projects have been signed in the region between 2008 and 2011, totalling approximately €320m, including a wind farm in Egypt and a tramway in Morocco. In September 2012, the Bank approved €600m of funding for the Cairo metro.

51. In addition to FEMIP lending activities, the EIB through the FEMIP Trust Fund contributes to the implementation of climate change policies, by launching regional studies such as the "Energy Efficiency and Renewable Energy Project Preparation Programme in urban areas of the Mediterranean Partnership Countries" and "Implementation of climate change mitigation and adaptation projects under the Mediterranean Climate Change Initiative", to better assess the needs of the region.

52. Pipeline until end 2013: There is an increasing emphasis in the pipeline on climate-related projects, including renewable energy (wind, solar thermal and photovoltaic), sustainable transport (urban transport, ports); and some industrial energy efficiency; approximately half the pipeline of potential EIB investments in the region is climate action, whereas 10 years ago only around 10% would have qualified as climate action as currently defined by the Bank. The bank also continues to support the development of natural gas in the region, both as a source of efficient power generation and for transit to the EU. Regional work is also important, including a pipeline of renewable energy projects under the Mediterranean Solar Plan (MSP), currently supported by grants from the Neighbourhood Investment Facility. The NIF has so far allocated more than €275 million of EU-grants in order to leverage additional funding for projects worth more than €9 billion of total investment costs (for the EU's Eastern and Southern Neighbourhoods).

Asia

53. Existing volumes: More than half of current operations in Asia under the general mandate are climate related. Loans to China and India for renewable energy, energy efficiency and forestry dominate the overall investment volumes, although the Asia portfolio also includes sustainable transport and energy efficiency projects in Vietnam, a framework loan for energy efficiency and renewable energy in Nepal, and a renewable energy framework loan in Pakistan.

54. Pipeline until end 2013: Nearly all anticipated signatures are expected to be recorded as climate action. Under the mandate, there is an increasing focus on diversification of countries in Asia, and climate related projects in the Philippines, Thailand, Indonesia, and Bangladesh are all under appraisal. In central Asia, energy efficiency investments related to existing energy networks (electricity and gas networks) and sustainable transport (railway infrastructure and urban transport) are viewed as high priorities. Given the huge contribution that most Asian countries make to global greenhouse gas emissions, climate action is likely to remain the key objective.

Latin America

55. Existing volumes: The investment portfolio has been dominated by Brazil, which includes a climate change mitigation framework loan totalling €500m to be allocated over the next 2 years. The portfolio also includes a hydro power plant in Chile, a wind farm in Mexico, and a €100m regional climate change mitigation framework loan for Central America. A €200m loan for the metro system in Quito, Ecuador has recently been signed.

56. Pipeline until end 2013: As in Asia, recent strong economic growth has led to increased CO2 emissions and environmental problems, and increased importance for climate change mitigation measures to support the development of a low carbon economy. The EIB is focusing on renewable energy development, industrial energy efficiency, sustainable urban transport and railway infrastructure, and water and forestry. As with China and Asia, the aim under the mandate is to diversify beyond Brazil into other less developed countries.

South Africa

57. Existing volumes: In May 2007 the EU and South Africa entered into a Strategic Partnership, the only one concluded by the EU with an African country. The Strategic Partnership has two strands: enhanced political dialogue and cooperation on regional, African and world issues, and stronger cooperation in a number of economic, social and other areas. Three climate action operations have been signed with South Africa since 2008, including two framework loans in energy efficiency and climate mitigation, and support for a facility to manufacture photovoltaic modules.

58. Pipeline until end 2013: The EU-South Africa political dialogue has recently been further focusing on issues of mutual interest such as climate change. Thus, a significant share of EIB financing in South Africa for the period 2012-2013 is being provided for projects that support climate change mitigation. Respective initiatives of the South African Government include the renewable energy investment programme (IPP Procurement Programme), the SARi (South African Renewables Initiative and the GFM (Green Financing Mechanism). EIB's activity in the country is focusing on renewable energy, energy efficiency and urban infrastructure investments carried out by both public and private sector developers; several concentrated solar power investments are in the pipeline under the climate mandate.

Africa, Caribbean and Pacific (ACP)

59. Note that the these operations are not carried out under the general mandate, but under the Cotonou Agreement using European Development Fund resources, or Member States' guarantees.

60. Existing volumes: Despite the highly diverse nature of the countries and overseas territories within the region, ACP is also increasing its climate-focused activities, such that they now comprise approximately one-quarter of lending across the region. Despite being low emitters of greenhouse gases overall, mitigation projects, particularly in relation to improving energy networks and providing new sources of renewable energy such as geothermal, are being developed. The Bank has also supported the development of gas infrastructure (networks and power generation) to displace more carbon intensive fuel oil and coal-fired generation. The region also contains innovative work on adaptation, such as the recently signed €50m line of credit with the Caribbean Development Bank (CDB) to undertake adaptation investments.

61. Pipeline until end 2013: The vulnerability of the region to the impacts of climate change, and potential additional sources of donor funding, reinforce the case for investment in adaptation projects, and may even offer entirely new investment opportunities in areas such as forestry and water resource management. There are few sustainable transport projects within the current pipeline. The Bank is also working jointly with the EC towards the development of financial instruments for implementation of the United Nations led initiative Sustainable Energy for All (SE4All). The initiative's objectives by 2030 are three-fold: universal energy access, doubling of renewable energy share, and doubling of energy efficiency efforts. The EC is focusing on Sub-Saharan Africa for the initial phase of the initiative, although it is expected that the learning acquired in this region can be replicated in others. Another aspect of work to pursue is to proactively focus TA for energy audits and climate resilience work within existing TA facilities and operations so as to reach as wide a range of promoters as possible.

Multi-regional operations – dedicated climate action facilities and funds

62. Finally, in terms of non-regionally specific operations, the EIB is able to provide a broad range of financing instruments to support its climate actions, and has the ability to blend financing sources and to co-fund investments, to leverage significant additional public and private financing. This range of financing instruments has been important in catalysing climate change mitigation investments by the private sector. Traditional financing instruments are appropriate for climate action investments with positive rates of return. However, when these benefits cannot be fully captured by investors, or client governments, the EIB has sought to deploy more innovative climate financing instruments which blend concessional funding – often from the European Union budget - with own financing to address market failures, to reduce risk, and leverage further investment.

63. An example of using public funds to attract additional private investment is the Green for Growth Fund (GGF), structured by the Bank and other founding partners in 2009. The fund provides finance for energy efficiency and renewable energy projects – either directly or through different financial instruments – within Southeast Europe (non-EU members) and Turkey. The European Union contributed €20m which has enabled the fund to grow currently to €191m, with €165m approved projects and €98m invested across 14 projects in 9 countries. 18 projects have been approved for technical assistance funding, and a further 14 under approval.

64. A second example is the Global Energy Efficiency and Renewable Energy Fund (GEEREF), which is an emerging market infrastructure fund-of-funds, capitalised from the European Union, Norway and Germany. The funds in which GEEREF invests target small and medium sized (€5-10m) projects and companies involved in energy efficiency and renewable energy, so as to enhance access to clean energy in developing countries. €108m is currently under management, with five funds signed and two others under signature. Some 15 projects are currently in progress through these funds. It is expected that each one develops between 10 and 15 projects. The current multiplier is for each euro of GEEREF funding results in €47 in final project financing. As mentioned in the discussion on ACP region above, similar structuring is currently being used by the Bank to develop mechanisms to increase private sector investment into renewable energy in Sub-Saharan Africa under the UN Sustainable Energy for All initiative.

65. The Bank has also invested in equity funds that have operations outside of Europe. The Crescent Clean Energy Transition Fund I is a renewable energy fund focusing on Turkey, which the EIB helped set up together with EBRD and other international investors as the first independently managed fund of its kind for Turkey. The fund has a target size of €200m. It held its first closing in September 2011 at €65m. EIB's commitment is up to €25m.

66. The Dasos Timberland Fund is the only forestry fund currently in the Bank's portfolio. The fund aims to build a diverse portfolio of sustainable forestry assets. Projects outside of Europe are intended to make up 60% of the fund. The value added is created through the consolidation of forestry properties, the enhancement of operational efficiency and the promotion of sustainable forest management. The Bank has also invested in EcoEnterprises Partners II - EIB's first financial initiative in biodiversity. The fund targets ecotourism, sustainable forestry and agriculture in Central and South America, one of the world's richest regions in biodiversity. The fund has a target size of USD 40m. First closing was in December 2011 at USD 20m. EIB's commitment is up to USD 6m.

67. The EIB has also sponsored six carbon funds. EIB's approach to the subject of carbon finance is to identify market gaps, and develop carbon fund products to fill those gaps. Working in close cooperation with other MDBs/European agencies, EIB has been able to leverage their resources and thus ensure its desired catalytic role in the market. In this regard, the EIB is following the developing areas of New Market Mechanisms, Nationally Appropriate Mitigation Areas and REDD+, looking to support initiatives via a wide range of products (e.g. loans, funds, bond issues).

Conclusions

68. This section has reviewed EIB climate operations in the Mandate regions. Key messages include:

69. The volume of climate action lending has grown significantly from an average of €1.1bn over the first half of the Mandate period (2007-09) to €1.6bn in 2010 and €2.1bn in 2011. This volume exceeds the bank-wide climate action target of 25% and, across the period, has broadened the range of countries and regions supported. The additional €2bn climate change mandate approved under the revised mandate in 2011, in particular, has helped the Bank strengthen and diversify its pipeline of climate action projects.

70. The Bank has supported a slightly different mix of climate action projects across different regions:
    a. In the pre-accession region, renewable energy financing has focussed on hydropower and on-shore windfarms, with increasing focus on supporting a broader range of projects through local financial intermediaries. Adapation projects, including reforestation, are an increasing focus of attention.
    b. Across Asia, large climate action loans to China and India dominate the volume of lending, but projects in a more diversified set of countries (Philippines, Thailand and Bangladesh) are under appraisal.
    c. Across the Eastern Neighbourhood, diversification beyond transport and energy sector has started to take place. Several climate related operations are under development, including flood protection in Moldova and sustainable transport in Ukraine. A significant potential for energy efficiency projects exists, as well as forestry and sustainable agriculture.
    d. Across Mediterranean countries, renewable energy (concentrated solar power; windfarms) and sustainable transport projects (metro; tramways) have been supported recently. Several regional studies are underway, supported through the FEMIP Trust Fund. Approximately half of the current pipeline is climate-action related.
    e. In Latin America, lending has been dominated by a single climate action framework loan to Brazil, although the portfolio also contains hydropower in Chile, a wind farm in Mexico and climate action framework loan in Central America. The future pipeline looks to diversify into other less developed countries.
    f. In South Africa, three climate action operations have been signed since 2008. EIB activity in the future will focus on renewable energy, including concentrated solar plants, as well as energy efficiency.

71. The next section goes on to examine general developments in climate action markets in the Mandate region, and identifies ways in which the Bank could further reinforce it support to climate action.

Section 4: Reinforcing support in the future

72. This section looks forward, turning to address the key questions posed in Article 6(4). It begins by examining some general trends and drivers in climate action markets across the region. Without pre-judging any legal proposals for the next multi-annual financial framework, it identifies six specific measures in which the Bank could reinforce its support to European climate policy.

General Commentary On Trends And Drivers

73. Climate action investment activity outside Europe currently reflects at least two macro-scale drivers. First, in terms of the investment “push”, EU member states (and other developed countries) are scaling-up their contributions to international climate finance to address climate change in developing countries. Likewise, the EU external lending mandates are increasingly promoting climate action, as exemplified by the additional €2bn climate mandate. EU regional facilities, such as the Investment Facilities, are also increasingly focusing on climate and environmental sustainability.

74. Second, in terms of the investment “pull”, there is increasing awareness from borrowers towards climate-related projects. This is driven by factors such as the improving underlying business case for some renewable energy technologies, with falling costs matched by high benchmark costs of conventional energy. In the absence of subsidies, this can act as a strong driver for energy efficiency improvements, especially given the low performance of current systems (e.g. district heating systems, industrial plants) in many developing countries. Strong potential also exists across several regions to reduce carbon emissions through replacing liquid and/or solid fossil fuel with natural gas. In particular, since the UNFCCC meeting in Copenhagen in 2010, progress is being made in many countries on identifying Nationally Appropriate Mitigation Actions (NAMAs) and national Low Emission Development strategies (LEDs). Likewise, developing countries are increasingly recognising their vulnerabilities to future climate change, and developing National Adaptation Programmes of Action (NAPAs) to identify priority investments. Financing institutions such as the EIB can clearly support this trend.

75. Despite this potential, however, it has to be recognised that in many developing countries, actual investment in climate action markets is currently rather limited. Weak regulatory environments often discourage private investment, compounded in many cases by subsidized energy prices. Market prices are often not sufficient to incentivise investment in climate action projects. Revenue streams fail to cover debt repayments on low carbon infrastructure; in the case of adaptation projects, there may be no revenue stream at all. For example, outside of China and India, the installed capacity of wind energy remains small; and, with a few exceptions (such as Brazil, Mexico, South Africa and Turkey, and again, China and India) the growth rate of new capacity is slow. The development of NAMAs and NAPAs should help identify and tackle such barriers, and thus develop a stronger pipeline of projects in the coming years. The proposed registry should help match donors and the financial community with national administrations. However, experience with investment programmes in other parts of the world suggests significant support is required to translate identified public programmes into a concrete pipeline of projects which donors or the international finance community can support.

76. As a European institution, the Bank is looking to support the development of such projects as a means to promoting European climate and development policy. Climate change and increasing concern about climate vulnerability are re-positioning the climate debate at the centre of development thinking and actions. In this sense, given the accumulated experience and knowledge about development issues in a broad range of situations, the Bank is well placed to support the EU in its ambition to promote sustainable low carbon growth paths in developing countries and emerging economies. Key to fulfilling this ambition will be the development and deployment of new financial instruments capable of a high degree of leverage of the private sector. The Bank will continue to build on its growing experience in this area under the UN Sustainable Energy for All initiative, as well as GGF and GEEREF. The Bank will actively monitor the development of new market mechanisms (NMM) under the UNFCCC and related pilot or

demonstration projects to support developing countries in achieving their NAMAs and LED strategies.

77. However, it needs to be recognised that there are also constraints on the ability of the EIB to deliver increasing volume, as well as quality, of climate action investment. Some of these threats are generic and related to the changing competitive position of the Bank as it responds to the economic crisis within the Euro area; others are more specific to the climate sector, such as state aid and other policies to support national industry.

78. The investment decisions of emerging economies over the next decades are widely recognised as being crucial in meeting Union climate objectives. During the current mandate period, the Bank has supported climate action projects in, amongst others, Brazil, China, Chile, India, Mexico, Russia and South Africa. The Bank remains committed to supporting investment in climate action in emerging economies. Operating as the EU Bank in these regions, the EIB will continue to follow and implement EU policies including on procurement, environment and social aspects and operate in full consistency with relevant EU external and trade policies.

79. Despite such macro-scale drivers, the ability of the EIB to promote innovative and more ambitious climate action projects in new markets will be greatly facilitated if it has more flexible access to grant funds for this purpose. Currently most European Development Financial Institutions and multilateral development banks have access to their own specific donor funds, which are not available to the Bank. The availability of such concessional funds to the EIB is limited and comprises two regional trust funds (FEMIP Trust Fund, EDF window for ACP), and participation in the EU blending facilities.

80. In the case of smaller projects – typically the case for energy efficiency and decentralised renewables – there is sometimes limited interest from local financial intermediaries, such as local banks. For the Bank to engage, this requires aggregation of projects, the development of more intermediated loans, other specialised, targeted investment vehicles to kick start the market, and the development and strategic deployment of credit enhancement structures – possibly using grant funds – to bring risk up to a level that can be supported by the EIB's credit risk policy guidelines.

81. However, the Bank has core strengths and has considerable opportunities. It is in a strong position, as the Bank of the EU, to support EU external policies, including climate action as a global public good. Whilst primarily focusing on downstream funding of investment projects, it is able to collaborate with the European Commission in more upstream country and sector strategy development, and overall country programming – and this is an activity that is being developed more systematically. The EIB is also uniquely placed to draw upon and share its technical experience and expertise in investment lending within Europe. This, combined with the leadership that the EU generally shows internationally with regard to climate action, means that the EIB is a powerful and respected brand in terms of financing climate action projects.

82. Much of the commentary so far has focused on mitigation, since this is a key focus of the climate mandate. However, there is also growing awareness and expertise developing within the Bank for financing projects which focus on climate adaptation or which include important elements of adaptation, and for ensuring all investments are appropriately "climate-resilient". The Bank is starting to formally monitor support to adaptation. For instance, in 2011, approximately €1bn out of a total of €18bn of finance towards climate action (both within and outside Europe) was recorded as supporting adaptation, including water resources in the Seychelles, and a specific global loan to the Caribbean Development Bank for adaptation investments across the region. Demand from developing countries for adaptation measures and for support to ensure processes, systems and communities are resilient, is increasing, as they recognise their particular vulnerabilities to and impacts of a changing climate. The Bank will continue to make efforts to support this, together with other IFIs, and to focus efforts on the most cost effective and needed measures.

Areas To Reinforce Bank Approach

83. This analysis of drivers in the market helps to distil clear areas in which the Bank, together with the European Commission, could reinforce its approach. This section sets out six potential areas,

which do not prejudge any legislative proposal or decision beyond this mandate period. The Bank welcomes reactions to these ideas. Reactions from stakeholders are likely to be sought in the course of 2013.

Area 1: Proactive support to innovative mitigation projects

84. There exists a strong opportunity for the Bank to promote low carbon, green growth, including in low income countries. Several countries have actively engaged with developing NAMAs and national LED strategies. A key challenge remains to distil these ''top-down'' plans into a robust supply of ''bottom-up'' projects, based on a sustainable business model.

85. The Bank is well placed to contribute to this development, both within the wider UNFCCC architecture (e.g. the UN Green Climate Fund and NMM), but also distinctively as the EU Bank, alongside the EC. In particular, when working in the mandate regions, it brings its experience in financing both mature and emerging low-carbon technologies within Europe, as well as its experience with designing instruments to scale up private sector investment. This rather unique experience can be usefully complemented by a more up-stream dialogue involving the European Commission.

86. However, it should be recognised that the Bank's capital and human resource base is limited. Particularly when considering engaging in a more challenging environment, the potential of the Bank also depends to a degree on access to technical assistance, concessional financing and risk-bearing capital. In this context, the EU regional Blending Facilities - or other existing or potential sources of grant finance - play a crucial role, and the EIB stands ready to leverage impact by blending with its own resources. In the case of technical assistance, such support needs to be extended in a flexible manner, since interventions are often involve relatively small contracts but are time critical.

Area 2: Improving Climate Resilience in particularly vulnerable countries

87. Many Mandate region countries are especially vulnerable to climate change. This vulnerability is exacerbated in some regions by poverty and lack of capacity. Together with other MDBs, EU finance institutions and Commission, the EIB is working hard to speed up the transition in the developing (and developed) world to one in which communities, economic systems and ecosystems are made cost effectively resilient to climate variability and future climate impacts.

88. The Bank plans to increase support to this important work in coming years through improved project screening, increased financing of high quality demonstration adaptation projects, supporting country needs identified in National Adaptation Programmes of Action (NAPAs), technical assistance targeted towards adaptation, and supporting training and providing adaptation TA to financial intermediaries.

89. When significant risks have been identified, the EIB will proactively engage in improvements of the planning processes around a project, project design and management, assisting the promoter, with TA where appropriate. This TA may be used to identify risks and vulnerabilities, and to propose both hard and soft response measures, as well as to facilitate adaptive management and operation. EU regional Blending and other Facilities such as the ELM TA facilities will play a crucial role for the Bank to provide this support. The success of such action needs to be measured more broadly than in volume of lending only. Reductions in the vulnerability of communities and infrastructure need to be monitored closely in order to measure the success in improving the resilience of the portfolio. Suitable methods and indicators to track the improvements in climate resilience will need to be identified and mainstreamed as we go forward through this critical transition phase.

90. When reporting on adaptation volumes, the Bank will increasingly try to separate out mitigation and adaptation components in a meaningful way, both quantitatively in terms of volume of financing but also qualitatively in terms support to promoters, portfolio of projects with improved resilience etc. As referred to in section 2, this approach will continue to avoid double counting of adaptation and mitigation.

Area 3: Continued collaboration with EU and Member States

91. In order to fully utilise its key position as the EU Bank, the EIB is developing a more structured approach to improve alignment with Commission / EEAS / EU delegations pre-programming exercises, and country operational programmes. This includes engaging more comprehensively with the Commission's strategic activities within countries, such as NMM and initiatives focussed on access to energy through decentralised renewables, as well as energy efficiency.

92. The EIB is also prioritising engagement with key member states which are particularly active in promoting climate action in developing countries, and have dedicated climate funds. Related to this, the EIB is also developing a more structured approach to build upon its unique ability to share and transfer expertise from European operations to developing countries.

Area 4: Collaboration with other IFIs

93. The Bank will continue to collaborate with other European bilateral institutions, International Financial Institutions (IFIs) and Multilateral Development Banks (MDBs) at various levels ranging from upstream sharing of best practices and lending policy development, to co-financing specific projects on the ground.

94. The Bank works extensively with these partners to promote climate action. As well as numerous projects and programmes being co-financed by the EIB and other MDBs, this cooperation also includes harmonising performance standards, carbon footprint calculations, climate risk management, reporting on investment and financial flows.

95. The EIB will continue its support towards UNFCCC. The Bank was part of the joint MDB input to the High Level Advisory Group on International Climate Action Finance, the joint MDB report to the G20 on mobilising climate finance and seconded a staff member to the Technical Support Unit of the UN Green Climate Fund Transitional Committee. The EIB also is observer to the Board of the Green Climate Fund.

Area 5: Emissions monitoring and reporting

96. As presented in section 2, the volume of climate action lending is not the only measure of the Bank's contribution to climate action. In order to understand the impact of projects on the climate, the Bank has implemented carbon footprinting systematically across its operations for all projects where emissions are significant and data is available.

97. Work continues to examine how the footprint can best be integrated into the strategic planning of the Bank as well as at sector, sub-sector and project level. Increasingly the Bank will involve promoters with the work on footprinting. The Bank will continue to report each year on the absolute and relative emissions from projects above a significance threshold. In certain sectors, footprinting may assist in screening projects from a climate perspective.

Area 6: Tracking and recording climate action

98. The international climate community is working on the development of criteria to track contributions towards the long term climate finance commitments of $100bn per year by 2020. International discussions continue on the definition or conceptualization of what is meant by the term 'mobilised private finance' and how this should count towards the commitments. The Bank will continue to actively participate in the discussions with a view to determine how its lending flows should be accounted.

99. As part of a wider trend in tracking and reporting on climate action flows, the Bank will work closely with the European Commission to contribute to the development of robust reporting standards for climate finance.

Annex 1. Recording Climate Action

The following project types[18] are recorded as contributing to the Bank's climate action corporate lending targets. This list has been applied since 2010.

Energy Efficiency

All projects meeting the energy efficiency definition of the Bank that result in:
- An increase in energy efficiency of at least 20% from the baseline[19];
- An increase in energy efficiency of less than 20% from the baseline provided that the energy savings justify at least 50% of the investment cost; or
- Investments in cogeneration (CHP) provided they meet the energy efficiency criteria defined in Directive 2004/8/EC.

Examples of eligible projects would include CHP plants and district heating systems, and energy efficiency investments in buildings and industrial facilities.

Comment: The definition of Energy Efficiency clearly distinguishes between business-as-usual improvements and projects driven by energy efficiency considerations.

Renewable Energy

- Projects from renewable non-fossil sources such as wind, solar, aero-thermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases – and related component manufacturing facilities and infrastructure subject to EU policy definition;

Hydro above 20 MW, biomass and biofuels may not be considered as climate action projects when their relative carbon balance is to be presumed positive (i.e. resulting in a net increase in emissions of GHGs) at the time of appraisal.[5]

Clarification: Larger hydro power projects may result in positive net GHG emissions due to potentially large quantities of methane (a powerful GHG) emitted by the decaying biomass in the area flooded by the plant reservoir. The net carbon balance of biofuel projects may also be positive depending on the biocrop used (e.g. studies show that bioethanol from corn or biodiesel from crops planted in deforested areas may result in net positive footprints). Generating power using biomass from unsustainable sources is also considered harmful to the global environment.

Transport

All transport projects that contribute to reducing transport emissions. Examples of eligible projects would be metro, tramways, bus rapid transit, rail, inland waterway and short sea shipping, as well as investments in rolling stock, vessels, and associated equipment.

Forestry And Land Use

Biological sequestration projects that sequester or conserve at least 20.000 tons / year of CO2-e[20]. Examples of eligible projects would be afforestation, reforestation, forest and cropland management, avoided deforestation, reduced tillage, and revegetation.

RDI

Innovative low-carbon technologies in early stages of commercialization and related manufacturing processes, goods and services, and research and development. Examples of eligible sectors would

[18] Please note that within the European Union, nuclear energy is also included (nuclear power plants, excluding enrichment facilities, and related projects such as energy efficiency in nuclear fuel processing plants).

[19] As measured using the EIB methodologies for the assessment of the carbon footprint.

[20] As measured using internationally accepted methodologies.

be photovoltaic, off-shore wind, concentrated solar power, second generation biofuels, low-emission engines, all projects currently under ECTF and carbon capture and storage.

Adaptation

Adaptation projects, intended primarily as measures taken specifically to anticipate climate change, when these measures either exceed €20 m in value or account for at least 50% of the total project cost. Examples of eligible projects would be flood control and drought management measures, and measures to increase the climate resilience of vulnerable infrastructure or areas (e.g. coastal areas).

Comment: The OECD/DAC has recently updated its so called marker for Adaptation which, while similar to the definition of the Bank in terms of purpose pursued, does not impose any thresholds in terms of total value or share in total cost. The Bank is thus using a more restrictive definition[21].

Other

- Methane capture or avoidance projects when they reduce emissions by at least 20% from the baseline;
- Carbon funds and other funds that promote energy efficiency, renewable energy, or biological carbon sequestration.
- Projects that eliminate or substantially reduce emissions of greenhouse gases other than CO2 and methane (i.e. N2O, PFC, HFC, and SF6);

Examples of eligible projects would be landfill gas flaring, composting and other methane capture or avoidance projects from solid waste treatment facilities and waste water treatment plants; other projects that reduce methane emissions. Industrial plant modernisation projects, including projects that eliminate or substantially reduce emissions of N2O, PFC, HFC, and SF6.

[21] Climate change adaptation projects that, in accordance with the OECD/DAC definition, are intended as measures to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience. A project would be eligible for adaptation if: a) the climate change adaptation objective is explicitly indicated in the project documentation; and b) the project contains specific measures targeting the definition above.
Examples of eligible projects would be flood control and drought management measures, measures to increase the climate resilience of vulnerable infrastructure (e.g. ports, airports, roads, etc.) or areas (e.g. coasts, arid zones, etc.), and other appropriate activities included those defined in the OECD/DAC definition text (see http://www.oecd.org/dataoecd/1/45/45303527.pdf).

Tables

Climate Action signatures over the period of implementation of the current External Mandate (01/08/2007 to 30/11/2012)

	2007		2007 (5 mo)	2008		2008 Total	2009		2009 Total	2010		2010 Total	2011		2011 Total	*2012 signed (as of 30/11/12)*		2012
	Facility	Mandate		Facility	Mandate		Facility	Mandate		Facility	Mandate		Facility	Mandate		*Facility*	*Mandate*	
Asia	500		500		101	101		167	167	500	223	723	201		201	*250*	*150*	*400*
Eastern Neighbourhood					150	150					360	360	26		26		*195*	*195*
Latin America							141	6	147	79	40	118	660	51	711		*200*	*200*
Mediterranean countries					1	1		65	65		119	119		131	131	*11*	*313*	*324*
Pre-Accession		306	306	135	1,019	1,154	30	518	548	275	4	279	256	717	973	*154*	*75*	*229*
South Africa					40	40		40	40				50		50		*50*	*50*
Multi-region																		
Total Ext. Mandate Regions	**500**	**306**	**806**	**135**	**1,311**	**1,446**	**171**	**796**	**967**	**854**	**746**	**1,599**	**1,194**	**899**	**2,092**	***415***	***983***	***1,398***
Climate Action as % of total lending on EIB own resources in Mandate regions	40%	16%	26%	9%	32%	26%	10%	13%	13%	30%	15%	21%	35%	29%	32%	*24%*	*39%*	*33%*

Table 1 EIB Climate action signatures mid-2007 to end November 2012 (mEURs)

Note 1: 2012 figures (italicised) are as of end November, and will be higher by year end.

Note 2: The methodologies and recording systems for climate action have been developing during the period shown and only figures from 2010 use the current definitions.

Climate Action signature forecast 2012 and projects in the pipeline for 2013

(project pipeline subject to constraints related to the COP and to the operating environment, representing a possible attrition of up to ⅓)

	2012 FORECAST		2012 Total	2013 PIPELINE		2013 Total
	Facility	Mandate		Facility	Mandate	
Asia	250	327	577	191	135	326
Central Asia					365	365
Eastern Neighbourhood		375	375		284	284
Latin America		200	200		105	105
Mediterranean countries	11	463	474		816	816
Pre-Accession	158	75	234	101	492	592
South Africa		50	50		375	375
Multi-region	10		10	222		222
Total Ext. Mandate Regions	429	**1,490**	**1,919**	514	**2,571**	**3,085**
ACP, OCT		112	**112**	188	140	328
Climate Action as % of total lending on EIB own resources in Mandate regions	26%	32%	31%			n.a.

Table 2 Pipeline for climate action

		Total activity				of which EIB activity within the mechanism			
Blending Mechanism	**Period covered**	**Total grants approved since inception**		**of which Climate Action support**		**Total grants approved for projects with EIB involvement ***		**of which Climate Action support**	
		Nbr of projects	EUR m	Nbr of projects	EUR m	Nbr of projects	EUR m	Nbr of projects	EUR m
NIF - South		23	226.10	16	86.52	16	179.80	12	80.00
NIF - East		29	191.63	15	40.26	17	129.45	8	22.00
NIF Total	*2008-2011*	52	417.73	31	126.78	33	309.25	20	102.00
LAIF	*2010-2011*	8	34.85	7	30.85	1	7.00	1	7.00
IFCA	*2011*	4	24.50	n.a.	n.a.	2	9.50	2	9.50
(EU IPA + other donor funds)	*2008-2011*	112	220.00	n.a.	n.a.	43	92.11	n.a.	n.a.

* EIB as Lead financier or participating co-financier

in grey = estimate based on list of approvals, climate support not tracked by the mechanism

Table 3 Support within EU Regional Blending Mechanisms (2008 to 2011)

Note: TA to support climate action is likely to be higher than shown as much support for adaptation work, energy audits and other climate TA is contained within bigger TA packages.

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