SPECIAL STUDY

The EBRD’s use of subsidies – phase 1

January 2017

EBRD EVALUATION DEPARTMENT
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### Abbreviations

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<th>EU</th>
<th>European Union</th>
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<tr>
<td>EvD</td>
<td>Evaluation Department</td>
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<td>PFI</td>
<td>Partner Financial Institution</td>
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<td>TC</td>
<td>Technical Cooperation</td>
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### Definitions

<table>
<thead>
<tr>
<th>Early transition countries</th>
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<tr>
<td>investment grants</td>
<td>grants from donors or the EBRD Shareholder Special Fund representing part of the cost of projects and accompanying Bank (and perhaps other) finance of the remainder</td>
</tr>
<tr>
<td>concessional loans</td>
<td>loans with terms (interest rate, tenor or grace period) more favourable than in available commercial loans and generally corresponding to donor funding for them</td>
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<tr>
<td>incentives</td>
<td>payments either in the form of performance fees paid to partner financial institutions (PFIs) for extending loans of specified kinds to sub-borrowers, or in the form of rebates for sub borrowers when their use of loans for specified purposes is validated</td>
</tr>
<tr>
<td>risk sharing</td>
<td>assumption by donor-provided funds of part of the Bank’s or PFIs’ credit risks in specified kinds of lending, mostly as first loss risk cover for PFIs</td>
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<td>SEMED</td>
<td>South Eastern Mediterranean Region which includes</td>
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Executive summary

The EBRD’s use of subsidies as an element of project structure has increased substantially over the past decade, on par with the overall increase of Bank business volume. Key drivers of the growth in subsidy use include:

- incremental donor support in the wake of the financial crisis; and,
- the Bank’s expansion into new operational areas including climate change; clean energy and resource efficiency where concessional funding is the norm.

Given the Bank’s emerging strategic directions the role of subsidies is likely to increase further.

This study presents a comprehensive mapping of subsidies by type, sector of use, geography and origin of finance, and from that provides an analysis of the consistency of their use with Bank policies. It is based on review of relevant EBRD policies and operational practices, interviews with EBRD staff in headquarters and resident offices, and analysis of 60 investment projects and facilities using the full range of subsidy instruments approved between 2010 and 2014 and for which non-TC grants were signed in this period.¹

Subsidies are defined as non-TC grants, in the four forms of investment grants, concessional loans, incentives and risk sharing. Examining the full range of uses of subsidies builds upon sector- and product-specific subsidy related findings in a number of recent EvD studies. It also provides a necessary foundation for further evaluation work to assess the results of the Bank’s use of subsidies, which was beyond the scope of this study.

Main findings

The Bank uses subsidies across a wide range of sectors and countries. Public sector clients are the dominant recipients of investment grants; concessional loans are balanced across private and public clients, including partner financial institutions (PFIs); while incentives and risk sharing are offered to PFIs and individual sub-borrowers.

The recent growth in use of subsidies (based on 2010 to 2014 data for signed grants) has been uneven across types: concessional loans have increased markedly (with large contributions from the Global Environment Facility and Climate Investment Funds), and so has risk sharing, while investment grants and incentive payments have not.

Donors’ priorities in providing non-TC grants differ markedly. To some extent these priorities are complementary, but there have been some gaps in terms of countries and sectors filled by the EBRD Shareholder Special Fund. While the Bank usually determines the amounts of any subsidies in its operations, some decisions, particularly on large European Structural and Investment Fund grants in municipal infrastructure and transport sectors, have been made directly by the donor.

The established principles for determining whether and how subsidies should be used are clear and coherent, but also allow for flexible application; they have been widely road-tested at an operational level and a good body of experience has been built. Approvals for the use of subsidies in individual operations and facilities have generally, though not always, followed these principles.

The application of the policy principle of “temporariness” is uneven. Subsidies are often scaled down or ended in follow up facilities, but there have been instances of repeated use. This is an issue that warrants review.

In most cases the Bank’s incorporation of subsidies in operations or facilities is intended to make them sufficiently attractive to clients (and in some cases also sub-borrowers) to be agreed and implemented successfully. In these cases, subsidies are intended to be enablers of Bank operations, without specific objectives distinguishable from those of the relevant operations or facilities. Assessing their effectiveness requires judging counter-factuals – whether the operation might have been implemented as successfully with less subsidy or no subsidy – rather than specifying ex-ante the subsidies’ intended effects and collecting ex-post evidence of those effects.

This means there is an inherent difficulty in marshalling evidence about the effectiveness of most of the Bank’s uses of subsidies. Assessments of subsidies’ effectiveness are straightforward in only a minority of cases, where they are allocated to specific components of operations with specific objectives of a measurable kind.

Issues

Due to the difficulty in many cases of assessing the effectiveness of subsidies, even as the volume and range of subsidies to support new strategic and operational objectives are likely to grow, greater attention should be given to those aspects of the use of subsidies where relatively clear evidence may be available. These aspects include bridging gaps in the affordability for householders of municipal services, encouraging sector reforms, expanding PFIs’ lending of designated kinds, and achieving economies in energy use by sub-borrowers.

Work already underway in the Bank to strengthen results frameworks provides an opportunity to better isolate the

¹ This study uses amounts of signed non-TC grants in the period 2010 to 2014 provided by management from September 2015 to July 2016. Since the study was finalised the donor co-financing unit has developed a database which reconciles earmarked grant amounts for the period of 1991 to 2015. This data was not available at the stage when EvD did data analysis. Significant differences between two datasets are explained by the considerable time lag between the approval (earmarking) and the signing of the deals with non-TC grants in their structure. The donor co-financing unit presentation “Evolution of the use of grants” prepared in October 2016 provides overview of the new reconciled data.
use and intended purposes of subsidies where possible. Examples include: the effects on demand for municipal services of combinations of tariff increases and service improvements; the effects of tariff increases and Public Service Contracts on the financial sustainability of municipal utilities; sustainability and demonstration effects of subsidised lending by PFIs after Bank credit lines have been repaid.

Case studies of comparator projects in the same sector could usefully explore differences between subsidised and non-subsidised structures, their effects and sustainability. Approved projects that remained unfunded through a shortage of needed non-TC grants for longer than, say, one year, could also provide insights.

There would be value in examining the practices – both design and assessed performance – of other providers of subsidy-enhanced operations in the specific sectors and countries of operation to identify opportunities to improve EBRD methods and practices. Comparison with other international financial institutions in similar context might be included in one of the cases.
1. Introduction

In this chapter;

- Purpose, scope, wider context, objectives and approach
- Limitation of the study

Purpose

This thematic study was included in the 2015 EvD work programme due to recent growth in the Bank’s use of subsidies and associated development relations with donors. The study is principally for learning purposes rather than accountability. In early 2016 EvD released a study on the EBRD’s sustainable energy financing facilities, which included addressing issues related to use of subsidies. An approach paper was reviewed by management and completed in late 2015. Due to the numerous purposes of subsidies and possible evaluation questions, and EvD’s resource limits, a decision was made to progress the study in two phases, with the possible second phase depending upon the results of the first.

Phase 1 of the study, presented here, maps the Bank’s use of subsidies through non-TC grants, and assesses the degree of correspondence between recent use of them and the Bank’s policies for such use. It is therefore partly descriptive and partly analytical. A possible second phase would evaluate the results achieved from use of subsidies.

Scope

This study evaluates Bank operations which incorporated subsidies and were approved by the Board in the five-year period from 2010 to 2014. It includes frameworks, facilities, projects and sub-projects.

Subsidies are defined as non-TC grants, a term commonly used within the Bank. They covering four types:

investment grants – grants from donors or the EBRD’s Shareholder Special Fund representing part of the cost of projects and accompanying Bank (and perhaps other) finance of the remainder;

concessional loans – loans with terms (interest rate, tenor or grace period) more favourable than in available commercial loans and corresponding to donor funding for them;

incentives – either in the form of performance fees paid to partner financial institutions (PFIs) for extending loans of specified kinds to sub-borrowers, or in the form of rebates for sub borrowers when their use of loans for specified purposes is validated; and

risk sharing – assumption by donor-provided funds of part of the Bank’s or PFIs’ credit risks in specified kinds of lending, mostly as first loss risk cover for PFIs.

All of these can be regarded as subsidies for Bank clients (including PFIs) or sub borrowers, since their common effect is to bring about a lower overall cost of finance for them than would be available commercially or with the Bank’s usual risk-weighted return.

While some transactional TC grants are also effectively subsidies for clients, this evaluation and its use of the term “subsidies” will be confined to non TC grants, for two reasons: in general non TC grants are more substantial subsidies than TCs, and accounting for the results of TC grants has recently been the object of an extensive review and upgrading.

Context

Subsidies or concessional finance is the subject of an extended body of literature, both academic and empirical, which will be reviewed extensively in Phase II. Some elements however contribute to an understanding of the context in which the EBRD is providing subsidies in its countries of operation.

Subsidies are at the heart of international financial institutions’ activities as they receive subsidised capital from their multiple shareholders and donors and use their status of preferred creditor to offer terms and conditions that are suited for the environment with higher risks, weaker institutional setups and unpriced externalities where private markets are unable to offer suitable financial products. Use of covenants for enhancing necessary structural and regulatory reforms in a wider context delivers economic effect that is greater than financial return of the specific investment. Indeed, the gap between the private and social return is often considered as a main justification for concessional finance. The ultimate objective is to achieve financial sustainability and transform governance principles and
institutions in a way that enables private operators to invest in the areas that were previously deemed unattractive. Therefore a range of principles is essential for shaping international financial institutions’ investments in a way that delivers gradual reduction in the use of subsidies, which involves variations in its design and its volume, that ultimately change behaviour patterns of the public and private sectors and the general public. These principles are usually separate for concessional financing in public/sovereign guaranteed sector and in private sector. A range of co-ordinating mechanisms among multilateral development banks exists aimed at unifying these principles and conditions of provision of such financial instruments. Additionally, a new generation of multi-stakeholder investment platforms emerges, such as the Sustainable Development Investment Partnership, which is aimed at bringing together international donors, public agencies and private stakeholders to mitigate the risks of financing large-scale infrastructure projects in the developing countries using the mix of financial instruments (such as loans, grants, guarantees and insurance, see here for example).

In the private sector, which constitutes 79% of the cumulative EBRD investment portfolio, the Bank is compliant with a joint 2012 agreement amongst multilateral development banks that they abide by principles to support sustainable private sector operations. These include: (1) additionality; (2) crowding in; (3) commercial sustainability; (4) reinforcing markets; and (5) promoting high standards. These were consequently used as a basis for developing development financial institution guidance for investment concessional finance (see information below in Chapter 2).

In parallel to these changes there are significant reforms in the provision of state (or regional) aid by the main shareholder countries, especially by the European Union and its member states. Among the most notable changes are:

(a) the eligibility criteria for state aid are becoming stricter; and

(b) the share of the financial instruments and blended (hybrid) financing compared to the pure grant financing of investment projects is increasing.

As European Structural and Investment Funds represent a significant share of non-TC grants in some countries of operations, and while EU’s external aid equally contributes significantly to the concessional funding in Neighbourhood countries through the Neighbourhood Investment Facility, the awareness of the new rules and principles for use of financial instruments is crucial for planning further operations with non-TC grants.

Objectives

This first phase of the evaluation has two objectives:

1) to map the Bank’s recent use of subsidies in precise terms, updating information on the use of non-TC grants compiled in 2012 for the Grant Co-financing Strategic Review; and

2) to assess the alignment of subsidy use with relevant guiding policies, in particular the principles stated in staff guidelines for the use of non TC grants, by answering a set of evaluation questions:

Evaluation questions

1/ How practicable has it been for the Bank to apply its principles for use of subsidies (as stated in the 2008 and 2015 staff guidelines for non-TC grants)?
   - How closely have these principles been followed in individual operations and facilities?
   - Have there been cases where subsidies were determined by donors rather than the Bank?
   - Have subsidies been applied economically (that is, efficiently, and apart from cases in which subsidy amounts were determined by donors)?
   - How often, and on what basis, have subsidies been scaled down or ended in follow-on facilities or operations?

2/ How have subsidies been justified, in their various types and contexts?
   - Can any differences in transition impact potential be attributed to subsidies?
   - Have there been refinements in the design of incentives and risk-sharing facilities?
   - Have assumptions about user tariffs or other prices linked to subsidies been confirmed during implementation?
   - How do donors see the comparative effectiveness of Bank operations using subsidies?

Approach

This study has been prepared through:

- Introductory discussions with eight Board directors and fifteen staff members in June 2015;
- document review for around sixty facilities, frameworks, projects and sub-projects involving subsidies;
- input in September 2015 from representatives of Management in the form of comments on the approach paper;
- input from the 2015 vD study on sustainable energy finance facilities; and,
- a further round of some twenty meetings with selected Operation Leaders and other staff members between 27 November and 7 December 2015.

Limitations

The analysis, findings and recommendations in this report remain subject to important caveats:

- the evidence is limited to Bank documents and
interviews so conclusions are essentially about consistency and completeness in Bank work and matters reported within the Bank, without validation from direct observations and external sources of information;

- projects and facilities covered are those approved in five recent years so the focus is mainly on designs and intentions, rather than on outcomes;

- data on exact amounts of financing while being consistent has some gaps and ambiguities, which is duly reflected in the respective chapters of the report.
2. Strategic background

Growth in use of subsidies

Growth in use of subsidies in Bank operations since the mid-2000s has been moderate in the numbers of non-TC grants, and uneven in their overall amounts.¹

Use of non-TC grants, 2008 to 2014 (€ million)

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>32m</td>
<td>31m</td>
<td>126m</td>
<td>108m</td>
<td>77m</td>
<td>85m</td>
<td>121m</td>
</tr>
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</table>

Source: Future Directions for Grant Co Financing

This growth has two components: a step increase in 2010 as donors helped the Bank respond to the global financial crisis, partly reversed in 2011 and 2012; and a trend increase which re-emerged in 2013 and 2014.

Growth has been driven by three main factors:

1) donors’ readiness in the aftermath of the global financial crisis to provide investment grants and concessional loans in selected countries other than early transition countries, especially to co-finance infrastructure with improved environmental and energy efficiency standards;

2) long running needs for subsidies in developing the Bank’s business in early transition countries, at municipal level and through PFIs – met initially from the Early Transition Country Fund and EBRD Shareholder Special Fund and over time increasingly from other donors; and

3) the use, more broadly than in early transition countries, of incentives for PFIs and sub-borrowers as means of expanding lending of targeted types – initially for micro, small and medium enterprises, from 2010 onwards on a large scale for investments in energy efficiency and renewable energy, and in the last few years also for agribusiness and women-led businesses.

Due to increases in the Bank’s annual business investment, the ratio of aggregate use of signed) subsidies to annual business investment has remained small, averaging a little over 1% in the period of 2010 to 2014. However, the growth in use of subsidies has been uneven in terms of the different types of subsidies. As a result of contributions from the Global Environment Facility and Climate Investment Funds, use of concessional loans has increased markedly. So has the Bank’s use of first loss risk cover as an encouragement for PFIs to undertake new types of lending. As for the other main types of subsidies, investment grants and incentive payments, there has been no trend of overall growth. This can be seen below, which shows the breakdown by main types of the annual totals for 2010 to 2014.

Policy framework

Non-TC grants for subsidies have in most cases, unlike TC grants, not had distinctive objectives of their own, but shared the objectives of the operations in which they have been used. For example, an investment grant for part of the capital cost of a water-supply upgrade has objectives of improving supply volume and quality, and helping the utility to operate more commercially, as in the operation as a whole; and incentives linked with a line of credit for renewable-energy investments at the level of households and small businesses share the objectives of the line of credit. There is, however, a minority of projects in which subsidies have been designated for one or several distinct components of the project – especially demand-side components, such as domestic metering, in energy-saving investment projects.

Guidelines developed by the Office of the Chief Economist in 2008 for non-TC grants from EBRD Shareholder Special Fund required subsidies to have an economic justification, usually related to unpriced externalities or other market gaps, to be no greater than necessary, and to be temporary. These guidelines incorporated a crucial distinction between subsidies for private clients, where care was needed to avoid distorting markets, and subsidies for public clients. Subsidies for the latter, typically municipal utilities operating in non-competitive markets, can mostly be seen as transfers between governments with little or no risk of market distortions.

¹ This chart is Figure 2 in Future Directions for Grant Co Financing, April 2015. As in the recent series of semi-annual and annual reports on grant co-financing, it is based on data for signings of Bank-managed investment grants, concessional loans and incentives, with the addition in respect of 2014 of amounts provided by donors to back first loss risk cover. It excludes subsidies provided through European Structural and Investment Funds.
The 2008 guidelines came to be used by the Bank’s economists in reviewing all proposed uses of non-TC grants. The guidelines were reviewed in 2012, as part of the Grant Co-financing Strategic Review under guidance from the Budget and Administration Affairs Committee of the Board (see the final report of the Grant Co-financing Strategic Review, 8 January 2013). They were refined a little, and formally made to apply to all non-TC grants, with associated requirements for initial specification of their intended results and subsequent reporting within those results frameworks. These guidelines do not apply to parallel co-financing or associated grants not managed by the Bank, such as those from European Structural and Investment Funds. The guidelines served to bring EBRD internal policies in line with the principles and definitions in the DFI Guidance for Using Investment Concessional Finance in Private Sector Operations, prepared by a working group under the leadership of the EBRD and the IFC and endorsed by multilateral development bank heads at a private sector roundtable in 2013. The box below summarises what these guidelines say about where use of non-TC grants is justified.

**Staff guidelines on justification for use of non-TC grants**

The use of non-TC grants can be justified in three situations:

1) **Presence of significant externalities:** There are situations in which markets fail to correctly value the cost or benefit that certain economic activities create on third parties and where carefully designed grants can be expected to improve market outcomes. This can be the case for under-priced environmental externalities (such as carbon dioxide emissions), first movers and network effects.

2) **Other institutional and market failures:** There may be temporary barriers to efficient and fair market outcomes due to information asymmetries (for example in small business lending), principal-agent problems, or changing behaviours that may not be individually rational but are nevertheless deeply engrained (such as the inefficient use of energy or water). The need to achieve a critical mass (scope and scale) of operations in order to deliver the expected transition impact will be taken into account.

3) **Affordability constraints on environmental infrastructure:** This applies mainly to services provided by public infrastructure where the cost-recovery price may temporarily exclude certain low-income and/or vulnerable groups. The use of grants can alleviate such affordability problems. For example, the EBRD requires EU environmental standards, which could be well beyond local regulatory standards and it could cost significantly more than local standards.

In addition, the use of non-TC grants is subject to the same discipline as the use of the Bank’s ordinary resources: promoting the transition to market economies while observing the requirement of additionality. The following principles should be verified:

i) **Market subsidiarity:** The use of non-TC grants should be focused on transition objectives that market-based instruments could not achieve on their own;

ii) **Transition leverage:** Non-TC grants should leverage reform or systemic change that advance clearly defined transition objectives;

iii) **Economic viability:** In principle a project ought to be viable in the long-term in the absence of subsidies or grants once the identified barrier has been overcome. For public infrastructure projects, the economic rate of return should exceed the financial rate of return and the use of non-TC grants should help fill this gap.

iv) **Sustainability:** To avoid the creation of subsidy dependency and achieve financial sustainability over time, the reliance on subsidies should decrease over time for a particular country, sector or product.

v) The guidelines allow for flexibility and a project-by-project approach.
3. Mapping uses of subsidies

To map the use of subsidies between 2010 and 2014, EvD reviewed the Bank’s annual donor reports regarding use of grant co-financing, covering TC and non-TC. These provide extensive information both about aggregate uses of subsidies in the four main subsidy types, and about individual Bank-managed investment grants and concessional loans for which co-financing agreements have been signed each year. EvD also acquired information from staff members and project or framework documents which added detail about: (i) how incentives and first loss risk cover have been allocated by country or region and by sector; and (ii) “footprints”, in terms of country or region and sector, of the Bank’s main donors for non-TC grants.

Distribution

This mapping uses the same four categories of subsidies as in the Bank’s reporting on non-TC grants – investment grants, concessional loans, incentives and first loss risk cover. Additionally concessional loans and incentives have been sub-divided into those for PFI s and those for other clients and sub-borrowers. This has been done to provide a fuller picture in functional terms. Full information of allocation by category and by country is provided in Annex 2. EvD refers to specific countries in the Annex 2 to clarify and avoid misinterpretation of data, while illustrations below are aimed at providing a snapshot analysis of the specific types of subsidies and have to be considered with some caveats.

Investment grants

Both charts below illustrate the distribution of investment grants approved by the EBRD from 2010 to 2014.

Investment grants provided to new EU member countries (Poland and Romania) from European Structural and Investment Funds are excluded. These are associated with Bank operations but were not managed by the Bank. The grant amounts were determined by the EU and governments of the respective countries and not by the Bank. Available data for such grants are incomplete. However it is important to recognise the importance of these grants, which often involve a very substantial amount of funding that has significant effect on the affordability of the project and enhances its transition impact. For example, if included in this analysis, the European Structural and Investment Fund investment grants would increase the concessional funding by a factor of 10 in both municipal water and wastewater sector (from €83.7 to €783.7 million) and in municipal transport (from €25.6 to €255.3 million).

3 Investment grants, 2010 to 2014 (€ million or equivalent)
4 Investment grants by country of operation, 2010 to 2014

Concessional loans, incentive payments and risk sharing

The three charts below provide information on allocation of concessional loans, incentive payments and first loss risk cover while full information by country is provided in Annex 2.

Chart 5 Concessional loans for public, private sector clients and PFIs, 2010 to 2014 (€ million equivalents*)

*For converting amounts of concessional loans to grant equivalents, a factor of 0.45 is used.
Chart 6 Incentive payments for PFIs and for clients/sub-borrowers (€ million of available funds)*

Abbreviation: EER – energy efficiency and renewables.
* For some facilities, the figures as yet available do not distinguish between incentives for partner banks and incentives for sub-borrowers.

Chart 7 Risk sharing for PFIs (€ million of available funds)
Data issues

The data provided are subject to the following definitions and scope:

- Data are based mainly on records of signing of agreements with clients for subsidies associated with Bank operations and therefore:
  - include a few operations and facilities which the Board approved before 2010 but for which subsidy agreements were signed in 2010 or later; and,
  - exclude an unknown number of operations which did not proceed from the operations committee approval to Board approval because necessary subsidies could not be provided by donors or the EBRD Shareholder Special Fund (the 2013 Grant Co-Financing Report states that 10% of TCs approved by TC Committee in that year remained unfunded, but provides no equivalent information about non-TC grants).

- Terms of concessional loans vary – they usually have a lower interest rate than the accompanying Bank loan, and may also have a longer tenor, a longer grace period, or some combination of these. In respect of some years the Bank has reported the grant equivalents of concessional loans in aggregate, ranging from around one third to around one half of the principal sums (see Grant Co-Financing Semi Annual Report and Funding Outlook, 23 April 2013). The figures for grant equivalents of concessional loans are based on a standard conversion factor of 0.45, and so are only approximate (see Semi-Annual Report on Grant Co-Financing, of 3 May 2011, which refers to an assumed grant element of approximately 45%, using IDA methodology of the World Bank).

- Many financing facilities have included combinations of incentives for PFIs, first loss risk cover for PFIs and incentives for sub-borrowers, according to assessments of needs by the Bank’s teams, or according to what support has been available from donors. The records available for this study indicate which types of subsidy were used for which facility, but only in some cases what amounts were involved. Accordingly, there are gaps in the data for some amounts of incentives and first loss risk cover. Where amounts are shown for first loss risk cover, they are amounts allocated with donors’ agreement (or the Board’s agreement in the case of the EBRD Shareholder Special Fund) to meet possible losses, as distinct from amounts – so far, much smaller, if any – used to meet claims made by PFIs.

Conclusions

The range of Bank operations supported by subsidies is broad, in terms both of countries and of sectors.

All recipients of investment grants in this period have been public-sector clients, whereas recipients of concessional loans have been a mixture from both public and private sectors, with amounts for private-sector clients (including PFIs) predominating. Recipients of incentive payments have been private-sector clients, apart from some state-owned PFIs.

There are no notably large amounts involved, aside from European Structural and Investment Fund investment grants, the amounts of which have been determined by the EU and EU member countries, and not the Bank, and an investment grant for Lietuvos Elektrine in Lithuania associated with decommissioning of the Ignalina nuclear power plant.

Distribution of donor funding

The Bank’s main donors of subsidies have agreed to have their contributions allocated to countries and sectors (see chart below).

These figures, unlike in the charts above, have integrated European Structural and Investment Fund grants to some EU countries which are neither determined nor managed by the EBRD since they illustrate the commitment of the EU as a donor in certain countries and sectors and the role of the EBRD as one of the crucial financial institutions that enable blended financial instruments.

More detailed information, donor-by-donor and region, is provided in Annex 3.
Chart 8 Where subsidies from main donors supported Bank operations, 2010 to 2014*

* Concessional loans are included as grant equivalents (45% of principal). The multi-donor International Ignalina Decommissioning Fund and the multi-sector Early Transition Countries Local Currency Risk Sharing Special Fund are excluded. Figures for amounts determined by the European Structural and Investment Funds, and figures in the columns for “Energy efficiency or renewables” and “micro, small and medium enterprises / agribusiness/ Women in Business”, are understated since the data as yet available are incomplete.

Donors differ markedly in their priorities. Only the EU and the multilateral environmental funds range widely, but many donors have provided subsidies to support Bank operations in early transition countries.

The differences in donors’ priorities mean that they complement each other to an extent, but still leave gaps in some countries and sectors where subsidies are needed for Bank operations. The more detailed picture of donors’ allocations provided in Annex 3 suggests that the EBRD Shareholder Special Fund has filled some persistent gaps – in geographical terms for Tajikistan, in sectoral terms for public transport and solid waste management, and in programme terms for the Caucasus Energy Efficiency Programme and the Energy Efficiency Management Systems Programme (the Bank’s Grant Co Financing unit has provided detailed descriptions of gaps between donors’ contributions and Bank needs for non-TC grants in its reports for donors – notably in the 2013 Grant Co-Financing Report, section 2.5, pages 21-42).
4. Evaluation questions and answers

Practicability of applying Bank principles to use of subsidies

How closely have the principles stated in the 2008 and 2015 staff guidelines for non-TC grants been followed in individual operations and facilities?

Generally, but not completely.

a) Some investment grants have represented large proportions of the capital cost of projects – not only in those cases in which the grant amounts were determined by donors rather than the Bank (see table below).

<table>
<thead>
<tr>
<th>Country</th>
<th>Project</th>
<th>Investment grant AS % project cost</th>
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<tbody>
<tr>
<td>Bosnia &amp; Herzegovina</td>
<td>Bijeljina Wastewater</td>
<td>75</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>Karabalta Water</td>
<td>60</td>
</tr>
<tr>
<td>Armenia</td>
<td>Kotayk Solid Waste</td>
<td>50</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>Bishkek Water II</td>
<td>50</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>Solid Waste Framework</td>
<td>50</td>
</tr>
<tr>
<td>Bosnia &amp; Herzegovina</td>
<td>Capljina Water</td>
<td>39</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>Bishkek public transport</td>
<td>35</td>
</tr>
</tbody>
</table>

b) These investment grants have been justified in much the same way as other, smaller grants, by direct references to affordability constraints or environmental benefits, although with indications that motivating clients and local governments was sometimes part of the justification (see 4.1.3(a)). The operations with which they were associated have had worthwhile objectives related to sector reform, as in the case of other, smaller grants, and their transition impact (TI) benchmarks have been similarly demanding.

c) These large investment grants have not been likely to distort any markets, since the clients involved were public-sector utilities operating in non-competitive markets, mostly with legislated monopolies (municipal bus utilities represent a partial exception, having competitors in the form of private bus or taxi companies; but in the cases reviewed, these competitors have operated under regulation, and Bank covenants have included raising fares on public buses and so making them less competitive in terms of prices). However, providing large proportions of capital expenditure in grant form is in tension with the Bank’s policy principles of sustainability for municipal enterprises and temporariness for subsidies. This is apart from whether for the donors involved they deliver the same value for money as subsidies more widely spread as smaller proportions of projects’ cost.

d) Some subsidies and incentives have been repeated in second and later stages of projects and financing facilities, which is also in tension with policy principles (see 4.1.4).

Have there been cases where subsidies were determined by donors rather than the Bank?

Yes, but only a few.

a) Investment grants from EU Structural Funds (more recently Structural and Investment Funds) fit this description. Those made in 2010-14 in association with Bank operations were for water and wastewater in Romania and for municipal transport in Poland. They are identified separately in chapter 3.1 above and Annex 2.

b) Concessional loans from the Clean Technology Fund are provided using terms which are concessional vis-à-vis the EBRD’s terms or market rates, in all deals, with a minimum floor of 75 basic points (0.75%).

c) The guideline agreed in the Eastern European Energy Efficiency and Environment Partnership, of sizing subsidy amounts according to expected reductions in carbon dioxide emissions or other environmental benefits, is broadly but not fully consistent with the Bank’s principles for determining subsidies. The Bank’s principles imply that account should be taken of the extent to which these environmental effects are reflected in energy prices for each client, whereas the Partnership guideline uses a standard figure, set in 2009, for all countries. However, this sizing guideline is applied flexibly rather than as a strict rule.

Have subsidies been applied economically (that is, efficiently, and apart from cases in which subsidy amounts were determined by donors)?

Generally yes.

a) Although some cases of investment grants in large proportions were noted above in 4.1.1, it appears from discussions with Operation Leaders and other Bank staff that these have been economical, in the sense that the amounts were necessary in the near term for affordability by users of municipal utilities or by city budgets, or as incentives for national and local governments to make investments accompanied by sector reforms.
b) For private clients the Bank’s application of subsidies, both directly and through financing facilities with sub-borrower incentives, has seemed economical in the cases reviewed for this study, involving no amounts which seemed unjustifiable or periods which seemed unreasonable. However, this can only be a provisional answer without having used consultants’ reports or evidence from fieldwork.

c) The repeating of some incentives for PFIs in second and later phases of facilities raises questions about their efficiency, although this is qualified to the extent that later phases have been more ambitious in target areas for lending – see 4.1.4. Also, as EvD’s Sustainable Energy Finance Facilities study noted, comparison through the time is often challenging due to changes in format and sector focus that prevents accurate comparison.

d) On the positive side there are clear indications, noted already in the 2015 EvD special study of Sustainable Energy Finance Facilities, of the Bank’s developing “smarter” design of incentives for sub-borrowers, to the extent permitted by practicality (see Box 2 for key conclusions of EvD Sustainable Energy Finance Facilities study) (see the answer to question 4.2.2 below. The EvD special study is of June 2015).

Key conclusion of EvD study *“The EBRD’s Sustainable Energy Financing Facilities” (2015)*

“...Where incentive payments have been used, these were found to be appropriate for overcoming specific types of market barriers and the levels at which incentives were set have been as low as possible while still retaining efficacy. [Sustainable Energy Finance Facilities] can focus attention and motivate action where the level of prioritisation given to sustainable energy investments is low even though such investments are cost-effective. Incentives also encourage the use of higher standards or better performing technologies, hence leading to more substantial ‘deeper’ interventions. There has been a clear trend of increasing “smartness” in incentives to sub-borrowers (i.e. linking to quantitative aspects of project performance), and phasing out PFI incentives in countries where there has been a succession of facilities.

...Regarding the efficiency of the project portfolio, keeping in mind that the main purpose of SEFs is to bring a long term transformation of the market of EE / RE financing, the best way to measure the efficiency is the extent to which the combined package of loans and grant funds provided has been able to leverage additional sustainable energy lending by PFIs. While detailed information on long-term changes is not available, the insight from surveys and other sources indicates that the combination of financing, TA and subsidies has been critical to the success and the leverage ratio, in line with that of other international financial institutions, suggests an efficient use of donor funds. The focus of Sustainable Energy Finance Facilities should remain on enhancing the extent to which they bring about a transformation in the market for sustainable energy lending.

...Regarding the Sustainable Energy Finance Facilities’ sustainability, few examples exist of continued energy efficiency and renewable energy lending by PFIs beyond or outside of the them. There has been a clear trend towards a greater focus on long-term sustainability in facility design, such as the use of lower and more precisely targeted incentives, inclusion of policy dialogue and efforts to develop the local consultancy sector. Benchmarks relating to long-term sustainability are also becoming more widely used, such as the volume of lending from alternative non international financial institution sources and the number of local engineering firms receiving training. In this respect, there has been an evolution of the sustainable energy finance facilities model towards ensuring that facilities leave a legacy of a strengthened project consultancy sector.”

**How often, and on what basis, have subsidies been scaled down or ended in follow-on facilities or operations?**

Often, but with exceptions.

a) This varies by type. Incentives and first loss risk cover for PFIs have generally been for first phases only. A typical example is the Turkey Sustainable Energy Finance Facility, where the first phase had PFI incentives but the second and third phases did not. Other examples are the reductions in PFI incentives in successive versions of facilities for financing adaptation by micro, small and medium enterprises to EU health and safety standards, Slovakian Sustainable Energy Finance Facility II, and the change from Romania EEFF to a Sustainable Energy Finance Facility; phasing out of incentives to “second time” PFIs in Moldova Sustainable Energy Finance Facility II; and the switch from first-loss to second-loss risk cover envisaged in the framework for the Turkey Women in Business Programme (the framework for the latter programme, approved in May 2014, drew on lessons learned since 2012 with credit lines for Turkish PFIs intended to expand their lending to women-led businesses. For PFIs which had previously had first-loss risk cover, it envisaged the Bank’s sharing losses only beyond the first 2%, and with the usual caps. There have been very few exceptions such as in the Moldova Energy Efficiency Financing Facility (EEFF), where incentive payments of 2% for PFIs continued in the second and third phases.

b) It is less generally the case that sub-borrower incentives have been only for first phases. The main reasons for this have been the continuation of financial-market obstacles, and more ambitious targeting such as to under-served
How have subsidies been justified, in their various types and contexts?

Justifications for subsidies in those cases for which documents have been examined show:

- These justifications differ substantially for different types of subsidy, as the Bank’s guidelines envisage. For municipal infrastructure, affordability for users has been a frequent justification, along with government requirements in some early transition countries to contract new loans only with some concessionality, and needs to motivate investments raising environmental standards and accompanied by sector reforms. Similarly for other investment operations with prospective environmental benefits, justifications have sometimes included the need for an adequate incentive to raise environmental standards above local requirements and/or to match internationally recognised standards, or to undertake sector reforms.

- Although motivating public-sector clients to work with the Bank is a legitimate justification, provided the economic circumstances described in the subsidy guidelines are present, it seems that because of its sensitivity this aspect has sometimes been under-emphasised in Board documents, and affordability for users unduly emphasised instead (cases reviewed in which the affordability analyses in Board documents indicated a capital grant or concessional loan was needed, but not clearly of the amount proposed, are as follows: Bijeljina water, Capljina water, Prijedor district heating, Actau waste, Bishkek water II, Karabalta water, Bali trolleybus, Chisinau public transport, Pskov water. For some of these, the argument for subsidies as encouragements for environmental improvements and/or sector reforms had already been made in country and sector strategies, or in integrated approaches). Market failures are often referred to while justifying the subsidies, while government policy failures are cited less frequently. However this may be, the lack of clarity about justifications for subsidies does not imply any lack of clarity about transition impact potential, or the benchmarks and timings usable in due course for assessing what transition impacts have been realised.

- For subsidies accompanying credit lines to PFIs, whether for PFIs themselves or sub-borrowers, justifications are mainly in terms of costs and risks for first-mover PFIs, market barriers such as information gaps and high costs of suitable materials and equipment, or environmental externalities.

- One implication of subsidies being needed to motivate clients to undertake transition-related obligations is that the justification for these subsidies is closely linked with the reasons for the Bank’s additionality.

- While justifications for subsidies are all indicated in Board documents, more or less explicitly, only some can be quantified in standard form and shown in tables or annexes – namely those relating to affordability for users of infrastructure, and to expected environmental benefits. Other justifications cannot be documented in this way for the Board, since they rely on counter-factual propositions that operations would not be agreed, or would not be successful, without subsidies of certain kinds and amounts. Generally what can be said about the justifying factors – externalities through energy pricing, sub-borrowers’ needs for incentives, or PFIs’ needs for incentives or first loss risk cover – is documented in consultants’ reports during the preparation of projects and facilities, is then reviewed by Bank teams in the light of experience previously or elsewhere, and is open to scrutiny and debate within the Bank in the course of operations’ submission to OpsCom and the Board for approval.

- Most justifications for subsidies are not reassessed as part of implementation, since even where this could be done, there is usually no working need for it (there are exceptions in two cases: if local authorities ask for Bank advice on schemes for subsidising low-income users of municipal infrastructure, and where the monitoring of outcomes in energy saving projects reflects on justifications related to those savings.). However, all types of justifications are reassessed by Bank teams if and when further phases or follow-on

market segments. In several instances sub-borrower incentives have been included in follow-on phases with eligibility conditions revised so as to incentivize the most effective investments (some examples are Moldova Sustainable Energy Finance Facility II and Poland Sustainable Energy Finance Facility II. See the section headed “Evolution of PFI incentives through time” in Annex 7 of the EvD special study of June 2015).

c) As for investment grants for public clients, there is a range of cases in water and wastewater and in public transport in which second or later phases have continued to include these forms of subsidy (the cases are: (1) Armenia, Yerevan metro rehabilitation II; (2) Bosnia & Herzegovina, Bijeljina waste water treatment; (3) Kyrgyz Republic, Bishkek water II; (4) Moldova, Road Rehabilitation III; (5) Poland, Warsaw public transport (tramways) – mid-2014 extension; (6) Tajikistan, North Tajik Water II). Discussions with Bank staff members have indicated that these continuations have been justified by countries’ socio-economic context – such as general and chronic poverty, unpriced environmental effects, and the impracticality of recovering the full cost of urban public transport through farebox revenue – similar to those which applied initially. Additionally, political factors are often in play, when governments are unwilling or unable to enact regulatory and legal changes that are necessary if utilities are to operate more commercially. Therefore both market failures and government policy failures might be identified as key barriers for phasing out investment grants to public sector clients.
operations are prepared. And to an extent, justifications of motivating public sector clients and their government owners to undertake Bank operations are reviewed through later reporting, as part of project monitoring, on whether covenants about commercialisation and other sector reforms are achieved.

**Can any differences in transition impact potential be attributed to subsidies?**

a) Subsidies as applied by the Bank are best understood as intended to be enablers of or triggers for Bank operations judged to offer suitable potential for transition impact. Operations in early transition countries with subsidies contain transition impact objectives which correspond to earlier stages in transition than in other COOs, especially in relation to private-sector participation and financing; but this is only natural in the circumstances. For example, in the Kotayk solid waste project in Armenia, adoption of cost recovery tariffs was covenanted only in a phased manner; in the Adjara solid waste project in Georgia, cost recovery tipping fees were required only after five years of operation; in the Bishkek public transport project in the Kyrgyz Republic, a covenant required only that a city-wide e-ticketing system be considered (which has proved a protracted process); in Bishkek water II, there was a requirement not for metering but for consideration of a business case for it; and the projects reviewed in roads, public transport and water in Moldova all had what can be called first-stage requirements relating to transition impact.

b) In the MEI and infrastructure sectors of early transition countries, there are no Bank operations without subsidies which would enable direct comparisons of subsidised and non-subsidised operations in terms of their ambition in transition impact potential. However, in non-early transition countries where subsidies have been used, there may be non-subsidised operations in the same sectors which would provide a basis for comparison in a possible second phase of this study.

c) Where subsidies are assigned to demand-side components of energy saving investment projects, they justify expectations of greater energy savings than would otherwise be included in transition impact potential. Four such cases were among those reviewed for this evaluation (there are a further five cases in which subsidies were allocated to specific components within projects: Adjara solid waste in Georgia (closure of unsuitable landfill and dumping sites), Chisinau urban roads in Moldova (LED street-lighting), Vologda water supply in Russian Federation (waste water treatment plant), Duboko solid waste in Serbia (waste separation line, transfer station) and Crimean municipal infrastructure in Ukraine (wastewater infrastructure)). In due course, whether these expectations are fulfilled will form part of project monitoring and completion reports and post evaluation. This is explained and illustrated in Box 3 below.
**Subsidies for demand-side components**

**Russia - Vologda district heating**

This project was approved in October 2010 with the intention of arranging grant financing of €2 million from the Northern Dimension Environmental Programme (NDEP) for an additional investment component aimed at wider installation of individual heating sub-stations.

The Board document indicates it was expected that the project’s investment program as a whole would lead to savings of about 3-5% of fuel, up to 12% of electricity, and up to 15-18% of water supply in the selected districts. It contains no estimate of savings attributable to the individual heating sub-stations and metering component alone.

The NDEP grant was provided, and a PMM report of August 2015 says that €1.1 million had been disbursed, and 134 individual heating sub-stations financed from the NDEP grant had been installed and had operated during two heating seasons since 2013. A consultant had been contracted to assess energy consumption patterns before and after the installation of individual heating sub-stations, and had provided a draft report.

That PMM report also says consideration was being given to whether the remaining grant funds should finance installation of individual heating sub-stations in other city districts or finance additional energy-saving measures in buildings already involved in the programme.

**Ukraine – Temopil and Lutsk district heating**

This project was approved in September 2012 with grant co-financing of €5 million having been approved by the Eastern European Energy Efficiency and Environment Partnership to finance a bio-fuel boiler and installation of individual heating sub-stations.

The project as a whole was expected to lead to specified savings in use of gas, electricity and water, and associated carbon dioxide emission savings of 27,200 tonnes per year. Board document contains (in Table 1.7.2) estimates of carbon dioxide emission reductions attributable to the project’s components, showing that the Eastern European Energy Efficiency and Environment Partnership-funded components would produce most (about 21,000 tonnes) of the expected reductions.

A PMM report of August 2015 notes the progress which had been made on covenanted aspects including installation of individual heating sub-stations and meter-based billing, but has no estimate of progress in carbon dioxide emission reductions due to early stage of the project.

The Lutsk district heating project, approved in 2014, had an accompanying Eastern European Energy Efficiency and Environment Partnership grant of €4 million to finance separate components – individual heating sub-stations in buildings and a biofuel boiler. The expected environmental benefits (Table 2.1 in Board document) include specified reductions in carbon dioxide emissions from these components as well as the project as a whole. The project is still in an early stage of implementation. Consequently a PMM report of January 2016 has no estimate of progress in achieving energy savings or emission reductions.

**Bosnia and Herzegovina - Prijedor district heating**

This project was approved in November 2014 with the intention of arranging grant financing of €2 million to meet half the cost of installing individual heating sub-stations and meters during 2016 and 2017.

The transition impact benchmarks and timing include gradual introduction of consumption metering, leading to consumption-based billing for 60% of buildings by December 2018. They also include a verified reduction in carbon dioxide emissions by a minimum 12,000 tonnes per year compared to 2013 figures, by December 2016, as the expected result of energy savings through the re-equipment project as a whole.

The Board document includes (table in 2.2) an estimate that the demand-side measures would produce carbon dioxide emission reductions of 2,284 tonnes per year.

In July 2015 the loan had not yet been disbursed, and therefore no reports on implementation were available.

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**Have there been refinements through time in the design of incentives and risk-sharing facilities?**

Yes - increasing use of risk-sharing as an accompaniment or alternative to incentive payments for PFIs, and the general use of multi-step incentives for sub-borrowers.

a) First loss risk cover and other risk-sharing arrangements are recent forms of incentive for PFIs in financing facilities. They have sometimes accompanied lending-related incentive payments for PFIs and sometimes substituted for them. There has been at least one case in which a Bank team preferred to offer PFIs first loss risk cover rather than payments, regarding it as a smarter incentive (discussion with Bank staff, referring to the Western Balkans’ Women in Business Facility). It seems also that experience has led Bank teams often to prefer first loss risk cover for 50% or 70% rather than 100% of losses on individual loans (as well as having aggregate caps), although such judgements are
made case by case. Because most risk-sharing arrangements are still in their first phase, there is little basis for saying how well the principle of temporariness has been applied to them.

b) There has been a trend in sustainable energy finance facilities towards making incentives for sub-borrowers “smarter”, in the sense that single-rate designs have been succeeded by multi-rate systems with rate steps related to expected amounts of energy savings (see 4.1.3 (d) and Box 2 above) (This is explained in detail in the section headed “Evolution of sub-borrower incentives through time” in Annex 7 of the EvD study June 2015: see especially Tables 8 to 11 and the text immediately following them).

Have assumptions about user tariffs or other prices linked to subsidies been confirmed during implementation?
The general picture is of partial rather than full achievement, but this is not surprising.

a) In operations using investment grants and concessional loans, there have been numerous cases of delayed or limited achievement of covenanted benchmarks relating to utility tariffs and other regulatory policies such as reorganising municipal services on a regional basis and promoting private sector participation. Out of the 22 relevant projects or frameworks, progress was delayed or limited in ten cases, while in another seven cases project monitoring reports contained insufficient information about this aspect. In only five cases do monitoring reports describe good progress towards covenanted sector reforms.

b) These shortcomings in progress reflect the degree of difficulty inherent in regulatory reforms which involve local political processes, especially the setting of utility tariffs. Examination of project documents and discussions with relevant Operation Leaders have indicated that the Bank’s initial objectives, benchmarks and timings appear to have been appropriate and realistic, while containing a reasonable amount of ambition, as required by the Bank’s country and sector strategies. Examples of this have been given in 4.2.1 (a) above.

c) One aspect of this question of ambition should be clarified. When the Bank specifies “full cost recovery” as the goal for utility tariffs, and sets covenants for reaching this goal or making progress towards it during implementation of investment projects, in projects with investment grants or concessional loans this means full recovery of costs which are subsidised in respect of capital. So the utilities’ financial sustainability after implementation of these subsidised Bank projects, even if tariff-related covenants are achieved, remains open to question. This qualified form of “full cost recovery” is nevertheless a demanding goal, given the sensitivities of local and national governments to representations from utility users. It seems few local governments in the Bank’s countries of operation have become and remained firmly committed to it. The cases in Box 4, describing Bank projects in the water sectors in three early transition countries, provide some illustration.

Reform in three water sector projects

Moldova – water utilities

This project, approved in May 2010, included a capital grant from the EU for one third of its cost. The expected transition impact derives from a range of sector-reform requirements – for cost recovery tariffs (by 2015), corporatisation of water utilities into joint stock companies or some equivalent form, and expansion of their operations towards regional operating companies – and from requirements for more commercial and transparent management within each utility.

The project also envisaged a stakeholder participation programme; a consultant helping the utilities and local authorities to monitor, together with beneficiaries, the impact of tariff increases; and policy dialogue, including about strengthening the role of the regulator of water utilities.

A PMM report of October 2015 contains a detailed and informative account of progress on these sector-reform issues. It notes that all six project companies had been successfully reorganized into joint-stock companies, becoming eligible to provide regional services.

About user tariffs, this PMM report notes that although the companies had met the initial conditions for tariff increases, and all localities had approved subsequent tariff increases, there were a number of cases of delay in compliance with the tariff-increase schedule: “Due to the delay of the project implementation, it has been difficult for the local authorities to justify further tariff increase to the customers ... discussions on such matters as tariff increases remain sensitive, and further discussions on this topic would most likely be fruitful only after the political landscape becomes clearer.”

Tajikistan – Central Tajik water

This project was approved in November 2011, with an investment grant from the EU Investment Facility for Central Asia for the major part of its cost. It followed projects in the water sector in Khujand and the South Tajik region, and represented an expansion of the Bank’s integrated approach. In briefest form, the objectives of the integrated approach had been for: (1) the responsible arm of government, KMK, to become a water sector regulator; (2) improvement of collection rates; (3) development and signing of public service agreements; (4) development of stakeholder participation programmes; (5) improvements in water companies’ commercialisation, transparency and governance; (6) eventual transfer of ownership to cities, perhaps with mergers of smaller companies.
The Board document described some progress which had already been made towards these objectives, including implementation of suitable tariff methodology in July 2011. It explained that the aims of the integrated approach were being broadened to include formulation of a water sector development strategy, and a study on possible private participation in the water sector.

A PMM report of August 2015 contains, as in the case above, a detailed account of the extent of progress which had been made on tariffs, regionalisation, and other sector-reform issues. Amid severe economic problems the government had rejected in early 2015 the proposed annual tariff increase; there had been shortfalls in water payments by state controlled companies, and institutional problems in KMK; and it had become clear that water companies could be expected to be commercially sustainable only if made regional. The Bank had stepped up policy dialogue to address these obstacles.

Kyrgyz Republic – Bishkek Water II

This project, approved in May 2014, included capital grants from the Global Environmental Facility Special Climate Change Fund and the Swiss State Secretariat for Economic Affairs (SECO), amounting to 50% of project cost.

Its expected transition impact derives from these requirements: (1) elaborate the tariff methodology to take into consideration new debt service obligations under Phase II and contributions to capital expenditure; (2) increase transparency and participation of water users; (3) increase collection rates for public sector clients; (4) develop a detailed business case for the expansion of water metering.

This and other Bank projects in the water sector of the Kyrgyz Republic have been accompanied by active dialogue on sector policy, with SECO and Asian Development Bank also involved. Recently the Bank has assumed the lead role among external agencies in this dialogue.

In discussion in December 2015, Operation Leader mentioned that the Bishkek water company is a champion of commercial operation, and now makes profits. This is for a range of reasons – higher tariffs for users are one, but also after the unrest in 2010 the government decided to subsidise utilities’ inputs of electricity.

d) Shortcomings in covenanted regulatory or sector-policy reform suggest that the Bank’s engagement needs to be for the long term, through integrated approaches or medium-term frameworks, although this brings no assurance of success. Infrastructure operations reviewed for this study include policy dialogue on recommended reforms during their development and implementation, including addressing delays in covenanted sector reforms and reviewing benchmarks. A review described by Bank staff showed that covenants specifying amounts of tariff increase, such as 20%, had more frequently been implemented than covenants in generic terms referring to full cost recovery. However, in some cases the effect of specified tariff increases has been obviated by unexpectedly rapid inflation, or by later omission of periodic tariff adjustments. Sometimes the Bank’s dialogue has been reinforced by advice or loan conditionality of other international financial institutions. These are factors which should be considered in broad, periodic reviews of the transition progress being made through integrated approaches or medium-term frameworks.

e) The gaps found in reporting on covenanted regulatory or sector policy reform are substantial, as noted in (a) above, although most of the cases used in this study in which reassessments of transition impact seemed overdue are in one country, Kazakhstan. These reporting gaps are part of the basis for the finding on monitoring and evaluation (chapter 5) and the issue (chapter 6) of improved understanding of demonstration effects.

How do donors view comparative effectiveness of Bank operations using subsidies?

This question remains to be explored in a possible second phase of the study. As the first phase of this study did not envisage direct engagement with donors, only general observations could be suggested. If this question is asked in a second phase it will especially concern the EU, the Clean Technology Fund, Eastern European Energy Efficiency and Environment Partnership, and other multilateral environmental funds. It will also concern those bilateral donors which, like mentioned multilaterals, fund subsidies in other international financial institutions as well as this Bank, engage actively over strategies and project pipelines, and require detailed reporting. It will be useful for a second phase of the study to include some comparative analysis, at least in one of the cases, which would provide insight into the approach of donors to allocating grants for subsidies to the EBRD and other international financial institutions working on similar issues in the same sectors and the same countries of operations. The choices of donors, the motivation behind the procedures used for assessing the quality of delivery impact, will be of particular interest.

In their meetings with Bank staff, the evaluation team heard a range of comments, not all consistent with each other, about whether donors have been interested in the most efficient use of their contributions of non TC grants. These comments were not pursued in any thorough way by follow-up discussions with donor representatives or examination of relevant documents. They are therefore little reflected in the findings of this first phase of the evaluation. Rather, they represent issues which could be worth exploring with donors in a possible second phase.
5. Findings

This first phase of the study looked into four distinctive types of the subsidies used by the Bank. And while it is necessary to accept the specificity of the circumstances and contexts in which each of them is used, there is a need for some degree of generalisation and outlining the key fundamentals and trends. This objective makes this EvD special study distinctive from other special studies which are concentrating on specific sectors or financial products that use subsidies. Even with some limitations stemming from the diversity, the findings of Phase I should contribute to the overall understanding of the Bank’s use of subsidies and the way it evolved and is likely to evolve in the future given the emerging challenges in the countries of operation and enhancement of partnerships built by the EBRD with other international financial institutions and donors.

The following three findings are based on the answers to the evaluation questions provided above.

No major problem in the Bank’s principles for use of subsidies

They are clear and coherent, have been road-tested, and contain enough flexibility. It is implicit in these principles that the Bank will be able to compete to only a limited extent when other international financial institutions offer large amounts of grants or concessional loans, or other generous subsidies, to prospective clients. This is the unavoidable consequence of the set of roles for the Bank which its shareholders have determined over the years, and the kinds and amounts of subsidy support with which the Bank’s donors provide it.

However, these policy principles warrant review in respect of one issue – temporariness. It may be that the principle of making subsidies only temporary should not apply generally, as currently stipulated by the policy, but according to country context or type of Bank operations, with acknowledgment that repeated subsidies can sometimes be needed and justified. However the issue of continuity of monitoring the justifications and the availability of wider context analysis ex-ante, during, and ex-post remains valid, as per the point on monitoring and evaluation below.

Results of non-TC grants

The Bank’s internal requirement for non-TC grants to have results frameworks and reporting against those frameworks should take account of the fact that subsidies most often figure as critical enablers for whole operations, but sometimes enable and are assigned to specific components of them, such as energy saving investments on the demand side. Where subsidies are enablers of whole operations, it would be pointless to distinguish their results from those of the operations; whereas in cases where Bank teams and clients agree to use subsidies for distinct and/or quite autonomous components within operations, separate and additional reporting on those components may be needed for internal purposes as well as for accountability to the donor/s involved.

Monitoring and evaluating

While subsidies in their general role as enablers do not change the Bank’s set of tasks, it could be said that they raise the stakes, through committing the donors’ resources and reputations as well as those of the Bank. Therefore the use of subsidies makes it all the more important to monitor, report and post-evaluate adequately for those projects, frameworks and facilities.

From the Bank side this involves particularly the review of integrated approaches and frameworks which depend on subsidies, and the review of demand-side components of energy saving investment projects to which subsidies are assigned. From the donor side, this involves seeking economy and efficiency in the application of subsidies, and discouraging the unnecessary repetition of subsidies in later phases of projects and facilities, when context is right.

Because of resource constraints the Bank does not systematically perform post-evaluations of its operations in which mid/long-term outcomes and impacts are analysed and measured against the initial baseline studies. This could, however, be done selectively where the Bank and donors most need to know the mid/long-term outcomes and impacts of subsidy-supported operations. Considering resource constraints, it could be done using donor funds, thus integrating evaluation component into the initial grant allocation for the specific operation.
6. Issues

Phase 1

Reviews of progress in sector reform

Specific cases reviewed for this study identified the difficulties in reviewing progress in sector reforms under integrated approaches and frameworks, when the expectations of continuation generated by project pipelines have had to be weighed against the implications of delays and other setbacks in projects already signed. It would be better if Board reviews of progress under integrated approaches and frameworks, including subsidy components, were done periodically, rather than only when sub projects or extensions are submitted for Board approval.

Improved understanding of demonstration effects

Incentives and risk-sharing are widely used within financing facilities, in order to extend the boundaries of commercial bank lending into types or regions where this lending is expected to bring transition or environmental benefits. But little information is gathered during and after the terms of financing facilities to establish whether demonstration effects take place, as distinct from whether lending covenants are achieved and whether other banks show interest in becoming PFIs when facilities with incentives are extended. Benchmarks for partner banks’ growth in lending of the incentive-supported kinds vary widely in how much, if at all, they require this lending to exceed the amounts of Bank credit lines; and timings for these benchmarks correspond to the periods when Bank funding is used, rather than longer periods. In other words, in respect of the most direct demonstration effects, there has often been little ambition and there have been no requirements for measurement after Bank credit lines are repaid (it would be challenging to design a generally applicable mechanism for monitoring past the lifetime of each financing facility, given that the implementation/monitoring consultants would have finished their assignment, and there would no longer be a legally binding agreement under which information about the PFI’s lending could be required). This leaves open a substantial question about the effectiveness of subsidies of this type.

As a result the Bank lacks the ability to tell a wider story about the ultimate effectiveness of its use of donor-provided subsidies for financing facilities, even as the volume and range of subsidies to support new strategic and operational objectives is likely to grow. A careful review should be made of how best to reconcile this disconnect, by building more adequate capacity and processes to provide evidence about the long-term impacts from donor supported financing facilities.

Greater Clarity on Scope and Expected Results

Where subsidy-enhanced operations are to be followed by successor operations employing subsidies, documentation should provide as clear treatment as possible of all subsidy-related issues – effectiveness of earlier use, extension or modification of proposed new subsidy elements, expected effects, and change/lack of change in the context.

Looking ahead to phase 2

When second phase of this special study is planned the following issues should be considered and the following elements should be integrated into its design, among others (EvD will be preparing Approach Paper for the Study’s Second Phase separately and in consultation with the management).

Results chains

First and most important, there are several results chains, frequently cited in justifying the Bank’s use of subsidies, which should be explored more closely. These are about:

- the effects on demand for municipal services of combinations of tariff increases and service improvements,
- the effects of tariff increases and Public Service Contracts (PSCs) on the financial sustainability of municipal utilities, and
- the demonstration effects of donor-subsidised (and TC-assisted) lending by PFIs, in terms of their continued lending of the promoted types after Bank credit lines have been repaid, and of similar lending by other banks in the same countries (this will be built upon the evidence collected during the EvD study on sustainable energy finance facilities).

As part of this, further attention should be given to a number of apparent success stories:

in the water and wastewater sector, the Bank’s lengthy involvement in Romania, the Kyrgyz Republic Water Framework, especially Bishkek water company, and in Moldova the case of Floresti; and

in public transport, Armenia’s Yerevan metro and the Kyrgyz Republic’s Bishkek trolleybus system.

As for sub borrower incentives, there could be a useful opportunity for studying demonstration effects in the CEEP programme as revised in early 2013, when it was decided to offer incentives for a limited period of two and a half years. More broadly, it could be considered whether FI facilities using subsidies for PFIs should be rated as fully successful only when they have been followed by phases in which PFIs continue the new lines of lending.
without subsidies for themselves; or should the rating factor in complexity of the local context that might include both market failures and government policy failures.

**Stimulating private finance**

Further attention should be given to cases which are especially significant in terms of the *Future Directions for Grant Co-Financing*, as formalised in April 2015 (circulated 23 April 2015) because this is linked to the Bank’s strategic goal of innovating in the blending of finance from international financial institutions and private sources, it would be worthwhile to look closely at:

- the Clean Technology Fund programmes which while having a basic rate of 0.75% have a varied degree of subsidisation; and
- the Energy Efficiency Management Systems programme – in which projects including energy management systems have been chosen for subsidy because of their high potential for demonstration effects, especially among private businesses (see Table 2).

<table>
<thead>
<tr>
<th>Date</th>
<th>Country</th>
<th>Project</th>
<th>Amount of Incentive Grant (€ '000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2010</td>
<td>Armenia</td>
<td>Elite Plaza</td>
<td>200</td>
</tr>
<tr>
<td>July 2010</td>
<td>Belarus</td>
<td>Pinskdrev</td>
<td>202.5</td>
</tr>
<tr>
<td>July 2010</td>
<td>Moldova</td>
<td>Medpark</td>
<td>160</td>
</tr>
<tr>
<td>July 2010</td>
<td>Ukraine</td>
<td>Obolon III</td>
<td>178</td>
</tr>
<tr>
<td>Sep 2010</td>
<td>Belarus</td>
<td>Minsk High Tech Park</td>
<td>140</td>
</tr>
<tr>
<td>July 2011</td>
<td>Moldova</td>
<td>Chisinau Airport</td>
<td>445</td>
</tr>
<tr>
<td>Nov 2011</td>
<td>Ukraine</td>
<td>Hotel Leipzig</td>
<td>150</td>
</tr>
<tr>
<td>Nov 2011</td>
<td>Ukraine</td>
<td>Lugentrokuiz</td>
<td>125</td>
</tr>
<tr>
<td>Oct 2012</td>
<td>Kyrgyz Republic</td>
<td>DLF-Park Palace</td>
<td>40</td>
</tr>
<tr>
<td>Mar 2013</td>
<td>Georgia</td>
<td>Smart Retail</td>
<td>90</td>
</tr>
</tbody>
</table>

*The Energy Efficiency Management System programme was approved by the Board on 16 June 2009. The above sub-projects were approved in 2010-2014 with Energy Efficiency Management System incentive payments.

**Comparisons**

If it is made possible by identifying non-subsidised comparator projects in the Russian Federation, Ukraine and the Western Balkans, there could be an exploration, at least through desk study and discussion with Bank staff, of differences between subsidised and non-subsidised projects in their objectives, TI benchmarks and timing. For example, in Ukraine the Bank approved financing of a district heating project in Cherkasy without subsidy, which might be compared with later projects using investment grants. However, this exploration could offer only limited evidence for the necessity or efficacy of subsidies, given the difficulties in identifying all the market gaps and other relevant factors in the cases compared.

**Possible over-bidding**

In order to explore the question of whether the Bank repeatedly over-bids for donor support, and if so in what areas, there could be a review to identify any operations which have been approved but were prevented from proceeding to implementation because of inability to obtain agreement from donors or the EBRD Shareholder Special Fund for non-TC grants needed for them.

**Donors’ views on comparative effectiveness**

There should be a review of how donors see the comparative effectiveness of Bank operations using subsidies – compared, that is, with use of subsidies through other channels including other international financial institutions. This might include exploring what types of risks donors are willing to share in other contexts, especially for the sake of supporting international financial institutions’ lending in local currencies.
Annex 1: Sources

Wherever they were available, the documents used for each operation were –

- Concept Review Memorandum,
- Board document, and
- the most recent Monitoring Report.

In some cases, staff answers to Directors Assistants Questions, and reports to individual donors (Eastern European Energy Efficiency and Environment Partnership, GESF and SIDA), were also consulted.

The following were used:

- Semi-annual and annual Grant Co-Financing Reports for 2010 to 2014
- Staff guidelines for the use of non TC grants from the Shareholder Special Fund, 2008
- Early Transition Countries Local Currency Loan Programme & Establishment of the Early Transition Countries Local Currency Risk-Sharing Special Fund, 2010
- Evaluation Department, Special Study on the Early Transition Country Initiative, 2012
- Grant Co-financing Strategic Review, final report 2013
- Internal Audit Department, Investment Co-Financing Grants, 2014
- Staff guidelines for the use of non TC grants, 2015
- The EBRD Approach to the Affordability Analysis of Utility Services, 2015
- Early Transition Countries Local Currency Loan Programme, 2015 Annual Update
- Evaluation Department, The EBRD’s Sustainable Energy Finance Facilities, 2015
- Future Directions for Grant Co Financing, 2015
# Annex 2: Operations with subsidies 2010 to 2014

## Investment grants (all for public sector clients)

It should be noted that there is a difference in classification of countries by region used by DCF and banking areas within the EBRD. EvD refers to specific countries in this annex to clarify and avoid misinterpretation of data. All amounts are shown in € millions.

<table>
<thead>
<tr>
<th>Early Transition Countries</th>
<th>Municipal Water and/or Wastewater</th>
<th>Municipal Solid Waste (SW)</th>
<th>District Heating</th>
<th>Electricity Generation</th>
<th>Municipal Transport</th>
<th>National Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belarus €7.5m Baranovichi biogas Slonim biogas Vitebsk wastewater Georgia €1.8m Kobuleti Kyrgyz Republic €10m Osh; Jalalabad; Karabalta; Kant; Talas Bishkek Water II</td>
<td>Moldova €10m Water Utilities Tajikistan €19.3m Central Tajik Water North Tajik Water Southern Tajik Water</td>
<td>Armenia €3.5m Kotayk Georgia €4m Adjara Kyrgyz Republic €3m Bishkek</td>
<td>Tajikistan €3.7m Dushanbe Khujand Kurgan-Tyube Nurek Tursun-Zade</td>
<td>Tajikistan €3.1m Qairokkum Hydropower Rehabilitation</td>
<td>Armenia €10m Yerevan Metro Rehabilitation I and II Kyrgyz Republic €7.4m Bishkek Public Transport Osh Public Transport Moldova €4.6m Balti Trolleybus Chisinau Public Transport Tajikistan €3.6m Dushanbe Public Transport</td>
<td>Armenia €2.1m Northern Corridor Modernisation Moldova €16.2m Road Rehabilitation III and IV Tajikistan €2.1m Road Maintenance</td>
</tr>
<tr>
<td>Central Europe &amp; Baltic</td>
<td></td>
<td></td>
<td>Lithuania €170m Lietuvos Elektrine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Balkans Bosnia &amp; Herzegovina €10.9m : Capijina; Bijeljina II</td>
<td>Serbia €2.4m : Duboko SW</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South-East Europe [Linked with Bank operations, but not managed by Bank: Bulgaria €49m* Romania €51m* Regional EU Cohesion Funds Water Co-Financing Framework (R2CF) – Covasna, Constanta, Dolj, Prahova, Baacu, Maramures, Ghor, Botosani]</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Ukraine €5m Crimea Municipal Infrastructure</td>
<td></td>
<td></td>
<td>€29m : Zhytomyr; Ternopil; Liviv; Luhansk; Lutsk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia €13.2m: Vologda Municipal Water; Volzhski Water Pskov water and wastewater improvement</td>
<td></td>
<td></td>
<td></td>
<td>€2m Vologda</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kazakhstan €6m: Aktau Water</td>
<td></td>
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</tr>
</tbody>
</table>

Because these refer to grants determined by the EU and not managed by the Bank, the data shown here may be incomplete.
## Concessional loans

*italics = private client; converted to loan equivalents using factor 0.45*

<table>
<thead>
<tr>
<th>Municipal water and wastewater, solid waste</th>
<th>District heating</th>
<th>Energy efficiency and renewable energy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Transition Countries</strong></td>
<td></td>
<td><strong>Tajikistan €4.4m</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Qairokkum Hydropower Rehabilitation</td>
</tr>
<tr>
<td><strong>Ukraine</strong></td>
<td>€1.4m Lutsk District Heating</td>
<td><strong>€15.3m</strong> Novoazovskiy Wind</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loans under Renewable Energy Direct Lending Facility and Ukraine Sustainable Energy Lending Facility – Eco-Optima Wind Farm; Small Hydro Power Plants; Porogi Solar Energy; Sunelectra Power; Ivankiv Biomass; Gnatkov Solar Energy; Ecoprod Biogas</td>
</tr>
<tr>
<td><strong>Turkey</strong></td>
<td></td>
<td><strong>€24.3m Loans to partner banks under –</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Turkey Residential Energy Efficiency Financing Facility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Turkey Private Sector Sustainable Energy Financing Facility</td>
</tr>
<tr>
<td><strong>Kazakhstan</strong></td>
<td>€2.6m Aktau Waste Management</td>
<td><strong>€4.1m</strong> Almaty LED</td>
</tr>
<tr>
<td></td>
<td>€4.9m Aktau District Heating Kazakhstan CAEPCO District Heating</td>
<td>KTZ Energy Efficiency</td>
</tr>
</tbody>
</table>

## Incentive payments for partner banks

(amounts available, with disbursements to depend on eligible lending)

<table>
<thead>
<tr>
<th>Financing facilities</th>
<th><strong>Energy efficiency, sustainable energy</strong></th>
<th><strong>Private sector support, micro, small and medium enterprises, (agribusiness and women in business)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Transition Countries</strong></td>
<td>Kyrgyz Republic Sustainable Energy Financing Facility: Bai Tushum; Demirbank; FINCA MCC; KICB; DKIB; Moldova Residential Energy Efficiency Financing Facility: Mobiasbanca; MIBC; MAIB; ProcreditBank; Moldova Sustainable Energy Financing Facility and Sustainable Energy Financing Facility II [part of €4.8m]: Mobiasbanca; MICB; MAIB; ProcreditBank</td>
<td>Turkmenistan Micro, Small and Medium Enterprises Facility €0.07m: Garagum Bank</td>
</tr>
<tr>
<td><strong>Western Balkans</strong></td>
<td>Kosovo SEP €0.1m: TEB SH.A.</td>
<td>Western Balkans Private Sector Support Facility: Ohridska Banka; NLB Tutunski Banka</td>
</tr>
<tr>
<td><strong>South-eastern Europe</strong></td>
<td>EU/EBRD Municipal Financing Facility Energy Efficiency (Slovenia &amp; Hungary - no details of sub-loans)</td>
<td>EU SM (includes Poland &amp; Romania)</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>National Bank of Egypt Energy Efficiency line Ukraine EaP Small and Medium Enterprise Energy Efficiency - Ukreximbank</td>
<td></td>
</tr>
</tbody>
</table>
## Risk sharing with partner banks

NB amounts available, with disbursements to depend on eligible losses

<table>
<thead>
<tr>
<th>Financing facilities</th>
<th>Energy efficiency, sustainable energy</th>
<th>Private sector support, micro, small and medium enterprises, (agribusiness and women in business)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Transition Countries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moldova REEFF - €0.3m</td>
<td>Central Asia Risk Sharing Special Fund (for Small and Medium Enterprise lending in Turkmenistan)</td>
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</tr>
<tr>
<td>Procredıt Bank Moldova</td>
<td>Early Transition Country Local Currency Risk Sharing Special Fund €40m</td>
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</tr>
<tr>
<td>MAIB</td>
<td>Georgia Agricultural Financing Facility (GAFF) €0.7m : VTB Georgia Bank II; Bank Republic</td>
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<tr>
<td>MICB</td>
<td>Turkmenistan Micro, Small and Medium Enterprises Facility €0.04m: Halk Bank US/EBRD Small and Medium Enterprise Finance Facility</td>
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<tr>
<td>Mobiasbanca</td>
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<tr>
<td><strong>Western Balkans</strong></td>
<td></td>
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<tr>
<td></td>
<td>Italian Investment Special Fund (for Local Enterprise Facility in Western Balkans)</td>
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<tr>
<td></td>
<td>Western Balkans Women in Business (WeB Women in Business)</td>
<td></td>
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<tr>
<td><strong>South-eastern Europe</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria REECL II €1.3m : DSK Bulgaria; CIB; United Bulgarian Bank; Piraeus Bank Bulgaria; CiBank; Raiffeisenbank</td>
<td>Romania Micro-Finance Facility</td>
<td></td>
</tr>
<tr>
<td><strong>Turkey</strong></td>
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<tr>
<td></td>
<td>Italian Investment Special Fund (for Local Enterprise Facility in Turkey)</td>
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<tr>
<td></td>
<td>Turkey Micro, Small and Medium Enterprises / agribusiness/ Women in Business €12.7m : Finansbank; Vakıfbank</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local Enterprise Facility in South Eastern Mediterranean</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Russia Small Business Investment Special Fund</td>
<td></td>
</tr>
</tbody>
</table>

## Incentive payments for clients and sub-borrowers

NB amounts available, with disbursements to depend on eligible borrowing

<table>
<thead>
<tr>
<th>Financing Facilities</th>
<th>Energy efficiency, sustainable energy</th>
<th>Private sector support, micro, small and medium enterprises, agribusiness and women in business</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Transition Countries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasus Energy Efficiency Programme (Armenia, Azerbaijan, Georgia)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy EfficiencyManagement Systems Programme; FINTECC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kyrgyz Republic Sustainable Energy Financing Facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moldova – Residential Energy Efficiency Financing Facility, Sustainable Energy Financing Facility and Sustainable Energy Financing Facility II [part of €4.8m]</td>
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<td></td>
</tr>
<tr>
<td><strong>Western Balkans</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kosovo SEP €1m</td>
<td>Western Balkans Private Sector Support Facility</td>
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</tr>
<tr>
<td>Western Balkans Sustainable Energy Financing Facility and Sustainable Energy Financing Facility II €9.0m</td>
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<td></td>
</tr>
<tr>
<td><strong>South-eastern Europe</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria REECL II € 6.9m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU/EBRD Municipal Financing Facility Energy Efficiency – €5.8m; EU SM Energy Efficiency; Romania CSF and Sustainable Energy Financing Facility €3.75m; Slovak Republic Sustainable Energy Financing Facility €12.6m</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
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<td></td>
</tr>
<tr>
<td>National Bank of Egypt Energy Efficiency line; Ukraine EaP Small and Medium Enterprise Energy Efficiency</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Annex 3: Main donors to operations with subsidies 2010 to 2014

#### Investment Grants (all public sector clients)

##### Early transition countries

<table>
<thead>
<tr>
<th></th>
<th>EU</th>
<th>SIDA</th>
<th>SECO</th>
<th>CIF/GEF</th>
<th>NDEP</th>
<th>Green Energy</th>
<th>Early Transition Country Fund</th>
<th>EBRD Shareholder Special Fund</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solid Waste</strong></td>
<td>Armenia - Kotayk SW</td>
<td>Georgia - Adjara SW</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Kyrgyz Rep - Bishkek SW Tajikistan – Dushanbe SW Khujand SW Kurgan-Tyube SW Nurek SW Tursun-Zade SW</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Electricity generation</strong></td>
<td>Armenia Yerevan Metro Rehabilitation I and II Moldova Balti Trolleybus Moldova Chisinau Public Transport</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Kyrgyz Rep Bishkek Public Transport Kyrgyz Rep Osh Public Transport Tajikistan Dushanbe Public Transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Municipal Transport</strong></td>
<td>Armenia Northern Corridor Modernisation Moldova Road Rehabilitation III</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>National Transport</strong></td>
<td>Armenia Northern Corridor Modernisation Moldova Road Rehabilitation III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tajikistan Road Maintenance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Kazakhstan, Russia & Ukraine

<table>
<thead>
<tr>
<th>Area</th>
<th>SIDA</th>
<th>Eastern European Energy Efficiency and Environment Partnership</th>
<th>NDEP</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water/Wastewater</td>
<td>Ukraine - Crimea Municipal Infrastructure</td>
<td>Russia - Vologda Municipal Water</td>
<td>Pskov water and wastewater improvement</td>
<td>Kazakhstan - Aktau Water</td>
</tr>
<tr>
<td>District Heating</td>
<td>Ukraine - Luhansk, Lutsk, Lviv, Ternopil, Zhytomyr District Heating</td>
<td>Russia - Volzhskiy Water</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Central Europe & the Baltic States

<table>
<thead>
<tr>
<th>Area</th>
<th>EU</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity generation</td>
<td></td>
<td>Lithuania - Lietuvos Elektrine</td>
</tr>
<tr>
<td>Municipal Transport</td>
<td>[Linked to, but not managed by the EBRD: Poland Krakow &amp; Warsaw Public Transport ]</td>
<td></td>
</tr>
</tbody>
</table>

### South-eastern Europe

<table>
<thead>
<tr>
<th>Area</th>
<th>EU</th>
<th>SIDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water/Wastewater</td>
<td>Bosnia and Herzegovina: Capljina; Bijeljina</td>
<td>Serbia Duboko SW</td>
</tr>
<tr>
<td></td>
<td>[Linked to, but not managed by the EBRD: Romania – Regional EU Cohesion Funds Water Co Financing Framework (R2CF) – Covasna, Constanta, Dolj, Prahova, Baacu, Maramures, Bihor, Botosani]</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Transport</td>
<td>Albania Fier and Vlore bypass roads</td>
<td></td>
</tr>
</tbody>
</table>

### Concessional loans

<table>
<thead>
<tr>
<th>Area</th>
<th>CIF/GEF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water/Wastewater</td>
<td>Kazakhstan - Waste management framework – Aktau Waste Management</td>
</tr>
<tr>
<td>District Heating</td>
<td>Kazakhstan – Aktau, CAEPCO District Heating</td>
</tr>
<tr>
<td></td>
<td>Ukraine - Lutsk District Heating</td>
</tr>
<tr>
<td>Energy Efficiency and Renewable Energy</td>
<td>Kazakhstan – Almaty LED; KTZ Energy Efficiency</td>
</tr>
<tr>
<td></td>
<td>Ukraine – Ukraine Residential Energy District Lending Facility/ Ukraine Sustainable Energy Lending Facility (private sector)- Eco-Optima Wind Farm; Small Hydro Power Plants; Porogi Solar Energy ; Sunelectra Power; Ivanik Biomass; Gnatkov Solar Energy; Novoazovskiy Wind; Ecoprod Bioges</td>
</tr>
<tr>
<td></td>
<td>Turkey – oans to private sector partner banks under:</td>
</tr>
<tr>
<td></td>
<td>Turkey Residential Energy Efficiency Financing Facility</td>
</tr>
<tr>
<td></td>
<td>Tukrey Private Sector Sustainable Energy Financing Facility</td>
</tr>
<tr>
<td></td>
<td>Tajikistan - Qairokkum Hydropower Rehabilitation</td>
</tr>
</tbody>
</table>
### Incentive payments for clients and sub-borrowers

#### Early transition countries

<table>
<thead>
<tr>
<th>Financing facilities</th>
<th>EU</th>
<th>SIDA</th>
<th>CIF/GEF</th>
<th>Early Transition Country Fund</th>
<th>EBRD Shareholder Special Fund</th>
</tr>
</thead>
</table>

#### Other countries

<table>
<thead>
<tr>
<th>Financing facilities</th>
<th>SIDA</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy efficiency, sustainable energy</td>
<td>Kosovo SEP; Western Balkans Sustainable Energy Financing Facility and Sustainable Energy Financing Facility II; EU/EBRD Municipal Facility – Energy Efficiency; EU SM Energy Efficiency; Romania CSF and Sustainable Energy Financing Facility</td>
<td>Bulgaria BEERECL and REECL II Slovak Republic Sustainable Energy Financing Facility</td>
</tr>
<tr>
<td>Private sector support, micro, small and medium enterprises, agribusiness, and women in business</td>
<td>Western Balkans Private Sector Support Facility</td>
<td></td>
</tr>
</tbody>
</table>

### Incentive payments for partner banks

#### Early transition countries

<table>
<thead>
<tr>
<th>Financing facilities</th>
<th>EU</th>
<th>SIDA</th>
<th>Early Transition Country Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy efficiency, sustainable energy</td>
<td>Moldova Residential Energy Efficiency: Mobiasbanca; MICH: MAIB; ProcreditBank</td>
<td>Kyrgyz Rep Sustainable Energy Financing Facility: Baitushum; Demirbank; FINCA MCC; KICB; DKIB</td>
<td>Moldova Sustainable Energy and Sustainable Energy II: Mobiasbanca; MICH: MAIB; ProcreditBank</td>
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<tr>
<td>Private sector support, micro, small and medium enterprises, agribusiness and women in business</td>
<td>Turkmenistan Micro, Small and Medium Enterprises Facility – Garagum Bank</td>
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#### Other countries

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<tr>
<th>Financing facilities</th>
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<td>Private sector support, micro, small and medium enterprises, agribusiness and women in business</td>
<td>Turkey Micro, Small and Medium Enterprise Financing Facility – 2 sub-loans</td>
<td>Western Balkans Private Sector Support Facility loans: Ohridska Banka; NLB Tutunska Banka EU SM – PB incentives to 2010</td>
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## Risk sharing with partner banks

### Early transition countries

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<td>Energy efficiency, sustainable energy</td>
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<td>Georgia Agricultural Financing Facility; VTB Georgia Bank II; Bank Republic</td>
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<td>Early Transition Country Local Currency Risk Sharing Special Fund</td>
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<td>Western Balkans Women in Business</td>
<td>Western Balkans, Turkey &amp; Southern and eastern mediterranean: Italian Investment Special Fund for Local Enterprise Facility</td>
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<td>Romania Micro-Finance Facility Turkey Micro, Small and Medium Enterprises /agribiz/ Women in Business – Finansbank</td>
<td>Western Balkans Women in Business Southern and Eastern Mediterranean: Local Enterprise Facility</td>
<td>Western Balkans, Turkey &amp; Southern and eastern mediterranean: Italian Investment Special Fund for Local Enterprise Facility</td>
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<td>Turkey Micro, Small and Medium Enterprises /agribiz/ Women in Business – Vakıfbank</td>
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Annex 4: Management comments

Summary

Management thanks EvD for the first phase study, which highlights important initial findings and raises interesting issues and questions for the second phase that will focus on the results of the Bank’s use of subsidies. The Bank has used subsidies to promote and trigger important transition objectives in circumstances where their use is justified (mainly related to addressing market failures). It has developed and put in place rigorous processes and policies to ensure that the use of subsidies is scrutinised and checked thoroughly for each operation ex-ante. Management therefore welcomes the study’s findings highlighting both coherence and clarity of the Bank’s policies and guidelines related to the use of subsidies, and the Bank’s consistent application of such policies and guidelines in structuring and implementing its activities.

Since the study completion a new dataset reconciling all grant data has been developed in the past three months in light of the analysis on “Evolution of the use of Grants” prepared by Management. While Management appreciates that the study is using data provided on signings looking only at the last five years, it notes that long-term trends in the use of subsidies are better analysed by looking at this more comprehensive dataset. Management also notes that the study should be clearer about the distinction between grants managed or controlled by EBRD and those driven by others outside the Bank’s sphere of influence for which data is not complete.

Management welcomes the findings, notes the “issues to consider” deriving from the first phase of the study and agrees that they are largely relevant for further exploration. Management believes that issues such as results frameworks, aggregate reporting on framework level) relate to a broader review and solutions going beyond the specific subsidy component. These are currently underway.

Management welcomes the nuanced conclusion regarding the principle of ‘temporariness’ of subsidies that reflects the importance of prevalence of market failures as the main determinant for continuation of the use of subsidies. Management notes that policy principles may better reflect such nuances of ‘temporariness’ and would welcome the second phase of the study to incorporate further analysis in this area.

Management agrees with the study’s finding that in most cases it does not make sense to distinguish between results achieved specifically by the use of subsidies. Management believes that the project should be reviewed, and results measured, in its entirety as a general rule, both from the resource efficiency point of view and as a more meaningful way of reporting results, including to donors.

Management agrees with the study’s suggestions for a follow-on phase with more emphasis on results and effectiveness of the use of subsidies in the Bank. Management would like to see deeper analysis of different types of subsidies, a closer look at risk sharing and local currency products, which may also require expanding the set of projects covered to include more recently signed investments.

More detailed explanations and further comments on selected findings, issues to consider, as well as proposed scope of a second phase are provided below by specific sections of the document.

The study’s findings and issues to consider

Chapter 5: Findings - There is no major problem in the Bank’s principles for use of subsidies. Management appreciates the positive conclusion regarding the design and application of the Bank’s principles for use of subsidies. Management agrees that there cannot be a rigid expectation on the “temporariness” principles and a more nuanced approach may be warranted to defining a period when the use of subsidies is justified. While seeking temporariness of grants is generally an important objective within the guidelines, this should primarily be aligned to the persistence of market failures, for which the subsidy is needed, in which case repeat projects with a subsidy component can continue to be an efficient way to overcome them. This includes overcoming either the heavy cost burden of a capex investment in a relatively poor economy supported by relatively poor consumers, and/or to achieve higher environmental standards related to the quality of the investment.

Chapter 5: Findings - Results of non-TC grants. Management is currently reviewing the transition impact results frameworks architecture as part of the Operation Efficiency and Effectiveness (OE&E) programme. The proposed flexibility in determining whether a separate results framework for non-TC grants is needed depending on a situation (for instance when they enable and are assigned to specific components of them, such as energy saving investments on the demand side), might have some advantages. Management however believes that the projects should be reviewed, and results measured, in its entirety. This is more meaningful for measuring results as recognised by the study. It is also in line with donors’ preferences, for which it is not enough to merely see the outcome of just their own funded elements – they are rather interested to see the overall achievements and as necessary, how their funding was additional to ensure the results were delivered. Management also deems that one single approach in treating all non-TC grants similarly is warranted, to ensure consistency of application, avoid confusion and increase efficiency.

Chapter 6: Issues - Reviews of progress in sector reform. Management notes that the Bank already performs annual reviews of the performance of frameworks, which includes assessment of the transition challenges and
progress in achieving related transition impact. The results are reported to the Board for integrated approaches (IA), since each project contributes to the incremental achievements of the desired long-term change, it is important to present updates on overall progress at each Board approval for individual projects, rather than in isolation. Nevertheless, despite provision of regular reporting on frameworks and IA performance, Management agrees that there may be room for improving periodicity of such reporting, although this is true for all frameworks and IAs, not only those with a subsidy component. Management will consider possible revisions in this area as part of the on-going review of results management in the Bank which, among other components, looks at the structure of results reporting to various internal and external stakeholders.

Chapter 6: Issues - Improved understanding of demonstration effects. Management notes that, to extent practical and possible, it has been an existing practice to include transition impact benchmarks on demonstration effects. In particular, benchmarks capturing lending sustainability (measured by lending out of PFI's own resources beyond EBRD programme or attracting financing from local banks for similar type of financing of renewable energy projects), and growth of lending to a given segment that first loss risk cover targets (e.g. Women and Business) are used on regular basis. However, as already noted in EvD’s footnote, from practical perspective monitoring beyond project completion is challenging, mainly due to data constraints since the client is not required to report after loan repayment. Management also notes that, while telling a “wider story” beyond the client (i.e. related to demonstration effects) is important and strengthens the evidence of effectiveness of the use of subsidies, this requires a complex analysis and presents methodological challenges (in particular, related to establishing counterfactual and attribution) with significant resource implications. Management believes that a more complex examination of effectiveness of the Bank’s use of subsidies beyond the client should be done through special methods and EvD products, such as the proposed second phase of this study.

Chapter 6: Issues - Greater clarity on scope and expected results. Management believes that the Bank has put rigorous processes in place that allow for comprehensive assessment of the scope of the use of subsidies as part of the project’s design and assessment. As noted above, Management believes that expected results of subsidies should be captured as part of an overall project results-framework (and not separately). The Bank has also been involved in deeper analysis related to justification of non-TC grants and concessional loans. For instance, in the use of non-TC grants for public sector contracts, this includes an explicit test conducted prior to the project approval to ensure that grant is needed to either decrease the tariff level paid by the users within acceptable levels compared to household expenditures, or the municipal support payments under a PSC formula be viable from a funding standpoint versus other critical budget expenditures.

Looking ahead

Management believes a comparison of EBRD with other international financial institutions’ practices to place the use of subsidies in EBRD in perspective would be beneficial. While examination of comparator projects with and without subsidies could be useful, it would be very difficult to control for all externalities between the two structures and thus achieve convincing findings. Comparative analysis between grant-supported projects vs non-grant-supported projects requiring capex support will also be challenging as most such projects will not move to implementation (i.e. the Bank’s financing does not materialise) until the capex grant is secured. Management finds it useful to devote further attention to results along proposed results chains, and welcomes further analysis in this area in the second phase of the study.

Management believes that the envisaged consideration “whether FI facilities using subsidies for PFIs should be rated as fully successful only when they have been followed by phases in which PFIs continue the new lines of lending without subsidies for themselves...”, is challenging. The possibility of delaying or reducing ratings while waiting for an uncertain period to establish whether the project was successful is impractical.

Management would welcome more detailed analysis of various types of subsidies, especially in conjunction with IMF requirements. Management will also find it useful if the second phase of the study looked at analysis of subsidy element in structuring financing in local currency, covering structures beyond the Early Transition Country Local Currency Fund covered by the first phase (central bank facilities for LCY sourcing, direct TCX subsidization etc.). As the use of ist loss risk cover has grown in the last two years, Management proposes to also include deeper analysis in relation to actual use of first loss risk cover vs. donor commitments, use of ist loss risk cover compared with other types of support (from cost-effectiveness perspective), calibration of ist loss risk cover for different clients and segments, and looking at scaling down of it for repeat transactions.

Management believes that the second phase of the study could be complemented by more recent operations – as the first phase of the study only covers 2010 to 2014 approved projects, it does not capture recent developments in approaches and procedures related to justification of non-TC grants and concessional loans. These now include more detailed affordability analysis prior to approval and specific annexes for grant justification which include the information.