Survey and Analysis of Transportation Investment Models in Other Countries

Stage 3 Report: Survey and Analysis of Investment through Government-Sponsored Lending Institutions

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I. Key Objectives and Overview of Research Approach

Survey and Analysis of Transportation Investment Models in Other Countries – Key Objectives:

- Conduct an analysis of transportation investment models in other countries addressing:
  - Stage 1: Survey and Analysis of the Frameworks that Govern Transportation Investment in Other Countries
  - Stage 2: Survey and Analysis of the Use of Public Sector Comparator (PSC) and Value for Money (VfM) Analyses in Developed Countries with Mature PPP Programs
  - Stage 3: Survey and Analysis of Investment through Government-Sponsored Lending Institutions
- Develop a resource for U.S. transportation officials to better understand international approaches and how to incorporate best practices and innovations in U.S. transportation investment programs

Objective of Stage 3: Survey and Analysis of Investment through Government-Sponsored Lending Institutions

The objective of Stage 3 is to:

- Provide a resource explaining how other countries (or groups of countries) have used government-sponsored lending institutions to address market gaps and leverage substantial private co-investment by providing flexible credit assistance

- Complete research that provides information on the:
  - Background of each lending institution
  - Objectives of each lending institution
  - Governance structure and budget arrangements
  - Types of financial products and lending terms
  - Project evaluation and selection criteria

- Research and report on how issues relating to livability and sustainability can be reflected in project eligibility and selection

- Discuss key lessons learned and identify practices that may be relevant for the U.S.

Objective of Stage 3: Survey and Analysis of Investment through Government-Sponsored Lending Institutions

The following table highlights the key research questions requested by U.S. DOT and identifies where the questions are addressed in this Report:

Research Question	The Infrastructure Finance Unit (TIFU)	European Investment Bank (EIB)	Reference
i. Why was a government-sponsored lending institution created?	Response to tight credit markets	To act as a long-term financing institution for the EU	Slides 17-19, 36-39
ii. What are the objectives of the government-sponsored lending institution (policy and financial) and how are results achieved?	Provide financing to Private Finance Initiative (PFI) projects unable to raise sufficient private financing	Invest in projects that contribute toward integrated balanced development, and economic and social cohesion.	Slides 19, 40
iii. What type of financial products does the government-sponsored lending institution offer?	Loans	Grants, loans, loan guarantees, lines of credit, equity	Slides 24-25, 44-50
iv. Does the government-sponsored lending institution offer any favorable lending terms?	No, loans are on fixed or floating interest rates	Yes, variable interest rates are available at rate below LIBOR	Slides 25, 52
v. What types of projects are eligible for credit assistance from the government-sponsored lending institution, and how much credit assistance is each project eligible for?	PFI projects up to 100% of senior debt financing available	Projects that contribute to policy objectives, up to 50% of funds for project implementation	Slides 24-25, 52
vi. Is there a competitive process in place for allocating the government-sponsored lending institution's resources, and if so, what factors drive project selection?	No, projects are selected on financing need and difficulty in obtaining ready and affordable credit from capital markets	No, projects need to meet eligibility requirements and contribute to policy objectives	Slides 26-31, 54-64
vii. What type of institution is the government-sponsored lending institution and what type of governance structure does it employ?	Agency within Her Majesty's (HM) Treasury	Independent non-profit bank, governed by a Board of Governors	Slides 20-22, 41-43

Objective of Stage 3: Survey and Analysis of Investment through Government-Sponsored Lending Institutions

This Report focuses on the following government sponsored-lending institutions:

The Infrastructure Finance Unit (TIFU)	• The UK recently introduced a direct lending arm of government, established within HM Treasury - The Infrastructure Finance Unit (TIFU) • TIFU is able to make direct loans to project companies involved in Private Finance Initiative (PFI)/Public Private Partnership (PPP) transactions, alongside or in extreme cases in place of commercial banks
European Investment Bank (EIB)	• The EIB is one of the most significant lenders to infrastructure projects across Europe, supported by member states through the contribution of equity and, effectively, guarantees of liabilities • The EIB uses this funding and support to raise funds in the commercial market, to support the development of infrastructure projects across Europe. • The EIB is an important example for this study, as its role as a regional lending institution may provide an example of how the U.S. Federal Government could structure the U.S. national infrastructure bank • The EIB also has a specific focus on livable and sustainable communities in their project selection and eligibility guidelines, which provides useful insight into how the programs of a lending institution can be utilized to support livability and sustainability policies

Source: Based on Survey of PwC Country Office staff

II. Government-Sponsored Lending Institutions

Overview of Government-Sponsored Lending

Government-sponsored lending is where government agency or program is created with the purpose of providing credit assistance to both public and private sector entities in order to support projects that have public, social, and economic benefit and purpose.

Credit assistance includes financial products such as loans, guarantees, and lines of credit.

Projects can include greenfield and brownfield developments such as subway lines, utility grid upgrades, manufacturing plants, and new hospitals or clinics.

Benefits of Government-Sponsored Lending	Challenges of Government-Sponsored Lending
• Address market gaps that private sector lenders are not able to fill • Encourage private co-investment • Flexibility to respond to market fluctuations and shocks (e.g., credit crisis) • Provides a de-facto level of competition to help stabilize debt prices • Provides certainty that a project will be able to obtain funding, reducing private sector fear of project collapse	• Sustain and reconstitute funding for the long-term; on-going government support vs. self-sufficiency • Crowding-out private sector institutions • Estimating and mitigating borrower default risk

Source: Based on Survey of PwC Country Office staff

Government-Sponsored Lending: Key Considerations

- As governments do not generally act as lenders to public projects, appropriate skills and staff are often required to:
  - Make lending decisions
  - Review projects and monitor them during operations
  - Know how to interact with commercial banks
- There are typically two types of lending:
  - Market Rate – lending approach is similar to that of a commercial bank
  - Preferential Terms – below market rate and/or subsidized policy driven programs

Source: Based on Survey of PwC Country Office staff

Government-Sponsored Lending: Financial Products

	Grants	Guarantees	0% interest loan	>0% interest loan	Line of credit	Equity
Description:	An award of financial assistance typically from a government to a private or public entity in order to carry out a particular task or program	Binding legal agreement where a guarantor agrees to pay a portion or all of the loan amount in the event of borrower default	Funds provided to a borrower for a fixed term at 0% interest, which is often times subsidized by the lender	Funds provided to a borrower for a fixed term at an interest rate greater than 0% and a reduced lender subsidy compared to a 0% interest loan	Guarantee from a financial institution that funds will be available to a borrower as needed for a fee for a predetermined period of time	Capital that is applied to full or partial ownership of a company or an asset
Expected Return (Outcome):	Completion of task or management of program; budgetary appropriation with no obligation of repayment	Fee to government for providing guarantee	Loan principal repayment from borrower	Loan principal and interest repayment from borrower	Repayment from borrower on funds drawn and interest on drawn funds	Return on investment in the form of a dividend or other similar payment

Source: Center on Federal Financial Institutions website, Products and Services - EIB website

Government-Sponsored Lending: Example Institutions

Institution/Program	Country	Sector	Select Product(s)	Year Est.
Federal Farm Credit Banks Funding Corporation (FFCB)	U.S.	Agriculture	loans, lines of credit	1916
FannieMae	U.S.	Housing	mortgages	1938
California Infrastructure and Economic Development Bank	U.S.	Multi - infrastructure, economic development	loans, pooled bonding	1994
Transportation Infrastructure Finance and Innovation Act (TIFIA)	U.S.	Transport: Surface Transportation	loans, loan guarantees, lines of credit	1998
Brazilian National Development Bank (BNDES)	Brazil	Multi - economic development and trade	loans	1952
European Investment Bank (EIB)	**EU**	**Multi - economic development**	**loans, loan guarantees, lines of credit**	**1958**
India Infrastructure Finance Co. Ltd.	India	Multi - infrastructure	loans	2006
The Infrastructure Financing Unit (TIFU)	**UK**	**Multi - infrastructure**	**loans**	**2009**

Source: Institutional Websites

*The institutions researched for this Stage are in **bold**

Government-Sponsored Lending: Institutions in the U.S.

- Established to address market gaps and/or to achieve specific policy goals such as encouraging home ownership (e.g., FannieMae)
- Capitalized through budgetary appropriation and/or sustained through government-backed debt securities (e.g., TIFIA, FFCB)
- Quasi-governmental or independently governed entities (e.g., California Infrastructure and Economic Development Bank)
- Tend to be sector specific and aligned with Departmental services

Federal Farm Credit Banks Funding Corporation (FFCB)

- Established in 1916 to address severe short-term credit shortages for rural farmers, which came as a result of the economic impact of WWI
- Today, it provides American agriculture with ready sound and dependable credit at competitive rates of interest. For long-term loans, this includes the purchasing and refinancing of farm real estate, as well as expenses related to production processing such as equipment, facilities, and livestock in the short-term.
- Loan portfolio of $162B (Mar 2010) with net income of around $3B/year supporting 93 farm credit banks nationwide
- Capitalized through debt securities, sold on primary and secondary capital markets; interest earned on these securities is tax exempt
- Independently operated and governed network of lending institutions with government-backed securities and government oversight and regulation

Source: FFCB website

Government-Sponsored Lending: Proposed Institutions in the U.S.

- A National Infrastructure Bank and a National Infrastructure Innovation and Finance Fund (NIIFF) have been proposed
- The NIIFF proposal is consistent with existing structures in the U.S. as it is aligned with the relevant Department (U.S. DOT)

	National Infrastructure Bank (President's FY10 Budget)	National Infrastructure Innovation and Finance Fund (President's FY11 Budget)
Objective	To provide direct Federal investment and foster coordination between State, municipal, and private co-investment to infrastructure projects of national or regional economic significance	To invest in transportation projects of regional and national significance that will effectively leverage non-Federal resources, including private capital
Proposed Budget	$5B/yr for 5yrs, FY10-14	$4B/yr for FY11
Sector	Infrastructure, multi-sector	Transportation infrastructure
Governance	Standalone government-sponsored bank/independent agency, administratively similar to FDIC (based on Dodd-Hagel, 2007)	Creation of new operation unit within U.S. DOT
Outcome	Required legislation to create Bank was not passed by Congress	Current Budget is under consideration by Congress

Source: President's FY2010 Budget, President's FY2011 Budget

III. Survey and Analysis of The Infrastructure Finance Unit (TIFU)

The Infrastructure Finance Unit (TIFU)

- TIFU was established in 2009 by Her Majesty's (HM) Treasury in the U.K. to:
  - Lend to PFI projects unable to raise sufficient financing
  - Negotiate the terms of loans for PFI projects
  - Monitor and manage loans for PFI projects
- TIFU was created as a stabilization tool to address the absence of capital market funding and the reduced number of active bank lenders in the PFI market. It was intended to act as a market catalyst to help PFI projects get off the ground during a tight credit market.
- TIFU loans are expected to cease when market lending capacity is judged to meet PFI demand

Private Finance Initiative (PFI) - an arrangement whereby the public sector contracts to purchase services from the private sector on a long-term basis, often between 15 to 30 years. Under a PFI, risks are allocated to the party best able to manage them. Typically, the private sector constructs and maintains the infrastructure project using private finance, and receives a unitary payment from the public sector based on project performance.

Source: HM Treasury TIFU website

Overview and Background of TIFU

Characteristic	TIFU
Objective	Lending to PFI projects where insufficient private sector funding is available on acceptable terms to allow the project to reach a timely financial close
Governance	PPP Policy Team, HM Treasury
Select Product(s)	Loans
Lending Terms	15 to 30 years; fixed or floating interest rate matching commercial lenders
Project Eligibility	Approved PFI projects (multi-sector): Prior to consideration for TIFU financing, the project team must undergo the investment selection process and complete a VfM analysis, as part of the project lifecycle as required for all UK PFI projects. In addition, projects must demonstrate that they have made reasonable attempts to obtain financing, but have been unable due to affordability, insufficient lender capacity, and terms that are not representative of those generally available for similar PFI projects.
Project Examples	Greater Manchester Waste Disposal Authority (£120M, 2009)

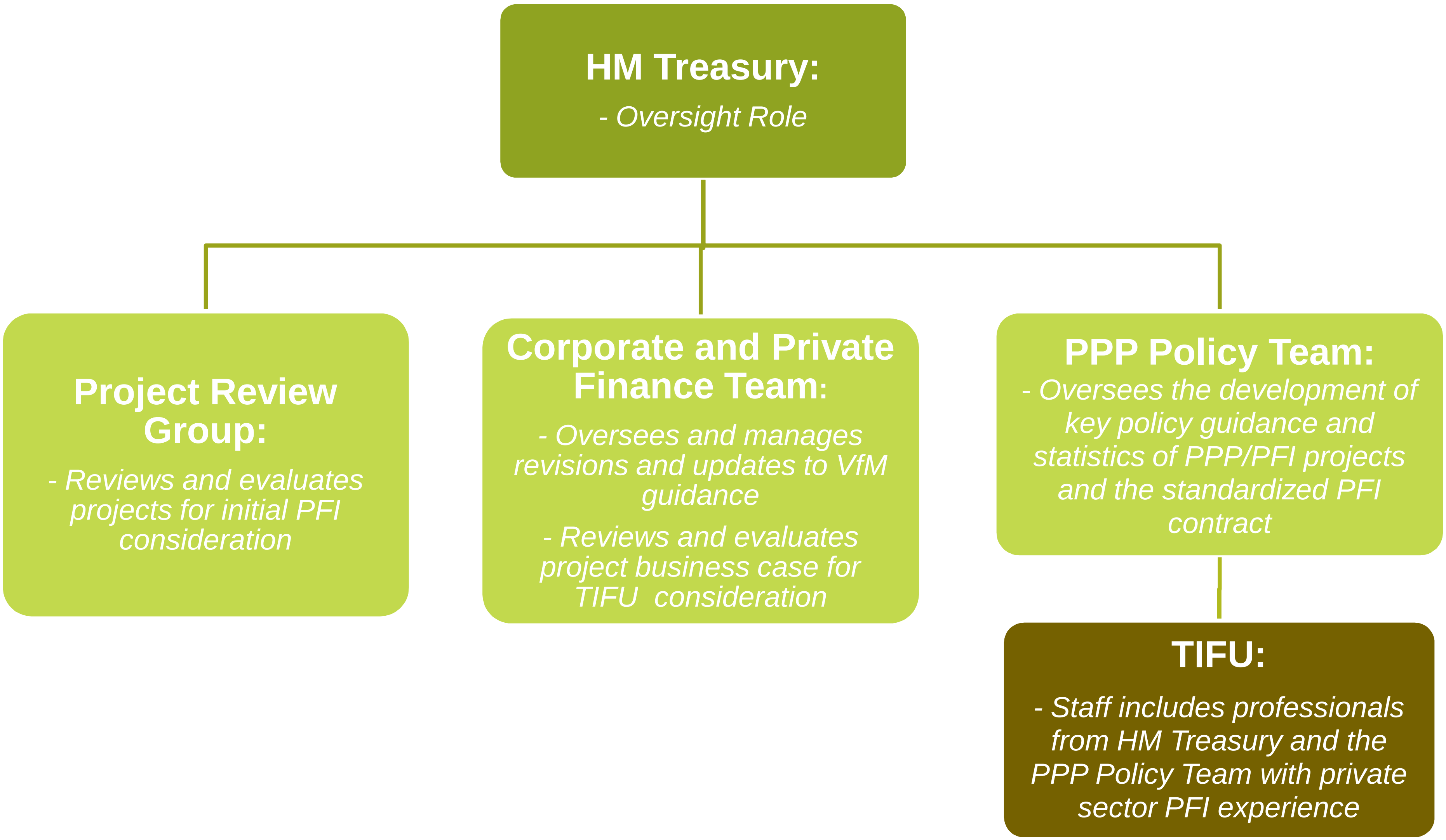
Source: HM Treasury TIFU website

Objectives of TIFU

- To provide a centralized, cross-departmental approach to public sector credit provision that:
  - Supplements bank or capital market funding when it is not readily available
  - Supports delivery of PFI infrastructure projects, despite tight credit markets
  - Supports job and economic growth by financing key infrastructure projects
- Addresses the government's need for an urgent response to the global financial crisis and its desire to retain the flexibility of loans as a temporary solution
- A TIFU loan may be offered when there is limited market liquidity. As market conditions improve, HM Treasury may sell the loan and exit the market.
- TIFU lends on similar terms as commercial lenders, and has credit approval and loan monitoring processes comparable to private commercial banks.
- HM Treasury considered the options of delegating the management of loans to a commercial bank and establishing a separate lending institution altogether. It elected not to proceed with this approach in order to supplement the market and protect the public interest.

Source: HM Treasury TIFU website; Based on Survey of PwC Country Office Staff

TIFU Governance Structure



Source: HM Treasury TIFU website; Based on Survey of PwC Country Office Staff

TIFU Governance Structure

Characteristic/ Feature	Description
Funding Source	• Wholly funded by HM Treasury and may cover up to 100% of senior debt financing
Leadership	• Leadership is appointed by HM Treasury in coordination with the PPP Policy Team
Roles and Responsibilities of the Unit	• Considers applications for loans to PFI projects at the direction of the Corporate and Private Finance Team and in cooperation with the Projects Review Group • Negotiates the terms of loans for PFI projects on a commercial basis • Monitors and manages TIFU loan portfolio and conducts due diligence procedures as necessary
Due Diligence	• TIFU has due diligence procedures built on private sector experience of its staff and an internal credit committee composed of HM Treasury officials that ultimately advises the Treasury Minister • Requires applicants to submit project evaluation data and the results of analysis by private commercial lenders whom the applicant approached prior to applying for TIFU loan
Reporting Requirements	• Governed by the same reporting standards and laws as HM Treasury • Projects may be subject to review by independent bodies such as the National Audit Office (NAO)

Source: HM Treasury TIFU website; Based on Survey of PwC Country Office Staff

TIFU Staffing

- The TIFU Director was recruited from Partnerships UK, and has a number of years of commercial lending experience
- Senior staff were hired from the private sector with experience at major international banks
- Three staff came in from the private sector on **secondment** with experience in banking, law, and project finance

What is a secondment?

The term secondment typically refers to a temporary placement of an employee to another part of an organization or to a completely different organization. For example, employees can be seconded from one commercial entity to another, from a non-profit to a commercial entity, from a commercial entity to the government, or from the human resources department to the finance department of the same organization. Secondments can be full- or part-time paid positions and conducted under a formal agreement for a fixed period from hours to months. In secondments to commercial entities, the hosting organization usually pays the salary of the secondee. Otherwise it is likely covered by the donating organization or the secondee's employer.

Source: Chartered Institute of Personnel and Development (UK); Based on Survey of PwC Country Office Staff

TIFU Staffing (cont'd)

- In addition to hiring staff directly from the private sector, TIFU was able to leverage private sector expertise through secondments, which can provide a number of benefits:

Secondment Participant	Description	Benefit
Secondee	Individual that is on temporary placement	• Wider career and personal development • Test and apply skills in a different organizational environment
Employer of Secondee	Sponsor of temporary placement and in most cases provider of secondee's salary	• Enhanced employee skills • Cross functional communication • Broader network and contacts
Host organization of Secondee	Recipient of temporary placement and provider of secondee salary in cases of secondment to commercial entities	• A new external perspective • Added skills and experiences during placement

Source: Chartered Institute of Personnel and Development (UK); Based on Survey of PwC Country Office Staff

Terms and Conditions of TIFU Lending

- Although TIFU may provide up to 100% of senior debt financing required by a PFI project, it is expected that most loans will be provided alongside loans from commercial banks, the European Investment Bank (EIB), or capital market lenders

- TIFU can provide long-term loans on either a fixed rate or floating rate basis, and provides standard ancillary lending facilities for PFI projects
  - If loans are provided on a fixed rate basis, TIFU will be entitled to receive interest rate break costs on early pre-payment, which will rank alongside commercial swap counterparty break costs
  - If loans are provided on a floating rate basis, they will be subject to hedging arrangements, which will be entered into by either co-funders or other swap counterparties as agreed by TIFU and the recipient project team

- In practice, TIFU is expected to provide floating-rate loans alongside commercial banks and the EIB

Source: HM Treasury TIFU website; Based on Survey of PwC Country Office Staff

Terms and Conditions of TIFU Lending

- TIFU loans:
  - Share in security and rank pari passu to commercial lenders both pre- and post-enforcement
  - Have full, unencumbered, syndication and sale rights and will be freely pre-payable alongside commercial bank loans as part of refinancing agreements

TIFU vs. TIFIA Fees

TIFU receives the same fees that commercial lenders receive such as up-front arrangement fees, which are payable only when a loan is actually made, or commitment fees on undrawn portions of a loan. And while TIFU has sought to match fees to that of commercial lenders, TIFIA has subsidized project application costs and fees. Since FY2008, total TIFIA credit applications exceeded available lending resources. DOT then began to consider charging upfront fees that would help offset some of the Government’s cost of providing credit assistance. DOT is considering a pilot program to accept applications for projects where potential borrowers are willing and able to pay an upfront fee since it is no longer able to subsidize all applicants.

Source: HM Treasury TIFU website; Federal Register Notice of TIFIA Funding Availability (December 3, 2009); Based on Survey of PwC Country Office Staff

TIFU Lending Process

Application

- Project eligibility confirmed
- Business Case presented to HM Treasury

Evaluation

- Review of financial need of the project and the availability of other funding sources

Selection

- Application is approved and discussions are held with the procuring authority on TIFU involvement in the project

Implementation and Monitoring

- TIFU project review, project structure and risks
- Project credit analysis and due diligence
- Loan documents signed at financial close alongside commercial banks loans
- Arrangement fee received by TIFU
- TIFU receives regular monthly, quarterly, semi-annual project reports
- Construction progress reports

Source: HM Treasury TIFU website; Based on Survey of PwC Country Office Staff

Project Eligibility

Application → Appraisal → Selection → Monitoring

- Projects eligible to apply for TIFU loans include:
  - All PFI projects that began the procurement process by March 3, 2009
  - PFI projects approved by the Project Review Group of HM Treasury and procurement initiated after March 3, 2009
  - All other PFI projects that meet the standard Value for Money (VfM) and affordability criteria, and are subject to obtaining HM Treasury approval prior to starting the procurement process
- All eligible projects will be included in the HM Treasury's database of PFI projects, which will be published on the Treasury website. As of February 2010, there are 115 PFI projects in procurement.
- HM Treasury intends to lend to projects only where appropriate funding is not available from the capital market in order to help PFI projects reach financial close on a timely basis

Source: HM Treasury TIFU website

Application → Appraisal → Selection → Monitoring

Project Application

- HM Treasury requires each project team to present a business case for a TIFU loan, which includes:
  - Structuring and financing options considered by the project team before applying for TIFU loan
  - Responses from commercial banks on loan applications
  - A written summary explaining why the terms offered by the commercial banks were not representative of the terms generally available for PFI transactions (where applicable) and a verification of this view by the project's financial advisor
  - A description of the nature and causes of the funding gap and the amount of funding required

Source: HM Treasury TIFU website

Project Appraisal

- Evaluation criteria for TIFU loans is based solely on the financial need of the particular PFI project and the availability of commercial and other funding sources
- PFI projects must demonstrate and prove to HM Treasury that they have tried and been unable to obtain sufficient financing from private capital markets after a post-preferred bidder funding competition has been held

Source: HM Treasury TIFU website

Project Selection

- The Corporate Private Finance (CPF) Team of HM Treasury reviews and evaluates the application. If the CPF Team selects and approves the application, it will invite TIFU to meet the procuring authority to discuss the project and arrangements for TIFU involvement.

- The private finance division of CPF, which was involved in project review, was recently moved under Infrastructure UK (IUK).

Key Observations

- TIFU was established to support the needs of the existing PFI program. Therefore, additional project requirements and qualification criteria for project selection is focused on addressing access to credit difficulties, as the merits of the project itself are already tested for the project to enter the PFI program.
- TIFU has provided one loan since being established in March 2009, which may reflect improving market conditions and access to financing

Source: HM Treasury TIFU website; Based on Survey of PwC Country Office Staff

Application → Appraisal → Selection → Monitoring

Implementation and Monitoring

- Once projects are selected, TIFU will conduct a review of the project. This includes an assessment of the project structure and risks.

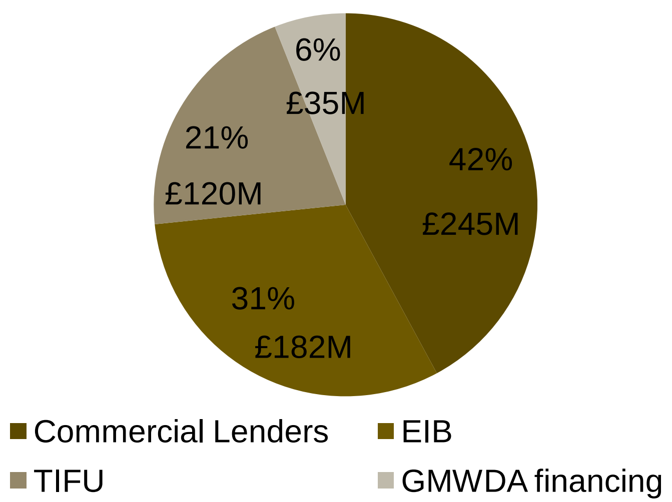
- Project monitoring can include documents and tasks such as:
  – Project credit analysis and due diligence
  – Loan documents signed at financial close alongside commercial banks loans
  – Arrangement fee received by TIFU
  – TIFU receives regular monthly, quarterly, semi-annual project reports
  – Construction progress reports

Source: HM Treasury TIFU website

Case Study: Greater Manchester Waste Disposal Authority (GMWDA)

- **Total Cost:** £4B, 25 year concession with initial capital investment costs of £798M (£582M of debt financing, $841M, 2009)
- **Project Description:** Construction, refurbishment, and operation of 44 waste facilities including biological treatment plants, material recovery facilities, composting , plants, waste transfer and loading stations, and household waste recycling centers throughout Greater Manchester (Pop: ~2.6M, 2008)
- **Procurement Process:** Bidding began with 10 proposals in June 2005 and ended after 3 stages with consortium Viridor Laing selected as the winner in January 2007. Viridor is one of the largest waste disposal companies in the UK and John Laing is a leading UK construction company.

Debt Financing Profile



- Due to the economic downturn, the two initial preferred bidder banks of Bank of Ireland and NIBC were unable to provide sufficient financing with NIBC dropping out, so the lending source pool was expanded. The Commercial Lenders include BBVA, Lloyds TSB, and SMBC, which provided 42% of total debt financing. The EIB contributed £182M, TIFU £120M, and GMWDA £35M.

  Total debt begins with an interest rate of 3.25% during construction and is set to increase once every 5 years during operation, starting at 3.35% and rising to 4.50% after 16 years from the start of construction to the end of the 25 year term

Source: HM Treasury TIFU website, World Bank's Public-Private Partnerships Solutions March 2010 Issue on TIFU

TIFU: Summary Observations

- TIFU provides an immediate short-term response of flexible assistance for PFI projects
- TIFU was created to address an immediate need and provide assistance to PFI projects that cannot secure funding due to the constrained capital markets
- To achieve its objective, TIFU offers limited financial products (15 to 30 year term loans) with fixed or floating interest rates matching those of commercial lenders
- The program builds on the due diligence of private lenders in order to identify and address credit gaps and affordability
- TIFU operates within HM Treasury, the central budget agency and also the central agency for the PFI program policies. This location provides TIFU with a multi-sector focus and enables it to build on the existing PFI program project eligibility requirements.
- As of June 2010, TIFU has closed one loan facility for the Greater Manchester Waste Disposal Authority

IV. Survey and Analysis of the European Investment Bank (EIB)

European Investment Bank (EIB)

- The EIB provides medium and long-term loans for projects in the European Union (EU) and partner countries
- The EIB was created in 1958, under the Treaty of Rome, as a long-term financing institution for what would become the EU
- Today, the EIB is a non-profit, EU policy-driven public bank which invests in projects that further EU policy objectives
- EIB finances a range of investments in all sectors of the economy, and is active in 150 countries working to support EU external cooperation and development policies
- EIB is legally and financially autonomous, with capital of €232.4B (US$307.5B, 2009) subscribed by 27 EU member states
- 95% of the EIB’s capital is borrowed on the capital markets; 5% of the EIB’s capital is provided by EU member countries

Source: What is the EIB Group, 2009

EIB Overview and Background

The EIB is one of the major institutions of the EU:

European Union - Member States

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom

Governing/Political Bodies

European Parliament
Council of the European Union
European Commission

Financial/Economic Bodies

European Central Bank (ECB)
European Investment Bank Group (EIB, EIF)

Source: What is the EIB Group, 2009, and the EIB website

EIB Overview and Background

- The EIB is a part of the EIB Group, which consists of the EIB and the European Investment Fund (EIF). The EIF was established in 1994 as the specialized financial body for small businesses in the EU. In 2000, the EIB became the majority shareholder of the EIF, with a 66% shareholding.
- The EIF focuses on Small Medium Enterprise (SME) investment in the EU, EU Candidate Countries, and a number of Non-EU partner countries through public and private intermediaries.
- EIF products and financing solutions include equity investments such as venture capital and mezzanine funds and debt products such as loan guarantees and microcredit, which serve to address market gaps in SME finance

EIB Lending and the Transportation Sector

Since its inception to June 2010, the EIB has provided nearly €800B for projects in EU member states, candidate, and partner countries. In 2009, EIB lending totaled €79.1B (US$110.4B) across a wide range of sectors including agriculture, energy, telecommunications, and transportation. Over the past decade, the transportation sector has accounted for approximately one-quarter of annual lending. Transportation projects have included new highways, subway extensions, expanded ferry commuter service, and refurbishment of central rail stations.

Source: What is the EIB Group, 2009, and the EIB website

EIB Overview and Background

Characteristic	EIB
Objective	Contribute towards the integration, balanced development and economic and social cohesion of the EU Member States
Governance	Board of Governors, Management Committee, Board of Directors, Audit Committee
Select Product(s)	loans, loan guarantees, lines of credit
Lending Terms	Usually 4 to 20 years; competitive fixed, convertible, and variable interest rates; variable interest rates usually available at a spread below LIBOR
Project Eligibility	Contribute and promote EU policy objectives such as economic and social cohesion
Project Examples	Thessaloniki (Greece) Metro Extension (€250M, 2006); M25 (UK) Highway Widening Project (£500M, 2009)

Source: What is the EIB Group, 2009, and the EIB website

EIB Overview and Background

How is the EIB different from a commercial bank?

Bank Service/Characteristic	Commercial	EIB
Use savings accounts to fund assets	X	
Use wholesale (interbank) markets to fund assets	X	
Use capital markets to fund assets		X
Non-profit institution		X
Rely on pseudo-sovereign credit rating to reduce funding costs		X
Pass on borrowing costs savings through subsidized lending rates		X
Loans, guarantees, lines of credit	X	X
Lending arrangement and commitment / non-utilization fee*	X	X
Technical project assistance to compliment financing facilities		X

*Both Commercial and EIB charge fees including commitment fees, although EIB fees can be set at lower levels.

Source: EIB Website; Based on Survey of PwC Country Office staff

EIB Objectives

- Primary objectives include:
  - Manage the EU treasury
  - Assess and manage risks attached to EIB operations
  - Carry out necessary economic or financial background studies that benefit the EU
- The EIB supports EU policy objectives in the following areas:
  - Evaluate, appraise, and finance projects and raise capital market resources
  - Fund projects that address economic and social imbalances in disadvantaged regions
  - Promote an economy that stimulates knowledge and creativity through investment in information and communication technologies, as well as human and social capital
  - Fund projects that create trans-European networks, such as cross-border networks in transport, energy, and communications
  - Stimulate investment through small businesses and microenterprises
  - Invest in building a cleaner natural and urban environment, and relies on alternative energy sources

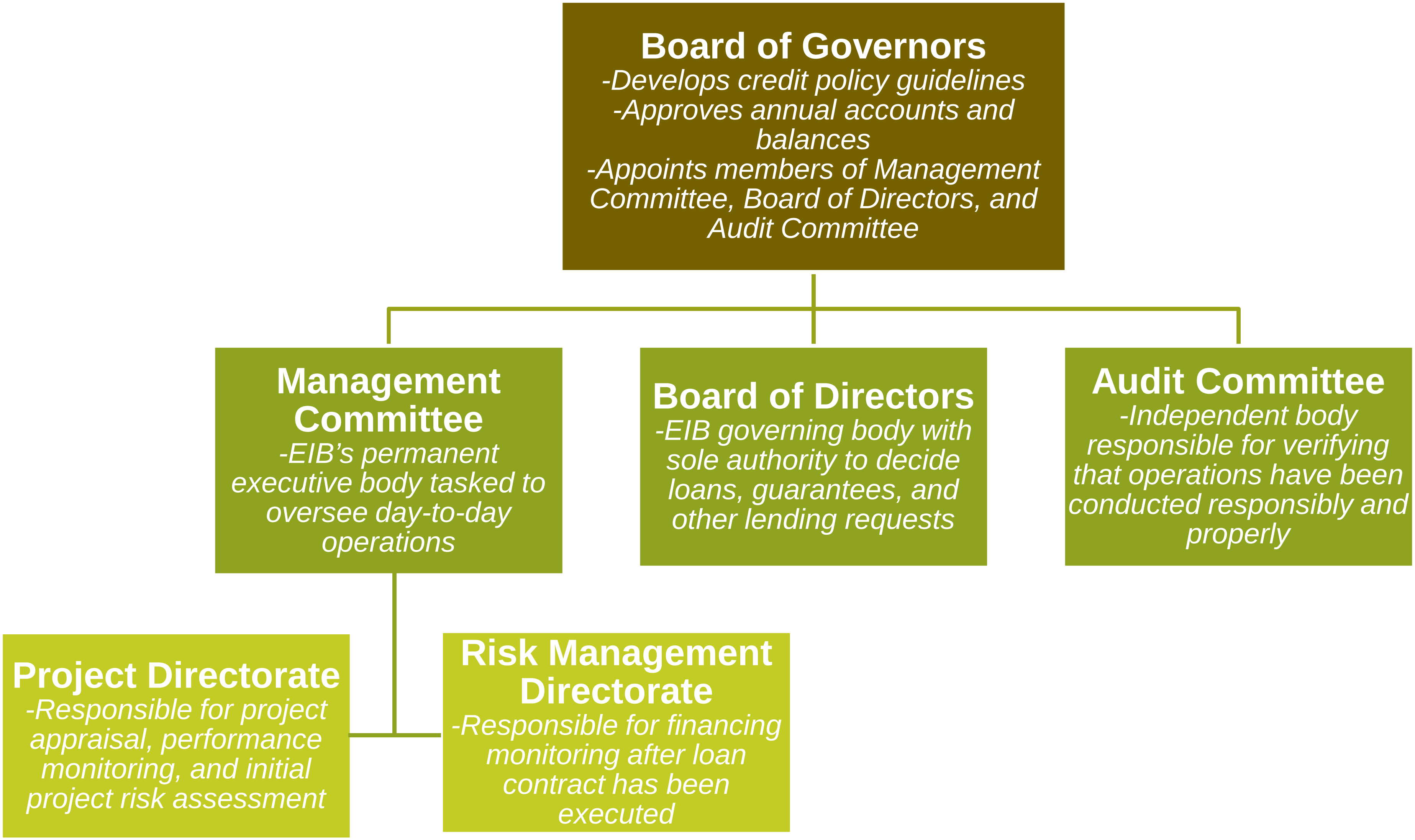
Source: What is the EIB Group, 2009, and the EIB website

EIB Governance Structure

- The EIB Board of Governors is appointed by the EU member countries
- The Board of Directors contains 28 members, with representatives from each member country and the European Commission. There are 16 alternates, which are shared by groupings of countries
- Each member country's share in the EIB's capital is based on its economic weight within the EU (expressed in GDP) at the time of its accession (see Appendix B)
- The Board of Governors leads the EIB and has the responsibility of overseeing and selecting the leadership of the Management Committee, Board of Directors, and the Audit Committee

Source: What is the EIB Group, 2009, and the EIB website

EIB Governance Structure



Source: What is the EIB Group, 2009, and the EIB website

EIB Governance Structure

Characteristic	Description
Funding Source	• EU member countries, equity and debt raised on capital markets
Leadership	• Board of Governors, which are appointed by each Member State • Board of Governors appoint leadership of subordinate agencies: Management Committee, Board Directors, and Audit Committee
Roles and Responsibilities	• Board of Governors – sets policy guidelines, lending priorities, and leadership • Management Committee – day-to-day operations • Board of Directors – lending decision making body • Audit Committee – independent auditors
Due Diligence	• Conducted by the EIB project lending teams, which review the project and project risks
Reporting Requirements	• Policies and regulations established by the EU and independently audited and reviewed by the Audit Committee

Source: What is the EIB Group, 2009, and the EIB website

EIB Financial Products

Product	Description
Grants	Programmatic grants in the EU are managed by the European Commission and are for activities such as environmental preservation, information and communication technologies development, and youth education. The EIB provides grants for financing interest rate subsidies and to cover the costs of project-related technical assistance for lending to developing nations in Africa, the Caribbean, and the Pacific.
Guarantees	The EIB provides guarantees for senior and subordinated debt and serves as either a standard guarantee or a debt service guarantee similar to monoline insurers
Loans	The EIB provides individual loans with fixed, revisable, and convertible rates for projects in all sectors of the economy for projects €25M or larger. For projects less than €25M, the EIB offers intermediated loans or lines of credit through an intermediary regional bank or financial institution. Most intermediated loans are directed toward Small Medium Enterprises (SME)*. In addition, the EIB provides loans guaranteed by national governments at near sovereign rates. This is particularly helpful for countries with higher borrowing costs.
Equity	The EIB provides equity in the form of venture capital funds through intermediary financial institutions for high-technology SME's with strong growth potential and more recently greenfield renewable energy. The management of the venture capital portfolio rests with the EIF.

* An SME is generally defined as an enterprise that has less than 250 employees and total annual revenue not exceeding €50M (US$61M, 2010), and/or an annual balance sheet total not exceeding €43M (US$53M).

Source: Products and Services – EIB website

EIB Financial Products: Grants

- Programmatic grants are managed by the European Commission in the EU and are for activities such as environmental preservation, information and communication technologies development, and youth education.

- The two main uses of available EIB grants are for:
  - Financing interest rate subsidies and to cover the costs of project-related technical assistance for lending to developing nations in Africa, the Caribbean, and the Pacific. Financial subsidies totaling €400M provided by the EU Member States are to be used over a 5-year period from 2008-2013. Up to €40M of the total can be allotted for technical assistance.
  - Providing €100K annually to support initiatives of 20 to 30 EU and EU partner non-profit organizations. Recipients have included: Slovenian Ministry of Finance for a Conference on Education and Economic Policy, the Kenyan Red Cross for Internally Displaced People, and the International Polar Foundation to support exhibits of Arctic research

Source: Grants - European Commission website

EIB Financial Products: Technical Assistance

- EIB offers a range of upstream technical assistance from EIB staff economists and engineers who may assess and advise on individual projects
- For project applicants within the EU, the EIB performs detailed due diligence prior to investment and all projects must comply with environmental and procurement directives of the EU
- For project applicants from designated non-EU developing partner countries in Africa, the Caribbean, the Pacific, and around the Mediterranean, the EIB provides technical assistance for project preparation, which can include feasibility and market studies, project management, and business case development
- Technical assistance for non-EU developing partner countries has three main objectives:
  - To enhance project quality and success rate
  - To increase project efficiency and success rate
  - To complement other available financial products

Source: Technical Assistance - EIB website

EIB Financial Products: Guarantees

The EIB provides guarantees for senior and subordinated debt and serves as either a standard guarantee or a debt service guarantee similar to monoline insurers

Loan Guarantee Instrument for Trans-European Transport Network Projects (LGTT)

Guarantee jointly set up by the European Commission and the EIB to facilitate greater private sector financing of multimodal EU transportation network integration. It received a €1B capital contribution to support up to €20B of senior loans in order to encourage the reduction of risk margins applied to senior loans for the project. In the event that the borrower becomes insolvent, the LGTT guarantees and provides full repayment becoming a subordinated lender to the project.

Corporate Lending: SME Guarantees by EIF

Guarantees provided by the EIF to support SME loan guarantees for mid- to long-term debt finance, equity guarantees to cover portfolio of investments in SMEs in start-up phases, and securitization to support securitization transactions to mobilize additional SME debt financing.

Source: Guarantees - EIB website

EIB Financial Products: Loans

- The EIB provides individual loans with fixed, revisable, and convertible rates for projects in all sectors of the economy for projects €25M or larger.

- For projects less than €25M, the EIB offers intermediated loans or lines of credit through an intermediary regional bank or financial institution. Most intermediated loans are directed toward small- and medium-sized enterprises (SMEs).

- **Conditions:** Proof of supporting co-investment provided by a commercial bank or banking syndicate with a solid credit rating

- **Fees:** Although commitment and non-utilization fees are not typically charged, projects may be required to pay appraisal and legal fees

- **Currencies:** Flexibility in holding financial accounts in more than seven different currencies including the EUR, GBP, USD, JPY, SEK, DKK, CHF, and currencies of candidate countries and other EIB partner nations

Source: Loans - EIB website

EIB Financial Products: Equity

The EIB provides equity in the form of venture capital funds through intermediary financial institutions for high-technology SMEs with strong growth potential. EIF manages the venture capital portfolio.

Middle East Venture Capital Fund
Sector: Early stage IT companies
Countries/Region: Palestinian Territories
Objective: To support the development of the financial and private sectors by providing equity or quasi-equity financing to export oriented IT companies based in the Palestinian Territories
Total Cost: US$35M to $50M (with €5M from the EIB), 2009

Bullnet Capital Fund II
Sector: Early stage IT hardware and software firms
Countries/Region: Spain
Objective: To invest in early stage companies that develop unique technology (software and/or hardware) with applications in several industries including: telecommunications, media, and healthcare.
Total Cost: €25M (€2.7M from EIB), 2007-2009

EIB SME Social Requirements
SMEs must meet all social requirements identified by the EIB, including requirements on labor standards, occupational and community health and safety, population movement (including involuntary resettlement issues), minority rights, public consultation, and cultural heritage in order to receive funding from the EIB

Source: EIB website and EIF website

EIB Financial Products: Equity

EIB also offers equity financing through several sector and region specific targeted infrastructure funds and renewable energy projects

Argan Infrastructure Fund

Region: Mediterranean Countries including Morocco, Algeria, Tunisia, Libya, and Egypt; and projects in Sub-Saharan Africa
Sector: Energy, transportation, logistics, waste management, and telecommunications
Financing: Equity financing for infrastructure projects that will contribute to EU objectives and follow EIB environmental guidelines, which encourage the use of clean and renewable energy
Project Funding Target: €75M on first project with up to €20M financing from the EIB

InfraMed Infrastructure Fund

Region: Mediterranean countries of Libya, Mauritania, and Turkey
Sector: Sustainable urban, transport, and energy infrastructure
Financing: Equity financing for infrastructure projects that will contribute to EU objectives
Project Funding Target: €400M with up to €50M EIB financing

Marguerite 2020 Fund

Region: EU
Sector: Transport and renewable energy
Financing: Equity financing for the implementation of strategic European policy objectives and projects in transport and renewable energy via regional/national European banks
Project Funding Target: €1.5B in total equity with up to € 100M EIB equity

Source: EIB website and EIF website

Case Study: EIB Microfinance Initiatives

- Microfinance is the provision of basic financial services to the poor, typically those living in developing nations with limited access to affordable financial products and services such as loans, insurance, and money transfers. According to the EIB Group, microfinance in the EU is an array of products and services for individuals who wish to become self-employed but do not have access to traditional banking services. It consists of those making small loans less than €25K.

- From 2000 to 2009, the EIB Group committed €654M to microfinance initiatives, including €26M for technical assistance. The EIB Group offers similar products in the form of loans, equity, and guarantees on a smaller scale.

MicroCred: Microfinance Investor

The EIB has invested in MicroCred since 2006, which is an African regional fund incorporated in France and dedicated to the creation and acquisition of commercially sustainable microfinance institutions. MicroCred has committed itself to achieving a commercially acceptable return and also a social return on investment through the use of equity and convertible debt to sustain these institutions. The EIB has committed €3M in equity to the project, which makes loans as small as a few hundred Euros to microentrepreneurs in sectors such as retail, food services, and construction.

Source: Microfinance - EIB website

Terms and Conditions of EIB Lending

- Lending decisions are made on the basis of a project's merits, and usually provides loans to projects for 4 to 20 years
  - Major projects over €25 million (US$31M, 2010) are financed by direct loans
  - Small and medium-scale ventures are financed through credit lines established in cooperation with national and regional banks, which have insight into the local markets

- The EIB does not lend more than 50% of the funds required for the implementation of a project

- EIB variable rate loans are usually available at a rate preferential to normal commercial debt. The EIB may or may not include an additional risk margin, depending on the specifics of the loan including potential corporate insolvency.

- The EIB holds a pseudo-sovereign credit rating based on the sovereign backing of the EU member countries

- Through the EIB, EU member countries assume lending risk by subsidizing lending with sub-market rates in order to support strategically important projects

Source: Produces and Services - EIB website

EIB Investment Process

Loan Application	Appraisal	Selection	Implementation and Monitoring
• Identifying the appropriate EIB lending product • Project eligibility and criteria including environmental sustainability and social well-being • Loan application process	• Project appraisal and evaluation led by EIB's Projects Directorate, EIB team tasked with working with project team to detect risks and issues and enable necessary corrective active once loan application is submitted • Development of project report to Board of Directors for decision on financing	• Tendering for EIB-financed projects to ensure funds are used rationally in the interest of the project and the EU with a notice published in the Official Journal of the EU (OJEU) • Ensure interactions with external providers are conducted equally and with transparency through a competition of qualified bidders using both cost and quality as considerations	• EIB project review, project structure and risks • Project credit analysis and due diligence • Loan documents signed at financial close alongside commercial banks loans • Regular monthly, quarterly, semi-annual project reports • Construction progress reports

Source: EIB website

Project Eligibility

- The EIB finances projects in most sectors. Eligible projects must contribute to EU policy objectives, which include:
  - Promoting economic and social cohesion (development of poorer regions)
  - Improvement of EU transport and telecommunications infrastructure
  - Secure production, transfer, and distribution of energy and alternative energy
  - Development of a competitive, innovative, and knowledge-based economy
  - Investment in human capital (e.g., schools, labs, research centers)
  - Natural and urban environmental schemes (e.g., water, waste, clean air)
  - Development of small- and medium-sized enterprises
  - Improvement of EU competitiveness
  - Support for external cooperation and development policies

In 2008, EIB provided €9.8B (US$14.5B) in loans for transport projects linked to trans-European networks, with more than half of this spending in countries that are economically depressed. An additional €3.2B was provided to priority projects as defined by the European Commission. The increased spending in the transport sector by EIB in 2008 (up from €7.2 billion in 2007) was caused by increased demand from project promoters as a result of adverse market conditions.

Source: Projects - EIB website

Project Application

Loan Application → Appraisal → Selection → Monitoring

- The EIB requires prospective lending recipients to prepare and submit documents that detail and describe:
  - **The Borrower:** The loan applicant and project sponsor. The application requires its legal status, list of principal partners and shareholders, and organizational structure.
  - **The Project:** The technical and environmental data outlining its general purpose, environmental impact, and a detailed cost estimate; financial data breaking down operating and maintenance costs and a financing plan and schedule of projected expenditure
  - **The Financing Structure:** Describes the project's commercial structure and risk allocation, detailed breakdown of financing sources, and proposed role of the EIB in the financing structure; a financial model including cash flow forecasts to enable analysis of underling assumptions
- Submission of the necessary application documents are the responsibility of the project sponsor, which can include project participants from the public and private sector such as banks
- As EIB will finance up to 50% of total project capital required, a plan must provided to describe the EIB's role as a lender and/or technical advisor and to account for the balance and its sourcing from other banks and sources, such as financing from the project sponsor or a loan from a country government.

Source: Projects - EIB website

Loan Application → Appraisal → Selection → Monitoring

Project Appraisal

- The key steps in the project appraisal include:
  - Review of project proposal for compliance with EU objectives
  - Assessment of the economic, technical and financial merits of the project and its impact on the environment
- The project appraisal is conducted by the EIB engineers, economists, and financial analysts, employed and hired as external consultants by the Project Directorate, in cooperation with the project team
- During the project appraisal, the Project Directorate is responsible for working with the project team to detect risks and issues and enable necessary corrective actions
- The criteria for a typical EIB appraisal is tailored for each specific project with appraisal results passed on to the Board of Directors in a project report. The report contains an appraisal of the project's consistency with EU objectives. It also provides an assessment of overall quality and soundness of the project based on a several l factors such as technical scope, implementation plan, operation capability, and project's environmental impact.

Source: Projects - EIB website

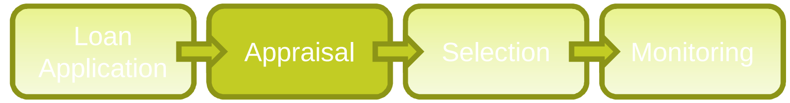
Loan Application → Appraisal → Selection → Monitoring

Project Appraisal: Livability & Sustainability

- Sustainable development has been an objective of the EU since 1997. The Renewed EU Sustainable Development Strategy was adopted by the European Council in June 2006, and outlines seven key issues with regards to sustainable development:
  - **Climate change and clean energy** – e.g. purchase of carbon credits, development of wind farms
  - **Sustainable transport** – transportation systems that contribute to the reduction of GHG emissions and other local pollutants (e.g. upgrade and modernization of ports to increase capacity and intermodal transport linkages)
  - **Sustainable consumption and production** – to boost demand and to improve overall environmental performance and impact of consumer products throughout their lifecycle and to help consumers make more informed choices
  - **Conservation and management of natural resources** – e.g. incorporating aspects of biodiversity in an environmental impact assessment
  - **Public health** – providing state of the art health care to help improve the social and urban environment (e.g. expansion and refurbishment of hospitals and clinics)

Source: Sustainable Development Strategy - European Union website

Project Appraisal: Livability & Sustainability

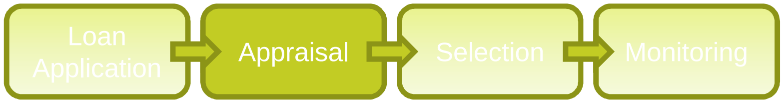


  - **Social inclusion, demography, and migration** – development of social and human capital and equitable economic development (e.g. studying the economic and social impacts of labor force out-migration from acceding EU nations)
  - **Global poverty** – poverty reduction strategies to support the UN's Millennium Development Goals (e.g. microfinance lending to encourage business development in Africa and the Caribbean)

- EIB lending has steadily increased for the building and maintenance of environmentally friendly and sustainable transport systems, which reduce CO_2 emissions and other pollutants, enhance fuel efficiency, and improve safety conditions.

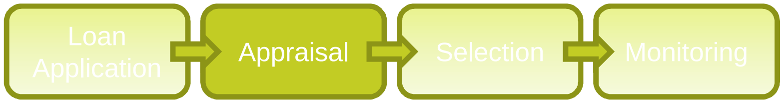
Source: Sustainable Development Strategy - European Union website; Projects - EIB website

Project Appraisal: Livability & Sustainability



- During project selection, environmental and social screenings are conducted to identify the extent and complexity of the project's environmental and social impacts and risks:
  - Location and issue-based risk checklists are prepared to answer questions concerning consultation of affected people, degradation of critical natural habitats, financing of commercial forestry, impact on indigenous communities, and impact on cultural properties (refer to Appendix F for risk checklist example categories)
- The EIB also aims to identify, quantify, and value direct and indirect environmental and social externalities where their influence on the socio-economic viability of the project is expected to be significant, and promotes measures to internalize such impacts (e.g., full cost-recovery tariffs). For example, the EIB discourages projects that may have significant negative external impacts such as endangering public health and quality of life by an increase in air or water pollution, in favor of projects that proactively reduce these external costs through regulation or other measures (refer to Appendix G for an example).

Source: Sustainable Development Strategy - European Union website; Projects - EIB website



Project Appraisal: Livability & Sustainability

The EIB adheres to the following guiding principles, developed by the European Commission, when considering funding sustainable transportation projects:

Principles	Description
Mobility	Mobility is essential for the free movement of people. The EIB will pursue an approach that strives for the most efficient, economic, and sustainable way of satisfying transport demand.
Trans-European Networks	The EIB will continue its strong commitment to funding trans-European networks, due to their essential role in achieving an efficient and cohesive community-wide transport system.
Freight Transport	Funding railways, inland waterways, and maritime projects will continue to be a funding priority for the EIB, as these are the most promising projects in terms of reducing greenhouse gas emissions per transport energy unit.
Research & Innovation	Emphasis will be placed on funding research development and innovation activities to ensure a focus on energy efficiency, emissions reduction, and safety enhancement.
Environmental Impact	The EIB will seek to identify the consequences of the projects it funds in terms of energy consumption and environmental impact.

Source: Sustainable Development Strategy - European Union website; Projects - EIB website

Project Selection

- The guiding principles of Mobility, Trans-European Networks, Freight Transport, Research & Innovation, and Environmental Impact are used as additional policy considerations in the transportation project appraisal and selection process.
- The Board of Directors has the sole authority in the EIB to decide whether or not a project is granted a loan, guarantee, or other lending product. Decisions are taken on majority vote to determine the loan amount (up to 50% of total project capital), interest rate, and other related charges.
- The decisions by the Board of Directors are informed by reports compiled and developed by the Management Committee.

The EIB finances many sustainable urban transport projects (including projects to promote pedestrian mobility and cycle paths). Between 2004 and 2008, EIB support for the urban transport sector was more than €14B in direct financing. Some 69 urban transport projects were financed, of which 61 were located in the EU.

Source: Projects - EIB website

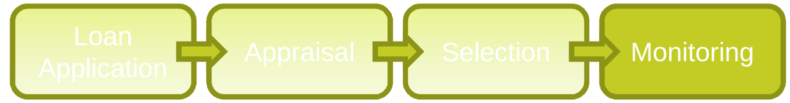
Project Selection

Project evaluation is based on the following quality factors and used to inform the financing decision by the Board of Directors:

Quality Factors	Description
Technical Scope	Soundness of technical scope, use of innovative technology, completeness of risk and mitigation measures, capacity for products/services
Implementation	Capability of project team to implement the planned project, quality of timing and employment estimates during implementation
Operation	Capability of project team to operate and maintain the project, quality of operating and maintenance cost and employment estimates
Procurement	Compliance with applicable legislation and EIB guidelines
Environmental Impact	Compliance with applicable legislation and results of environmental impact assessment
Market and Demand	Results of analysis on the demand for products/services over the life of the project, with reference to sector studies completed by the Projects Directorate
Investment Cost	Quality of project cost estimates and detailed components, and comparison with costs of similar projects
Profitability	Quality of financial profitability estimates and related indicators (e.g., rate of return), and information on economic profitability

Source: Projects - EIB website

Project Implementation and Monitoring



- The Risk Management Directorate, which reports to the Management Committee, is responsible for the financial monitoring of the loan and the structuring of operations as needed
- The Project Directorate, which also reports to the Management Committee, is responsible for project performance monitoring
- The EIB conducts a review of the overall project, project structure, and risks and conducts its financial due diligence and credit analysis of the project
- The EIB monitors projects from loan award through project implementation until the loan is repaid. Monitoring requirements can include:
  - Tracking the servicing of the loan
  - Ensuring that funds are being used for the stated project objectives
  - Ensuring that physical project construction is in accordance with the contract
  - Regular monthly, quarterly, or semi-annual project reports and construction progress reports
  - Maintaining loan documents signed at financial close alongside commercial banks

Source: Projects - EIB website

Project Implementation and Monitoring

Loan Application → Appraisal → Selection → Monitoring

- The EIB also monitors the environmental and social performance of the projects it finances, including the fulfillment of any specific obligations described in the contract
- Monitoring is typically conducted through periodic reports by the government procurement project team and site visits by the EIB
- At the completion of a project, the EIB will conduct an ex-post evaluation to capture lessons learned and to better inform future projects. These reports are available on the EIB website.

Source: Projects - EIB website

EIB: Summary Observations

- The EIB's primary stakeholders and subscribers are the EU member countries
- The EIB is led by a Board of Governors designated by each of the member countries
- The Board of Governors develops the credit policy guidelines and determines the leadership of its subordinate bodies: the Management Committee, the Board of Directors, and the Audit Committee
- The EIB uses the backing of the EU member countries to raise funds in the capital market at pseudo-sovereign rates
- The EU member countries record their direct investment in the EIB and not the EIB’s borrowing within their national financial accounts (i.e. EIB debt does not become part of national debt)
- The EIB invests in projects and programs that further EU objectives in EU member countries, non-member partner countries and regions
- The EIB provides loans at sub-commercial market rates to help facilitate undertakings that are considered important to EU objectives (including projects or SME lending)

EIB: Summary Observations

- Investments are made across a range of sectors including agriculture, transportation, energy, and telecommunications. Transportation represents one quarter of the EIB's lending portfolio.
- The EIB offers grants, guarantees, loans, and equity:
  - Grants are used mainly to subsidize interest rates and technical assistance of applicants from developing nations
  - Guarantees are used to support large projects, such as the Trans-European Transport Network Projects, and small, such as for SME and microenterprise development
  - Both large and small-scale projects are financed through a mixture of fixed and variable interest rate loans and lines of credit
  - Equity is in the form of venture capital focusing on high-technology high growth SMEs and greenfield renewable energy investment
- The EIB also provides upfront technical assistance to help ensure that projects are robust and adequately governed to improve their chance of success in terms of meeting EU goals and qualifications

V. Summary of Key Lessons Learned And Considerations for the U.S.

Key Comparisons of Government-Sponsored Lending

Characteristic	TIFU (UK)	EIB (EU)	TIFIA (U.S.)
Objective	Lending to PFI projects where insufficient private sector funding is available on acceptable terms to allow the project to reach a timely financial close	Contribute towards the integration, balanced development and economic and social cohesion of the EU Member States	To provide credit assistance for large-scale surface transportation projects of regional and national significance and leverage Federal funds by attracting substantial private and other non-Federal co-investment
Governance	PPP Policy Team, HM Treasury	Board of Governors (from EU Member States)	Office of Innovative Program Delivery, U.S. DOT
Select Product(s)	loans	loans, loan guarantees, lines of credit	loans, loan guarantees, lines of credit
Lending Terms	15 to 30 years; fixed or floating interest rate and fees matching commercial lenders	Usually 4 to 20 years; competitive fixed, convertible, and variable (spread below LIBOR) interest rates	Up to 35 years; interest rate based on SLGS rate
Project Eligibility	Approved PFI projects with evidence of market funding shortfall	Contribute and promote EU policy objectives such as economic and social cohesion	Surface transportation projects sponsored by state and local governments, transit agencies, special districts, and private entities
Project Examples	Greater Manchester Waste Disposal Authority (£120M, 2009)	M25 (UK) Highway Widening Project (£500M, 2009)	I-595 Corridor Project ($602M, 2008)

Source: HM Treasury TIFU website, EIB website; FHWA TIFIA website

Key Lessons Learned

- Government-Sponsored Lending institutions often invest in multiple sectors and may provide consistency in investment prioritization:
  - TIFU and EIB invest across multiple sectors and are administered by a central entity
- Institutions can be utilized to pursue common programs and objectives across government and shareholders, which reflects the type of financial products offered:
  - TIFU builds on the UK existing government's PFI program and provides loans
  - EIB supports broader EU objectives and provides grants, loans, guarantees and equity
- Institutions can combine funding from government contributions and/or from the capital markets:
  - TIFU is funded from UK Treasury
  - A significant portion of EIB's capital from bond-issues and other debt instruments, with the remaining coming from the member countries

Key Lessons Learned

- Commercial risk assessment and structuring analysis is conducted during the investment process:
  - TIFU uses commercial experts and commercial lending processes to review project risks and support lending decisions
  - EIB uses commercial processes and experienced staff to review project risks and lending decisions
- Institutions can be structured to limit crowding-out of private capital:
- TIFU is short term and flexible product only utilized when credit need exists
- EIB acts as a commercial bank and operates under a senior debt limit

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Appendix B – Total EIB Subscribed Capital by Country

Country	Amount (EUR)	% of Total
Germany	37,578,019,000	16.2%
France	37,578,019,000	16.2%
Italy	37,578,019,000	16.2%
United Kingdom	37,578,019,000	16.2%
Spain	22,546,811,500	9.7%
Netherlands	10,416,365,000	4.5%
Belgium	10,416,365,000	4.5%
Sweden	6,910,226,000	3.0%
Denmark	5,274,105,000	2.3%
Austria	5,170,732,500	2.2%
SUBTOTAL	211,046,682,000	90.8%
BALANCE (17 EU countries)	21,346,307,000	9.2%
TOTAL*	232,392,989,000	100.0%

*as of April 2009, equivalent to US$307.5B

Source: EIB Statute brochure, 2009

Appendix C – Map of European Union Member States

Source: The EU at a Glance – EU website

Appendix D – TIFIA, TIFU, and EIB Case Studies

U.S. TIFIA Projects

Name	Description	Location	Project Cost	Loan Amount	Project Length	PPP?	Financing Terms
I-595 Project	The project consists of the reconstruction and widening of the I-595 mainline and all associated improvements to frontage roads and ramps (10.5 miles)	FL, U.S.A	$1.834B	$603M	35 years, starting in June 2009	Yes	• Type of Loan: Direct, backed by availability payments • TIFIA Rate: 3.64% • Term of Repayment: June 2014 - June 2042 • Other Funding Sources: Senior private bank debt, private equity, FDOT qualifying development funds
Transbay Transit Center	The project will replace the current terminal with a new multi-modal transportation center, centralize the region's network, and create a new neighborhood in the surrounding area	CA, U.S.A	$1.189B	$171M	7 years, starting in Feb 2010	No	• Type of Loan: Direct, secured on senior lien of project revenues • TIFIA Rate: Approx 4% • Term of Repayment: 2009 – 2045 • Other Funding Sources: TEA-21 earmark, SAFETEA-LU earmark, State funding and land sales

Source: FHWA TIFIA website

Appendix D – TIFIA, TIFU, and EIB Case Studies

UK TIFU Project

Name	Description	Location	Project Cost	Loan Amount	Project Length	PPP?	Financing Terms
Greater Manchester Waste Disposal	This project is a 25 year Private Finance Initiative waste and recycling contract to create a network of state-of-the-art recycling facilities over the next 5 years	UK	£798M	£120M (£182M EIB)	25 years, starting in 2009	Yes	• Type of Loan: Direct, backed by availability payments • TIFU Rate: Floating rate ranging from 3.25% to 4.5% • Term of Repayment: 23.5 years • Other Funding Sources: Senior debt from Greater Manchester Waste Disposal Authority, commercial lenders, EIB, private equity

Source: HM Treasury TIFU website

Appendix D – TIFIA, TIFU, and EIB Case Studies

EIB Projects

Name	Description	Location	Project Cost	Loan Amount	Project Length	PPP?	Financing Terms
High Speed Rail Project	This project includes development of the the Madrid-Badajoz, Madrid-Alicante-Murcia, and Valladolid-Burgos-Vitoria high-speed rail lines	Spain	€23.4B	€5B	5 years, starting in 2010	No	• Type of Loan: Direct • EIB Rate: • Term of Repayment: • Other Funding Sources: Spanish government, EU Cohesion and regional development funds, TEN funds
A2 Toll Road Project	This project includes the expansion, refurbishment, and operations of the second motorway segment of the TEN network between Berlin and Warsaw	Poland	$2.22B	$1.46B	27 years, starting in June 2009	Yes	• Type of Loan: Direct • EIB Rate: • Term of Repayment: • Other Funding Sources: Commercial banks, private equity, EU grants

Source: EIB Projects – EIB website

Appendix D – TIFIA, TIFU, and EIB Case Studies

EIB Projects

Name	Description	Location	Project Cost	Loan Amount	Project Length	PPP?	Financing Terms
Metro Expansion Project	This project includes the design, construction, testing and commissioning of the first phase of the Thessaloniki Metro system	Greece	€1.5B	€250M	8.5 years, starting June 2006	Yes	• Type of Loan: Direct • EIB Rate: • Term of Repayment: • Other Funding Sources: 3rd and 4th Community Support Framework (CSF), EU grants
M25 Highway Widening Project	Project involves widening 100km of the M25, a congested major highway that encircles Greater London, from 3 to 4 lanes and operating and maintaining the entire project road as well as a substantial portion of the existing road network throughout the concession period	UK	£2.0B	Up to £500M EIB financing	30 year contract, which includes construction and operation and maintenance	Yes - DBOM	• Direct loan to special purpose concessionaire to build

Source: EIB Projects – EIB website

Appendix E – EIB SME Lending

Project Name	Project Description	Date Signed	Type of Finance	Total Amount
EIB partnership with Belgium KBC/CBC	EIB developed a loan agreement worth EUR 300 million with Belgium banks KBC and CBC. KBC and CBC will use their close-knit network of bank branches to make the EIB funds available to small and medium-sized enterprises.	5/31/2010	Credit Line for SMEs with fewer than 250 employees across a range of sectors	€300M
EIB loan to Croatian Reconstruction and Development Bank	EIB provided a loan to the Croatian Reconstruction and Development Bank (HBOR) to finance projects of small and medium-sized companies (SMEs), mid-cap companies, and municipalities	4/15/2010	Loan for SMEs in the area of industry and services, such as tourism, energy, health, and education	€250M
EIB loan to Austrian bank BAWAG P.S.K.	EIB is lending €100 million to Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse A.G. (BAWAG P.S.K.) to finance small and medium-sized projects of BAWAG P.S.K.'s business customers	3/26/2010	Loan for SMEs and mid-cap companies in areas of industry, services, infrastructure, health, energy, and education	€100M

Source: EIB Projects – EIB website

Appendix F – EIB Livability and Sustainability Checklist

Location/Issue-Based Risk Checklist

Policy	Key Question	No	Yes	Outcome
Public Consultation	Consultation of project-affected people is not carried out.		►	High risk
Natural Habitats	Does the project involve significant conversion or degradation of critical natural habitat? *OR Does the project impact on an* area of critical natural habitat? *OR Involve the significant* conversion of natural habitat?		► ► ►	Project precluded from investment; High risk; High risk
Forestry	Does the project involve the financing of commercial forestry? *Or logging operations in tropical* moist forest or the purchase of logging equipment for use in tropical moist forest?		► ►	High risk; Project precluded from investment
Indigenous Peoples	Does the project impact on an indigenous community?		►	High risk
Involuntary Resettlement	Will the project involuntarily resettle people through physical (relocation) or economic (loss of access to productive assets) displacement?		►	High risk unless very few people are involved (medium risk)
Child and Forced Labor	Will the project utilize forced labor (service not voluntarily offered) or harmful child labor (exploitative or hazardous or interfering with the child's development)? *OR is there any indication of child or* forced labor in the supply chain?		► ►	Project precluded from investment; High risk
Cultural Heritage	Will the project significantly impact non-replicable cultural property such as archaeological, historical or religious sites or sites with unique natural values?		►	High risk

Source: EIB Environmental and Social Practices Handbook, 2010

Appendix F – EIB Livability and Sustainability Checklist

Policy	Key Question	No	Yes	Outcome
Safety of Dams	The project involves the construction of a dam in excess of 15m in height, or 10-15m in height with a sizeable reservoir?		►	Where there are NO other policy issues, this is a medium risk and categorisation should be reviewed alongside other impacts. EA should include dam safety analysis.
Waterways	Will the project impact a waterway (river, canal, lake, etc.), which forms a boundary between or runs through 2 or more sovereign states in any way?		►	Where there are NO other policy issues, categorisation should principally be based on the severity of the impact and full analysis integrated into the EA. Medium location risk.
Climate Change	The outcome of the project will be significantly affected by climate change considerations		►	High risk

Source: EIB Environmental and Social Practices Handbook, 2010

Appendix G – Example of EIB Ecosystem Impacts

Summary table of Ecosystem impacts by project alternatives for the development of new high voltage transmission lines in the country of Georgia

Table 5.1-13 Ecosystem impacts

Type	Alternative 1						Alternative 2						Alternative 3					
	Impacted Route Length	Access Road Impact	Tower Impact	ROW Clearing/ Maintenance Impact	Substation Impact	TOTAL Impact	Impacted Route Length	Access Road Impact	Tower Impact	ROW Clearing/ Maintenance Impact	Substation Impact	TOTAL Impact	Impacted Route Length	Access Road Impact	Tower Impact	ROW Clearing/ Maintenance Impact	Substation Impact	TOTAL Impact
	(km)	(ha)	(ha)	(ha)	(ha)	(ha)	(km)	(ha)	(ha)	(ha)	(ha)	(ha)	(km)	(ha)	(ha)	(ha)	(ha)	(ha)
Caucasian middle-mountain landscapes with beech-dark coniferous and dark coniferous (spruce-fir) forests, partly with evergreen understory	2.696281	1.348141	0.5056	26.96281		**28.81655**	2.696281	1.348141	0.5056	26.96281		**28.81655**	5.591724	2.795862	1.9324	55.91724		**60.64551**
Caucasian sub-alpine landscapes with combination of meadows, tall-herb communities, elfin woods and thickets	5.755044	2.877522	1.6068			**4.484322**	7.84724	3.92362	2.2024			**6.12602**	6.043377	3.021688	2.1124			**5.134088**
Caucasian upper-mountain landscapes with birch and pine forests	1.146551	0.573276	0.09	11.46551		**12.12879**	2.103505	1.051753	0.3256	21.03505		**22.41241**	6.898472	3.449236	1.8424	68.98472		**74.27635**
Colchic foothill landscapes with hornbeam-oak forests alternating with beech-chestnut, oak-Zelkova and poly-dominant forests with evergreen understory	9.031135	4.515567	2.2024	90.31135		**97.02931**	9.031135	4.515567	2.2024	90.31135		**97.02931**	9.031135	4.515567	2.2024	90.31135		**97.02931**
Colchic low-mountain landscapes with hornbeam-oak and hornbeam-beech-chestnut forests mainly with evergreen understory, partly alternating with oak-pine forests	3.188237	1.594119	0.8312	31.88237		**34.30769**	3.188237	1.594119	0.8312	31.88237		**34.30769**	3.188237	1.594119	0.8312	31.88237		**34.30769**
Colchic middle-mountain landscapes with beech forests mainly with evergreen understory	20.04497	10.02248	3.9548	200.4497		**214.427**	20.04497	10.02248	3.9548	200.4497		**214.427**	17.0415	8.520748	6.0672	170.415		**185.0029**

The above summary table highlights three plausible alternatives for the 280km (174mi) 500kV line and their respective impacts on the surrounding forests and mountain landscape. In this case, impact is conveyed and measured in hectares of land.

Source: EIB Environmental and Social Impact Assessment of the Black Sea Regional Transmission Project, 2009

Appendix H – Project Examples of Guiding Transportation Principles

Guiding Principle	Example
Mobility	Antwerp Mobility Masterplan - completion of highway expansion, widening of transport canal, and extension of tram lines towards the suburbs creating greater linkages to improve mobility in the region (€1.5B total cost with €700M EIB financing, 2005)
Trans-European Networks	Spanish High Speed Rail Network – expansion of high speed rail in Spain with the construction of 3 major new lines with 2 originating from Madrid and another from the city of Valladolid from 2010 to 2015 creating regional and improved connections to neighboring Portugal (€5.0B EIB financing, 2009)
Freight Transport	London Gateway Port – first phase of development of a deep-water port to accommodate super-post-Panamax container vessels and improve intermodal freight distribution in the UK (£1.5B total cost with £300M EIB financing, 2009)
Research and Innovation	Mercedes Benz Cars R&D and Sustainable Mobility – research and development with the goal of optimizing fuel efficiency, lowering carbon emissions, and developing new electric or fuel cell powered vehicles (1.7B total cost with 400M EIB financing, 2010)
Environmental Impact	Turkey energy, transport, and environment investment – EIB committed to supporting expansion and upgrades to the power grid and improving efficiency and reliability of distribution; bundled funding for development of high speed rail between Ankara and Istanbul (€718M EIB financing, 2009)

Source: Trans-European Networks – EIB website